April, May, June 2019



Serving the Residents of Culpepes Orange, Spotsylvania, Stafford, Fredericksburg, Caroline, King George



MEMO FROM THE CHAIR, LINDA C. MULLER

"In every walk with Nature one receives far more than he seeks." John Muir, in a letter dated July 1877.

Sierra Club Founder and naturalist John Muir understood the wonderment and comforting experience of walking in nature. Fast forward more than a hundred years later and research studies support the health benefits of taking "a walk in the woods". In Japan, the practice of "shinrin-yoku" or "forest-bathing", is considered a form of "preventive" medicine. A study compiled in 2007 indicated that the practice of "forest-bathing" boosted the immune system. Taking time out in nature has also shown to reduce inflammation, improve blood pressure, increase ability to focus, boost creativity and sense of well being. When we strive to protect and preserve our natural and wild places, we are also protecting and preserving our health and well being.

The Rappahannock Group's Outings program offers opportunities for members and friends to explore natural areas in our membership region. RGSC Outings Leaders Richard and Suzanne Eggeling are planning upcoming hikes and we hope you will join us on our next outing. For more information about RGSC's Outings or if you have a suggestion for an Outing, please contact Richard and Suzanne: rich.sue.sc(at)gmail.com

Film Screening: "The Human Element"

The Rappahannock Group will be screening the documentary film "The Human Element" (78 minutes) on Sunday, August 18, 2019 2-4 pm at the England Run Library (Howell) Stafford, VA. The film is a follow up to the visually stunning film "Chasing Ice" which RGSC screened in 2014. "The Human Element" offers visual explorations of current impacts of climate change in the United States. Discussion will follow the film. Free and open to the public.

VA Chapter Sierra Club Annual Gathering: Westmoreland State Park Sept 20-22

We are excited that this year's Annual Gathering will be held in our own backyard at the Westmoreland State Park! What is the annual gathering? It's a week-end for Sierra Club members and friends to enjoy camaraderie, hiking, kayaking, fishing, yoga, and great educational sessions. You can stay a day or the entire weekend. The VA Chapter is finalizing the details and will post on the VA Chapter website soon.

http://www.sierraclub.org/virginia

Volunteer for Your Rappahannock Group Sierra Club-Plenty of Opportunities

The Rappahannock Group is fortunate to be served by dedicated volunteers. To keep Rappahannock Group strong and vibrant, we welcome new volunteers to serve the club, and

there are plenty of opportunities to help. Whether your interest/talents are social media, environmental education, program planning, public outreach, political, legislative, outdoor activities-we need you! If interested in volunteering, please contact me: lcmuller(at)mindspring.com.

Safe Summer Travels and be sure to: <u>Save the date</u>: RGSC Fall Open House is Sunday September 15, 2-4pm at the American Legion Building, Fredericksburg.

Yours in Exploring, Enjoying and Protecting the Planet Linda Muller,

Links for reference:

John Muir Archive/Vault Life and Writings of John Muir http://vault.sierraclub.org/john muir exhibit/default.aspx

Health Benefits of Being Outside: Business Insider April 2018

http://www.businessinsider.com/why-spending-more-timeoutside-is-healthy-2017-7

Forest bathing enhances human natural killer activity and expression of anti-cancer proteins.

http://www.ncbi.nlm.nih.gov/pubmed/17903349

CONSERVATION CHAIR, BILL JOHNSON

Fracking & Health by Bill Johnson

The 6th edition of the hydraulic fracturing (fracking) Compendium was released a few days ago. It is a joint effort between Concerned Health Professionals of New York and Physicians for Social Responsibility (PSR). Their Compendium provides "abstracts and electronic links to an almost encyclopedic compilation of reports, peer-reviewed articles and investigative reporting on fracking's dangerous impacts on health." IT includes analysis of over 1,500 reports and studies that have been published and peer reviewed. It is the most comprehensive analysis of the impacts of fracking that exists today.

The news release by PSR can be found at: https://www.psr.org/blog/2019/06/19/new-fracking-compendium-now-available/. Several quotes below are from this release.

The actual report is at: https://www.psr.org/wp-content/uploads/2019/06/compendium-6.pdf

Fracking breaks up underlying shale rock formations to provide a pathway for gas to seep up and be captured for burning to generate electricity. Virginia's Taylorsville Basin has been targeted for fracking, but so far, the price of fuel is too low to warrant the expense of mining it. That could change, however, if things continue to worsen between Iran and the Trump Administration. Nothing spikes the cost of fossil fuels like a war in the Middle East.

Mining for fracked gas is a significant cause of global warming and damages the health of residents near the wells. Methane gas, one of the most potent greenhouse gases (GHGs), leaks during every phase of operations, from extraction, to shipping, to burning. It's final resting place is the atmosphere, as a GHG.

The Trump Administration is clearly understating the impact of fracking, from having EPA grossly underreport the amount and impact of methane leaks, to covering up the impact on the health of its citizens.

A direct quote from PSR is scary: "Health problems associated with fracking include increased rates of premature birth, the leading cause of infant death in the U.S.; reproductive and respiratory impacts, and cancer risks. Drilling and fracking contribute to toxic air pollution and smog (ground-level ozone) at levels known to have health impacts. Fracking and the disposal of fracking waste can contaminate drinking water. Fracking infrastructure poses serious potential exposure risks to those living nearby and poses human rights and environmental justice issues."

Think pipelines when you think fracking, because every well is connected via a pipeline. When you think pipelines, think of the problems people are now facing in the Western part of Virginia, because of the Atlantic Coast and Mountain Valley Pipelines. Think compressor stations that leak methane being placed in historically sensitive places. Think eminent domain taking your land to facilitate profits for private companies.

While I understand that reading Compendium 6 is a time-consuming task, there are specific sections that can be read, if you are interested. Examples include: "public health, water contamination, air pollution, inherent engineering problems, abandoned wells, pipelines, LNG export, and more." The Compendium discusses "The Compendium also addresses some of fracking's widening circles of impact, with sections ranging from flood risks, to earthquakes, to threats to agriculture. And, of course, climate change."

King George, Caroline, and Westmoreland Counties are included in the Taylorsville Basin. Be aware that fracking could come home to haunt you, even if you refused to sign leases. And if you live in surrounding areas like the Fredericksburg Region, you will also be impacted. Equipment, laborers, and trucking will all pass through those areas to get to the fracking wells. And pipelines will be built to connect those wells to the larger distribution pipelines. FERC will have the final say on eminent domain and the taking of land because of connecting to pipelines that cross state lines. FERC's motto seems to be "We never met a pipeline we didn't like.

PASS ON PLASTIC, PAULA CHOW

On June 3, 2019, Keep Virginia Beautiful awarded RGSC a \$1,000 grant with their "30 in 30 Green Grant Program" for our "Pass on Plastic" campaign.

Designed for the local Fredericksburg Saturday Farmers Market to reduce and eventually eliminate plastic produce bags, the Pass On Plastic campaign aims to help shoppers realize that **putting plastic produce bags in reusable bags defeats the purpose of reusable bags.** The alternative to a plastic produce bag is a reusable nylon net produce bag (RNPB) made by volunteers. The RNPB is durable, strong, washable, breathable and colorful.

The campaign works with two interested vendors, Valdez Produce and C & T Produce, where signage in multiple spots in the vendor's booth encourages shoppers to reconsider using plastic produce bags.

Once a month, we give away a RNPB (one per family) between 9 am - 11:30am to shoppers at Valdez Produce or C & T Produce. We have also provided the vendors with colanders for shoppers to use instead of the single-use plastic bags. The shoppers would put all their produce in one or two colanders then proceed to the cashier who will separate and weigh the produce before placing them in the reusable bag. Our giveaway is an example of an alternative to plastic bags.

We plan to have a quick conversation with customers about the RNPB as to where to find them and the benefits of using them (veggies can breathe, reusable, washable, durable, strong) and request they return to shop with the RNPB. Volunteers have signed up to help cut and sew the net produce bags.

The colorful RNPB will attract shoppers who are not shopping at these vendors to look and be curious. On some Saturdays, we set up a sewing machine to sew the RNPB under an umbrella adjacent to the vendors. This helps point out to shoppers the issue of plastic waste and alternatives. We accept donations for the net produce bags.

By concentrating on 2 vendors, we hope that they will serve as an example that attract the other vendors at the Farmers Market towards pushing reusable produce bags. This would be the stepping stone towards having a plastic bag-free Farmers Market.

Question: Why do you use nylon (a form of plastic) as an alternative when there is cotton or muslin? Isn't that more environmentally friendly?

Answer: While cotton or muslin is a good product, it would be prohibitively expensive to use as a campaign giveaway. It also weighs more and in testing products, 9 out of 10 shoppers questioned the weight of the produce bags, concerned about paying for its weight. Additionally, organic cotton and all textiles use an inordinate amount of water for manufacturing and have their own carbon footprint from cradle to grave. The biggest difference with cotton or other natural product is that the natural product will biodegrade in the landfill while plastic or nylon only breaks down into micro-particles and never goes away. Ultimately, the goal is for consumers is to strive towards zero waste. The journey to that end is a struggle.

Volunteers are needed for cutting the netting, sewing the bags, handing out the bags at the Farmers Market, data collection (twice only), sewing at the Farmers Market, tabling at the Farmers Market on the Sept. 7th Community Day.

Spend one session, one hour, one time – any time you can give is appreciated. Join our effort to influence others to eliminate plastic waste!

SCHEDULE: (Subject to Change due to weather and volunteer availability)

Produce Net Bags give away:

July 20

August 3

September 7

Sewing Machine Demonstration:

June 8

July 20, 27

August 3, 10, 17, 24

October 5, 12

Cut & Sew Sessions

August 5 – 1pm – 3pm UU Church 25 chalice circle, Fredericksburg. Bring sharp scissors or portable sewing machine and extension cord

RESOURCES:

Search online for reusable produce bags – Key word search "reusable produce bags"

To volunteer contact Paula Chow: paulachow132@gmail.com, please put on the subject line - Pass On Plastic volunteer

TIPS COLUMN

More Net Produce Bags by Paula Chow

If you purchase bulk oranges, lemons and other produce that is often bagged in a stretchy net bag (usually red, orange or yellow colored), SAVE THEM! You can carefully tear off the label, keeping the stitching intact. These bags are just as useful for produce, are washable, durable and lightweight. Pass extras along to family, friends and coworkers. If you have more than you can use, bring them to the Food Co-op table at the Farmers Market in Fredericksburg so they can pass them along.

Polystyrene (otherwise known as Styrofoam) by Paula Chow

Publix Market in Cosner's Corner accepts **CLEAN** polystyrene. There is a bin outside the store doors. If you pass this tip along to others, please emphasize CLEAN, so that they do not contaminate the collection.

Bug Hunting by Bill Johnson

It's time for war, folks, against Japanese Beetles. They have shown up mid-June, a bit later than last year. How do you get rid of them? Pesticides are not the way. Organic gardening forbids their use, and pesticides kill all sorts of good bugs and harm your health. You can reach out and crush them in your fingers, with or without gloves (yuck). Or you can use their natural defenses against them.

These beetles tend to drop straight down off the plants to escape. I take a small bucket, put an inch of water in it, hold it under the leaves where the beetles are eating, and allow the bugs to commit suicide by dropping down into the bucket as I reach my hand over them. I had heard that chickens would eat them, so this year I started using plain water. Our chickens wouldn't, however, so I reverted to my tried-and-true method putting a few drops of soap into the water. This kills them very quickly. If you don't put the soap in, some of the beetles are still

swimming 24 hours later, being unable to get out of the bucket. I consider that cruel, so I won't do it. Yeah, they're bugs, but that's no reason to torture them.

Reduce and Reuse by Diana Johnson

Reduce your Plastic Packaging: I found a company that sells toilet paper, tissues and paper towels with environmentally friendly materials and they donate 50% of their products to help build toilets for those in need. Their packaging is paper not plastic. The company is called Who Gives A Crap. I personally use their products.

Reuse Your Plastic: I know we are trying to stop using the single use plastic bags so as I was taking the plastic bag off my newspaper I realized we could use that bag in many other ways. If you buy flowers you could use that bag instead of the store bags. By putting those bags in your bag of bags that you should have readily available in your car you will be able to reduce your plastic even more.

Reuse Newspaper: if you purchase flowers at the grocery store, instead of using their plastic bags you could use an old newspaper to wrap your flowers in. Placing them in your reusable bags will keep them from getting anything else wet until you get home.

OTHER LINKS

Virginia Conservation Network

www.vcnva.org

Virginia League of Conservation

Voters

www.valcv.org

Southern Environmental Law

Center

www.southernenvironment.org

Friends of the Rappahannock

www.riverfriends.org

Tree Fredericksburg

www.treefredericksburg.org

RGSC MAILING ADDRESS

RGSC

PO Box 7972

Fredericksburg, VA 22404

EMAIL NEWS GROUP SIGN UP

rappsierragroup@gmail.com

OUTINGS CO-CHAIR, SUZANNE EGGELING

On March 30th fourteen happy souls hiked through the beautiful old growth forest at James Monroe's Montpelier Estate in Orange County. It was a beautiful, crisp, spring morning, with trees beginning to bud, and much banter between hikers. The excursion concluded with a delicious potluck picnic lunch and further camaraderie.

The weather once again cooperated on April 20th, when we joined the staff at Caledon State Park for a beach cleanup. Being the Sierra Club people that we are, our group chose to hike two miles down to the beach and back. While at the beach we shared cleanup duties with approximately fifty other volunteers, collecting a total of 740 pounds of trash. We all felt a sense of accomplishment and satisfaction knowing that the beach and park were left in much better condition than we found it. Thanks to all those who joined us and helped make a difference.

There was an optional contest of 'making art from trash' after the cleanup; we enjoyed observing some energetic and creative folks piecing together some remarkably complex trash sculptures.

With the advent of hot summer weather hiking is now temporarily 'on hold' until fall, when some interesting outings are planned, e.g. Shenandoah hike, Culpepper (Library of Congress tour followed by 'environmental movie'). cardboard recycling plant visit (Richmond).

RGSC EXECUTIVE COMMITTEE (EXCOM)

Chair: Linda C. Muller, lcmuller@mindspring.com

Vice Chair, Bill Johnson, billatthelake@comcast.net

Program Chair: Paula Chow, paulachow132@gmail.com

Treasurer: Diana Johnson, dianaatthelake@comcast.net

Membership & ExCom Member: Michael Johnson,

johnson2000m@aol.com

Webmaster & ExCom Member: Doug Ferguson,

dougferg@verizon.net

Conservation Chair: Bill Johnson, billatthelake@comcast.net

Newsletter Editor: Bill Johnson, billatthelake@comcast.net

Hospitality Chair & ExCom Member: Jody Lochmiller,

jody_lochmiller@hotmail.com

Outings Leaders: Suzanne and Richard Eggeling,

lizzigo@gmail.com

Interns:

RGSC CONSERVATION REPORT, LINDA MULLER

March 2019 to May 2019 Conservation Report

by Linda Muller

March 2019

3/23 Tabling: Wild and Scenic Film Festival, Fredericksburg VA, sponsored by Friends of the Rappahannock

3/30 Outing: Montpelier Hike-Orange County VA

April 2019

Conservation: "Pass On Plastics": project undertaken by Paula Chow & volunteers, hand-sewn produce bags for distribution at Fredericksburg Farmers Market throughout the season.

Conservation: Published Letters to the Editor and Guest Editorial: In Support of the Spotsylvania Solar Farm by RGSC, two items:

4/2: Virginia Mercury: by Bill Johnson & Richard Eggeling

http://www.virginiamercury.com/2019/04/02/rappahannock-sierra-club-support-the-spotsylvania-solar-farm/?fbclid=lwAR1kpj8DHt8

4/3: Free Lance Star: by Linda Muller

http://www.fredericksburg.com/opinion/letters_to_editor/letter-sierra-club-endorses-solar-farm/article_c88782a1-0d01-5fe1-9a4a-0d1-5fe

4/6 Conservation: RGSC Co-Sponsor: Student Climate Change Conference @ University of Mary Washington, presented by Fossil Free Fredericksburg & Ready for 100 w/Alice Redhead

4/20 Outing: Earth Day Clean Up at Caledon State Park, King George, VA

4/27 Earth Day: RGSC Co-Sponsor: Earth Day On The Rappahannock, Fredericksburg, VA:

Booth Theme "Climate Change". 10th annual RGSC Living Green Award awarded to "The Falafel Joint" restaurant in Fredericksburg and Konrad Heller, teacher & Eco-Club Sponsor at Colonial Forge High School. More info on Living Green Award http://www.sierraclub.org/virginia/rappahannock/living-green-award

Richard & Suzanne Eggeling displayed their modified solarized travel van for Earth Day.

May 2019

5/15 RGSC: Executive Committee Meeting

To see pictures of events be sure to check out our Face Book Page...thanks!

PROMOTING CLEAN ENERGY, RICHARD EGGELING

The link below is to a letter to the Senate Finance Committee from US Senators; it is cause for optimism.

https://www.cortezmasto.senate.gov/imo/media/doc/6.19.2019%20Letter%20to%20prioritize%20extending%20clean

%20energy%20tax%20incentives.pdf

It is most heartening to see a handful of prominent Senators promoting the continuation of federal incentives for clean energy, an example of representative democracy at work. Their message is clear and compelling, reminding any reader that there was a time of progress and cooperation, when common sense plans (e.g. the Clean Power Act) for a better tomorrow were debated and implemented. These representatives deserve whatever support we can muster – a simple 'THANK YOU' at the very least - to show our appreciation and boost their morale and commitment to uphold sound environmental decisions.

Against this backdrop there are no words to describe the insane environmental policies of the Trump administration ... where coal-fired power plants, once on a path to reduce carbon emissions, are now being encouraged to relax emission standards.

While it is extremely difficult to look at the future of our country and our planet without anxiety, it is reassuring to see the rise of political activism and, equally important, the adaptations taking place in the business world. A growing list of companies, young and old, are addressing sensitive environmental issues in their 'standard operating procedures'. Sustainable environmental practices are becoming more than mission statements, they are increasingly being incorporated into daily operations. This is as evident in non-profits such as the Fredericksburg Food Co-op who have seen rapid growth because they embrace this philosophy. It is evident that the men and women attracted to this new energy sector do so due to personal convictions, less than financial gain. Talk to them, you will find out very quickly!

On this basis I encourage SC groups to engage with businesses involved in the installation, distribution, and/or delivery of clean energy in their community or region. We can learn from these professionals, while they learn from us our local concerns.

For example, we could help promote using 'hard top' surfaces for solar arrays, like parking lots. Imagine the revolution that could be sparked by successfully installing a financially viable, elevated solar array over a large parking lot, providing electricity and shade for cars and fun activities. This game-changing initiative is not far-fetched considering the constant advances in technology, especially improved conductors that carry DC power, eliminating the need for local DC/AC power inverters.

In this scenario we would receive wide support demanding for more of the same, the demise of coal-fired power plants could then be assured. It would help balance the need for clean energy with preservation of farmland and forests. The need for Interaction between organizations such as the Sierra Club and the clean power specialists should be obvious. We can help them without losing sight of our identity and mission. They can help us understand how to explain that our objectives, the need to accelerate the acceptance and of growth of clean energy, are the same as their objectives