



# THE POWER OF NATURE ... AND A MURAL

by Eder Muniz

## ROCHESTER REGIONAL GROUP—Explore, enjoy and protect the planet SIERRA CLUB ECOLOGUE

For me to be able to do a piece of art in a neighborhood/community is very special because we never know how far the mural's message can go, and because people can see it in different ways. But the one thing I know about the impact is that it is really positive. You see the way people start to take care of the neighborhood on the street where they live, and the neighborhood of the kids. I try to show how important nature is for human beings. People forget about it. They are running so hard to make money, to survive. It's a bunch of lies. Because if you don't have this connection, this basic connection with nature, we're not going to be successful, because our life is empty...we're going to be missing something.

A lot of people think it's weird to say that. But think how important, how much value nature has for human beings, and for other beings of course. And the way we are running now, we are getting far from nature. So this piece, in this neighborhood in Rochester, is to show a little bit how nature is important - to highlight this beautiful garden the community is putting together. The whole mural shows a piece of nature from upstate New York. The snake, the bees, the frog.

It is to make people remember why we are suffering, why people are dying - in different ways. And also this piece is really important for this neighborhood because it is a black neighborhood. It has this beautiful image of a black woman from Brazil, from Salvador. She is a singer and she talks about Black women's rights. So, to have come from a black neighborhood yourself, you can see in this, yourself. And to see it around your neighborhood—it has a power you cannot really explain because it is so deep. You respect it because you feel it and because you are so deeply affected.

For me it really is a transformation, to be a part of that, to be the beginning of that, and I hope to be able go back and see it, years later.

Eder Muniz



Montgomery Neighborhood Center, 10 Cady St., Rochester 14608.

Note: The Rochester Sierra Club thanks its members for their support which made it possible for us to make a contribution in support of the Mural.

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## From the Chair: Making the most of our members' donations

By Jessica Slaybaugh

This is the first mostly-digital edition of our newsletter. On behalf of the executive committee, I'd like to thank all of you for your support and understanding – and for contacting us if you want to continue to receive a paper copy of our newsletter. I can certainly understand the preference for paper. There's a sense of comfort I feel when holding paper in my hands that can't be matched by any type of electronic device.

Some of you who are reading this on a screen now might have requested a paper copy. Don't worry – You should receive it in a few days, but please contact us if you don't. Our newsletter is emailed to a distribution list of all members who have an email address on file with Sierra Club.

The cost savings we'll achieve through this reduction in print copies will allow us to invest more of the money you donate to us in local and state environmental and social justice causes. Here are just a few examples of what we can do with these funds:

- Host events such as our tree giveaway. We've also recently discussed the possibility of holding a series of smaller-scale educational virtual events.
- Support the development of wind and solar projects, while ensuring that land that is of significance to local indigenous peoples (e.g., burial and historical sites) is never used.
- Petition our local, state, and federal government representatives to take action and make combating climate change a core element of their platform.
- Invest in other local organizations that are doing great environmental, social, and racial justice work.

As environmentalists, we still have so much work to do. While we aren't as bad off as we were during Trump's presidency – and although there have been some major victories – the Biden administration has sometimes failed to adhere to promises that were made through executive

orders he put in place during his first few weeks in office. For example, just a few days ago, Biden auctioned off 1.7 million acres of tracts in the Gulf of Mexico for offshore drilling.

There's also the looming threat of administration changes – from the president on down – that would oust strong supporters of environmental causes. Despite overwhelming evidence that man-made climate change is a legitimate, urgent threat that requires significant action, the majority of conservative politicians (and some liberal politicians as well) actively oppose taking action.

The oil and gas industry has significant influence over our country's political system, and their hands are deep in the pockets of many politicians. These politicians claim to serve their constituents, but in reality, they serve industries, special interest groups and wealthy individuals who stand to benefit from actions that will cause harm to their constituents and our planet.

Over the past few years especially, growing social unrest and alarming incidents have made it more and more clear that we cannot have tunnel vision and focus only on climate change. We must fight on three fronts: environment, social and racial justice. They are all intertwined, all vitally important.

I bring all of this up as examples of why it is critical that we continue to invest time, energy and money into the fight for our planet's survival. We cannot afford to become complacent. It can easily feel overwhelming, but by working together and investing our funds strategically, we can make a difference.

Thank you all for your ongoing support of the Sierra Club. If any of you are looking for organizations to make end-of-year donations to, we humbly ask that you consider us. Donations can be mailed to our P.O. Box , or you can make an electronic donation via PayPal by going to [SierraClub.org/Atlantic/Rochester](https://SierraClub.org/Atlantic/Rochester) and clicking on "Donate" in the upper right-hand corner.

Many wishes for a happy holiday season and new year,

## THE FIRST GREAT EXTINCTION ON EARTH

By Peter Debes

The first great extinction on earth caused by organisms. Humans? No! Blue-green "algae." Those micro-organisms that can foul our Finger Lakes and even poison people! But this was about 2.2 billion years ago! Evidence in rocks and fossils show that for great spans of time (like hundreds of millions of years or more!) the tiny creatures evolving in the oceans developed ways of taking nitrogen in the air to "fix" it into chemicals for life— but at a huge energy cost. So this prevented a rapid rise of new life forms.....until blue-green algae made a break-through.

About 2.7 to 3 BILLION years ago, they evolved a way to combine nitrogen fixation with photosynthesis. Photosynthesis makes carbon chemicals that can be used to create new chemicals and compounds, exploding the possibilities for

life on the planet. AND...releasing free oxygen! This spelled DOOM for many of the organisms that had evolved so far, because they were poisoned in a GREAT EXTINCTION era by....can you believe it...OXYGEN. Not only did this process destroy almost all the organisms that had evolved in the oceans (when there was little oxygen in the air or water), the oxygen began moving out of the water into the air where it began destroying the methane that was relatively abundant in the air.

We know so well that methane traps heat from the sun in the air keeping the planet warm or sometimes, too warm. Back then, the methane began to be destroyed by the oxygen from this new break-through—photosynthesis. (Geologists actually call this the "The Great Oxidation Event"). And so... the planet began to cool. It cooled so much, that geologists believe it led to a great ice age that covered the oceans, and where much of the life on earth perished, even much of those algae in the oceans doing photosynthesis because the ice covered the oceans and blocked sunlight from much of the water. Imagine...2.7 to 3 billion years ago.



# The Cryptocurrency Energy Problem

By Daryl Odhner

This overview is for those of you who (like me) have been slow to follow this tech phenomenon. There is much written material about this topic, as well as TED talks and other video presentations. A majority of internet discussion is by proponents, who are enthusiastic about gaining wealth; there are fewer discussions about sustainability.

**What is Cryptocurrency (CC)?** CC is a digital currency exchange system that uses “blockchain technology” to store records of assets and transactions. A blockchain is like a digital ledger, secured by encryption. Blockchains have uses other than CC; and can be used to store many kinds of digital information. CC blockchains are shared by huge networks of computers around the world.

CC proponents maintain that CC exchanges are egalitarian, and free of control by financial institutions and/or governments, who can deny accounts to potential holders, freeze money, charge fees, restrict international exchanges, or slow down transactions. CC traders transact peer-to-peer, without intermediaries. CC has apparently been used by third world citizens—including women in places like India and Afghanistan—enabling them to conduct business that would not be possible under conventional banking systems.

On the down side, CC trading can be used for illegal trade, avoiding taxes, money laundering, and payment to ransomware hackers because of its cryptic nature; and certain CC platforms consume significant energy, which is the focus here.

**Energy Consumption:** When a CC trade is done, the transaction has to be electronically validated by the network. This is where different CC platforms differ. *The problem is with platforms like Bitcoin, that use a validation method called “Proof-of-Work,”* in which the system is programmed to generate a mathematical puzzle for each transaction that must be solved to validate the transaction. Participants in the network are induced to earn cryptocurrency by competing to solve the computer-generated puzzle.

These puzzles can only be solved by generating random numbers until a satisfactory solution is produced. This process of generating trillions/quadrillions/etc. of numbers to satisfy the puzzle is called CC “mining,” and it can require enormous computing power to compete successfully with other participants in the network. Individual miners have pooled resources to create large mining operations with huge energy budgets. (I have difficulty trying to comprehend how solving a math puzzle can validate a transaction, but we have to accept that this somehow serves the purpose of validating and securing the currency blockchain in an automated system.)

## **Take-home points:**

- Blockchain technology and CC are here to stay; and not inherently bad.
- The environmental problem lies specifically with the Proof-of-Work transaction validation protocols (“mining”) because of the energy use. Alternative transaction validation protocols exist that are less energy intensive and faster, but are not as widely used.
- Bitcoin is the oldest and best known CC. There are other CCs, some of which do not require mining: Ethereum, Litecoin, Cardano, and many others.

There is a lot of money at stake. Some bitcoin mining operations have generated hundreds of thousands of dollars/day.

**Some NYS history:** Greenidge Power Plant: This plant on Seneca Lake was decommissioned due to lower power demand in 2011. It was purchased and re-activated as a gas-fired plant in 2017 *with DEC approval*, primarily to provide energy for CC mining. A \$2 million economic development grant was received to upgrade the plant (!!!). 220,000 metric tons of carbon dioxide were reportedly emitted in 2020\* due to plant generation. The outcome of a recent NYSDEC public comment period concerning re-permitting the Greenidge Plant has not yet been determined.

Plattsburg: A few years after bitcoin miners flocked to upstate NY because of cheap energy, some lessons were learned by locals. Former Plattsburg Mayor Collin Reed said that CC miners began using up the local Plattsburg energy quota, which angered constituents because it increased electricity costs. Plattsburgh had to foot the bill for the difference. He observed that promises of bitcoin job creation never materialized, since CC mining requires computers but minimal employees.

Tonawanda: A Canadian company has been seeking approval from the Public Service Commission to operate a gas-fired power plant for CC mining. Parties including the Sierra Club have sued, arguing that CC mining entails noncompliance with NY’s climate law, the Climate Leadership and Community Protection Act (CLCPA), by causing major increases in greenhouse gas emissions.

CC mining moratorium: A bill to establish a moratorium on CC mining passed the NYS Senate in 2021 but has not made it through the Assembly.

The NYSDEC recently denied permits for two power plants downstate to run on fracked gas, based on noncompliance with the CLCPA. I’m not certain if these operations were intended to provide power for CC mining.

**Going forward:** Under the CLCPA, NYS has committed to achieving 100% zero-emission electricity by 2040. Currently, our electric energy comes from less than 30% renewables. In order to move away from fossil fuels, we need to substantially increase our renewable electric energy sources. There can be no justification for burning fossil fuels, or squandering electric energy for CC mining. We need to support all initiatives to halt CC mining.

Sources:

Excellent webinar presentation on *The Cryptocurrency Mining Dilemma* by the Niagara Sierra Club:  
<https://www.youtube.com/watch?app=desktop&v=bVPTZW1MufM&feature=youtu.be>

*Bitcoin miners flocked to an upstate New York town for cheap energy — then it got complicated;* CNBC; (Jun 24 2021)

Martynov, Olga. 2020. *Sustainability Analysis of Cryptocurrencies Based on Projected Return on Investment and Environmental Impact*. Master’s thesis, Harvard Extension School.

Jessica McKenzie; *This power plant stopped burning fossil fuels. Then Bitcoin came along;* Grist (May 06, 2021)

## GENESEE VALLEY AUDUBON SOCIETY WINTER FIELD TRIPS

**Durand Eastman Park  
Log Cabin Road  
Sunday, December 12, 2021 at  
10:00am**

We will meet at Lot D on Lakeshore Blvd, which is directly across from Log Cabin Road. We will be on the lookout for overwintering birds and other wildlife. Binoculars will enhance your enjoyment. Dress for the weather that can be brisk and wet this time of the year. For questions or to register email Loretta Morrell at [loretta.morrell.gvas@gmail.com](mailto:loretta.morrell.gvas@gmail.com).  
**Register for this event no later than Friday, December 10, 2021.**

**Mendon Ponds Park, Birdsong Trail  
Nature Center Parking lot on Pond  
Rd off of Clover St  
Wednesday, December 15, 2021,  
10:00am – 12:00pm.**

Come enjoy a nice stroll in the woods and take the time to feed some of our hungry winter feathered residents that have been acclimated to eating from our hands in this popular park. While you are visiting you might want to check out the Wild Wings Center and their newly acquired nature center. Most of the trail is a fairly easy walk but there are a couple of steeper areas. Areas could be muddy if temperatures are warmer and there has been recent rain or snow. Birdseed will be provided for participants (a donation for seed would be appreciated). Binoculars will enhance your enjoyment. Dress for possible wind and standing in snow. For questions or to register email Loretta Morrell at [loretta.morrell.gvas@gmail.com](mailto:loretta.morrell.gvas@gmail.com).  
**Register for this no later than Monday, December 13, 2021.**

**Monday, January 17, 2022, 10:00am,  
Duck, Duck, Swan, Owl?, Ontario  
Beach Park/Seabreeze Irondequoit  
at the Outlet Bridge.**

January is not the nicest time of the year to go for a walk, but it can be a great time to see ducks and other waterfowl. We will meet at the north eastern corner of the Ontario Beach Park parking lot. We will use binoculars and a spotting scope and view what birds we can find in and around the river and beach. Waterfowl should be abundant. A snowy owl is a possibility. From there we will caravan to Seabreeze and the parking lot on the left hand side before crossing the outlet bridge in Irondequoit, and see what we can see there. . Binoculars will enhance your enjoyment. For questions or to register email [loretta.morrell.gvas@gmail.com](mailto:loretta.morrell.gvas@gmail.com).  
**Register for this event no later than Saturday, January 15th, 2022**

**Sat. Jan. 15, 2022, 3:00pm, Short-eared Owl Field trip, Braddock Bay Area.**

We will be in grassland looking for Short-eared Owls and other winter field birds. Binoculars will enhance your enjoyment. Contact June Summers to register email [summers@frontiernet.net](mailto:summers@frontiernet.net), and find out where we will be meeting. **Register for this event no later than Thursday, January 13th, 2022.**

*Follow Genesee Valley Audubon Society on Facebook or Twitter for updates.*

## Thank you for your donations towards planting trees! By John Kastner


THANK YOU, THANK YOU, THANK YOU...

...and thank you again for your amazing response to our second request for donations for the second annual Sierra Club tree giveaway. You went from \$0 to almost \$1800. We are very proud of you. We have also received donations from some of last year's sponsors and a \$1000 commitment from Wegmans food stores. We are closing in on our \$5000 goal, but we aren't there yet. So, if you haven't yet given, please consider stepping up to help us fight the climate emergency locally.



The event will run on April 30th from 10:00am to 3:00pm at four area parks in the north, south, east, and west segments of the county. We will also need volunteers to staff these sites to distribute the trees and planting materials. It would be nice to have enough people to run two shifts at each site. Many hands make light work

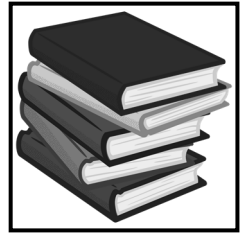
Planting trees is a relatively easy way to effectively respond to the climate emergency on a local level. There is no reason why we can't come together and have a little fun while we're doing it. If you want to donate and/or volunteer, please call me at 585-461-4701 or email: [jkastner@weeblax-uzzl.com](mailto:jkastner@weeblax-uzzl.com). Thanks again and stay tuned for further announcements.

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## A Plastic-free Holiday

By John Kastner

With a disappointing lack of compassion, vision and leadership following two weeks of desperate clinging to business as usual at COP26, it's pretty clear that meaningful climate action is up to those of us who love the earth enough to take personal responsibility for the mess we helped make. Plastic is our more or less permanent, indelible contribution to the planet, killing wildlife, polluting our air, water and soil and fueling the climate emergency by subsidizing the fossil fuel and fracking industries. Plastic has become a huge component of the consumer economy. With this as the state of things, we might want to consider avoiding plastic in our holiday shopping. Perhaps we could think about buying and giving books, natural fiber clothing, non-plastic craft items from third world shops or local artisans, fine art, magazine subscriptions, memberships to arts (or environmental) organizations, museums, charities, or perhaps making or baking our gifts. We might also consider gift certificates to grocery stores or secondhand shops to further reduce our environmental impact.



At any rate, please try to avoid giving things with myriad small plastic parts that will likely eventually end up imbedded in soil, blown into our water or pulverized into particles that can be inhaled or ingested into living bodies. With so much damage already done, we can at least resolve not to add to our earth's toxic woes by overindulging in the annual consumer orgy...just something to think about to make the holidays less stressful for the planet and ourselves. I hope you all have holidays warm and beautiful with the love of friends and family.



# ANNUAL SIERRA CLUB 2022 CALENDAR FUNDRAISER

Once again it's Calendar time - your RRG's biggest fundraiser! You get a wall or desk calendar with breathtaking images of our beautiful planet, space for planning, and the Club gets funds we need to run our programs and pay our bills. We depend on your generosity to get things done.

These calendars make great holiday gifts! Thank you for your continued support.

Please send your check payable to Rochester Regional Sierra Club indicating how many and which kind of calendar you want. Calculate Sales Tax for where you live and add \$8 each for shipping.

Address to: Rochester Regional Group Sierra Club

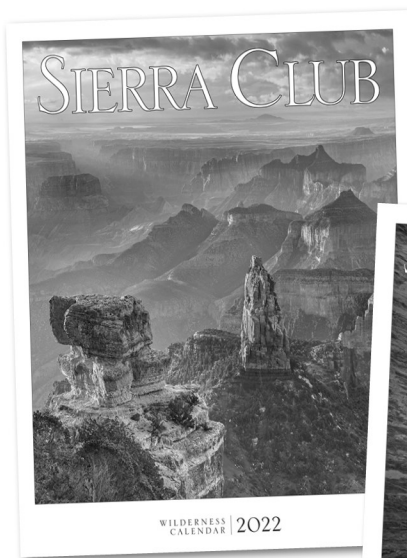
P.O. Box 10518

Rochester, NY 14610-0518



Enjoy, explore, and protect the planet

## 2022 SIERRA CLUB CALENDARS



### ORDER FORM

ITEM	COST	QTY	TOTAL
Wilderness Calendar	<input type="checkbox"/> \$14.95	_____	_____
Engagement Calendar	<input type="checkbox"/> \$15.95	_____	_____

Subtotal: \_\_\_\_\_

Sales Tax: \_\_\_\_\_

Shipping: \_\_\_\_\_

GRAND TOTAL: \_\_\_\_\_

Please make checks payable to "Sierra Club" and mail to the return address shown on your newsletter.

#### SHIP TO:

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone (\_\_\_\_) \_\_\_\_\_

Email \_\_\_\_\_

# BALLOT FOR MAILING IN IF YOU DO NOT VOTE ELECTRONICALLY

**Margie Campaigne**

**Ron Garrow**

**John Kastner**

\_\_\_\_\_ **write in candidate**

\_\_\_\_\_ **write in candidate**

-----CUT HERE-----CUT HERE-----CUT HERE-----

Bios of current ExCom members up for re-election. You may write in a candidate(s) also, as we have several vacancies.

## **Margie Campaigne**

I joined the local Sierra Club in the mid 1990's and worked with the Great Lakes Committee. Sometime after that, I was recruited to join the ExCom. I chair the Biodiversity-Vegetarian Committee, helped with various aspects of our annual Environmental Forums, and am current editor of the Ecologue and board secretary. I enjoy being able to pursue my passion for the environment in a number of ways, all facilitated by being a member of the RRG and its ExCom.

## **Ron Garrow**

Ronald Garrow, Akwesasne Mohawk Bear Clan, is the Founder and Executive Director of The Indigenous Peoples Center in Rochester, NY, a nonprofit organization supporting and promoting awareness of the Indigenous people's culture, primarily the Haudenosaunee Culture (known as Iroquois). While creating and running The Indigenous Peoples center Ron serves on the Board of Directors for Kanatsiohareke, a Mohawk Community in Fonda, NY and works full time for NY State Department of Motor Vehicles. Ron grew up on the Akwesasne Indian Reservation of Upstate New York and currently lives in Rochester, NY near his children and grandchildren. Ron has worked with many individuals and local entities to bring positive change and celebrate the indigenous cultures that are present in the region. Having participated in many speaking engagements, interviews and public events Ron has many accomplishments and is a Mohawk language speaker.

## **John Kastner**

Lifelong resident of Rochester, graduate of RIT BFA, worked thirty years as an illustrator, retired from the Memorial Art Gallery's Creative Workshop after teaching there forty years, founding member The Committee to Save Seneca Park, 1977-1986. Sierra Club member since 1992, board member since 2012 in charge of tabling and calendar sales and chair of our annual tree giveaway event, an avid hiker, biker and paddler with a keen sense of responsibility toward preserving the planet for coming generations.

**Rochester Regional Group of the Sierra Club**

**P.O. Box 10518**

**Rochester, NY 14610-0518**

Message line: 585-234-1056

www.sierraclub.org/atlantic/rochester; Find us on **Facebook** and **LinkedIn!**

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rubin150@aol.com

**\*The opinions expressed in the articles within are those of the authors and are not necessarily an official Sierra Club position or policy.\***

<b>Winter 2021-22 Calendar SIERRA CLUB and other environmental events</b>				
<b>DATE</b>	<b>DAY</b>	<b>TIME</b>	<b>MEETING/EVENT</b>	<b>LOCATION</b>
December 7th	Tuesday	6:30- 8:30 pm	Executive Committee Meeting	Via ZOOM, not in person
January 4th	Tuesday	6:30—8:30 pm	Executive Committee Meeting	Via ZOOM, not in person
February 1st	Tuesday	6:30—8:30 pm	Executive Committee Meeting	Via ZOOM, not in person.
All year	Every day	See Facebook for COVID hours	Abundance Coop Food Market: local, organic, sustainable food, open to public	571 South Ave., Rochester, NY in South Wedge (585) 454-2667 www.Abundance.coop
<b>SEE PAGE 4</b>	<b>FOR GVAS</b>	<b>FIELD TRIPS</b>	<b>BE SURE TO REGISTER IN ADVANCE</b>	<b>WE ARE INVITED TO PARTICIPATE</b>

**Watch our Facebook page and website for information on upcoming community meetings, outings & other activities**

*All Committees are local volunteer groups of the Rochester Regional Group of the Sierra Club.*

Follow us on Facebook to keep up-to-date on new events throughout the year—[www.facebook.com/SierraROC](http://www.facebook.com/SierraROC)

Executive Committee meetings are open to Sierra Club members. All other meetings are open to everyone.

**The Ecologue is printed on 100% recycled paper with green plant-based toner by ACCELERATED MAILING**

