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NEWS ON OUR EFFORTS TO KEEP THE ENVIRONMENT HEALTHY FOR MINNESOTA COMMUNITIES

Summer/Fall 2023 Volume 43, Issue 1

SIERRA CLUB LEGISLATIVE PRIORITIES AND RESULTS p. 6

HAVE THE METALS
WE NEED ALREADY
BEEN EXTRACTED?

p. 10

SUMMER OUTINGS & NATURE TIPS
p. 13

ENVIRONMENTAL ETIQUETTE: HOW TO BE GREEN BUT NOT MEAN

p. 22



Illustration credit: Brian Bradshaw



shanks to new leadership in the legislature, we shanks to new leadership in the legislature, we are finally achieving climate goals in Minnesota. As are finally achieving climate goals in Minnesota. As are finally achieving climate goals in Minnesota. As are welcoming new staff, we look to the future, we are welcoming new staff, we look to the future, we are welcoming new staff, and lower that our climate and interns, and volunteers to ensure that our climate and can continue to deliver the wins that our climate and can continue to deliver the wins that our climate and can continue to deliver the wins that our staff. our communities - both wild and human - need. Onward-Margaret Levin



Sierra Club staff and volunteers celebrate the passing of historic legislation outside the Minnesota Capitol.

PASSING CRUCIAL LEGISLATION

The legislative session began with a major victory: the passing of the 100% Clean Energy Bill. We kept the momentum going by devoting the rest of the session to the kind of small, persistent actions that drive big change: signing petitions, sending emails, calling legislators, and showing up at the Capitol for rallies.

As a result of our collective efforts on climate action and climate justice this session, Minnesota is now firmly on the path to a sustainable future.

"WE TELL PEOPLE 'ELECTIONS HAVE CONSEQUENCES' AND THERE IS NO **GREATER PROOF THAN THE 2023** LEGISLATIVE SESSION. BETWEEN THE 100% BILL, THE OMNIBUS TRANSPORTATION AND OMNIBUS ENERGY BILLS, I HAVE NEVER BEEN MORE HOPEFUL THAT WE COULD FINALLY DO OUR PART IN MINNESOTA TO ADDRESS THE CLIMATE CRISIS."

- Peter Wagenius, Legislative and Political Director



BIPOC Introduction to Backpacking participants and staff leader JR Hunte at the first learning session

CONNECTING AND LEARNING OUTDOORS

The Outings Program provides Sierrans and their neighbors a multitude of opportunities to connect with each other and the outdoors. We bring outdoor experiences to veterans and their families, we support the next generation of BIPOC leaders, and we offer events from stargazing to hiking that are open to all.

"JR'S PASSION FOR THE OUTDOORS GIVES." ME CONFIDENCE THAT ALL OF US COULD MASTER BACKPACKING OUTDOORS. IT FEELS SPECIFICALLY THAT I AM GAINING A SET OF LEADERSHIP SKILLS, CONFIDENCE, AND CONNECTIONS WITH OTHER BIPOC OUTDOORS PEOPLE THAT WILL EMPOWER ME FOR YEARS TO COME." - BIPOC Backpacking series participant



Earth Day March in partnership with Climate Justice Committee, EPNI, Sierra Club, and other organizations. Photo Credit: Devon Cuperv

BATTLING POLLUTION ACROSS THE STATE

We're organizing across the state to ensure environmental protections are enforced, to pass stronger regulations when needed, and to lobby for solutions like organics recycling, clean energy, and energy efficiency. It's beautiful to see volunteers, staff, and members build relationships across differences of race and class to fight alongside local coalitions for a cleaner, better world.

Together we are:

- Fighting proposed toxic copper-sulfide mines in the Arrowhead and beyond.
- Standing with allies in North Minneapolis to shut down the HERC trash burner.
- Fighting the NTEC proposed fossil gas plant in the Northland.
- Proud to be a part of the East Phillips Coalition that has said no to city plans that would further pollute their neighborhood.

"WE AREN'T GOING TO SURVIVE WITHOUT EMPATHY. THE MOST MEMORABLE THING FOR ME HAS BEEN WORKING AND LEARNING FROM THE PEOPLE WHO'VE BEEN IN THE FIGHT AND TO SEE HOW INCREDIBLY DIFFICULT IT WAS TO GET THIS BASIC THING DONE."

- Delaney Russell, Dual Volunteer Sierra Club & East Phillips Coalition on the recent environmental justice win: funding for the community to purchase the former Roof Depot site.

Sierra Club – North Star Chapter 2300 Myrtle Avenue, Suite 260 St. Paul, MN 55114 (612) 659-9124

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CHAPTER STAFF & LEADERSHIP

Find a list of chapter staff and volunteer leaders at sierraclub.org/minnesota/staff and sierraclub.org/minnesota/chapter-leadership. With any questions contact us at 612-659-9124, north.star.chapter@sierraclub.org.

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JOURNAL LEADERSHIP

Art Director/Production: Brian Bradshaw

Editors: Mary Blitzer, Marya Hart, Lindsay Starck

Contributing writers: Kris Acuña, Mary Blitzer, Alison Brown Cerier, Truly Green, John Krenn, Don Luce, Maerin Renee, Lindsay Starck, Robert Suchanek.

Copy editors: Danette Knickmeier, Doreen Kloehn, Sarah Curtis.

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TESTIMONY FROM THE 2023 LEGISLATIVE SESSION

On Frontline Community Protections (Cumulative Impacts Bill)

"THIS WOULD ADDRESS POLICIES THAT WERE CLASSIST AND RACIST THAT ZONED A LOT OF INDUSTRIES—IN FACT, AN OVERWHELMING AMOUNT OF POLLUTIVE INDUSTRIES—IN OUR COMMUNITIES...WE'VE GOT PEOPLE WHO CAN'T HAVE CHILDREN ANYMORE, WE'VE GOT PEOPLE WHO ARE FACING CANCER, WHO ARE FACING ASTHMA."

- Roxanne O'Brien, Community Members for Environmental Justice

On Lead in Schools

"THE SCIENTISTS AND DOCTORS THAT EVALUATE THE IMPACT OF LEAD EXPOSURE ON CHILDREN AND ADULTS FIND A CLEAR PICTURE THAT TELLS US THE MORE WE LEARN ABOUT IT, THE LOWER THE STANDARD MUST BE."

- Steve Ring, Sierra Club

On the Green Bank

"THE GREEN BANK WILL HELP MINNESOTA MEET OUR CARBON EMISSIONS GOALS FASTER AND ENABLE US TO ACCESS MILLIONS OF DOLLARS IN FEDERAL FUNDS. IF WE DON'T TAKE ADVANTAGE OF THIS OPPORTUNITY, OTHER STATES WILL."

- Patty O'Keefe, Sierra CLub

Illustration Credit: Brian Bradshaw

THANK YOU TO OUR ADVOCATES

It isn't easy to testify at the Capitol. The rooms are large and formal; the tables are wide and polished. The Senators or Representatives on the committee you've come to see are arrayed in a line or half-circle before you, watching you, waiting for your words. Behind you, other individuals who have come to testify or observe are shifting in their seats, eyeing the back of your head. It's a daunting experience, but it's essential to moving key legislation forward. We are grateful to the brave and dedicated individuals from our community who showed up and made their voices heard this legislative session. Here are a few of their words:



On Transit Funding

"A PERSON'S ABILITY TO MOVE AROUND FREELY IS DIRECTLY TIED TO THEIR ACCESS TO OPPORTUNITIES SUCH AS JOBS, EDUCATION, AFFORDABLE HOUSING, AFFORDABLE HEALTHCARE."

- Anthony Taylor, Slow Roll MSP

On Protecting Habitat & Sequestering Carbon

"FORESTS HAVE TRADITIONALLY BEEN VALUED BASED ON WHAT CAN BE EXTRACTED FROM THEM...HOWEVER, THERE'S BEEN A GROWING APPRECIATION OF OTHER VALUES DERIVED FROM THE FORESTS."

- Robert Kean, Sierra Club

On Clean Energy

"HOW FAST WE GET TO NET ZERO IS AS CRUCIAL AS THE GOAL ITSELF."

- Peter Wagenius, Sierra Club

On Transit Funding

"I ACTUALLY WANT TO TELL YOU ABOUT A GUY I SEE FAIRLY REGULARLY ON THE 11 (BUS LINE)...ONCE I STARTED TO RIDE THE BUS AGAIN AFTER THE COVID RESTRICTIONS LIFTED, HE SAW ME AND TOLD ME HE WAS WORRIED ABOUT ME, GLAD TO SEE ME, AND GLAD TO KNOW THAT I WAS STILL AROUND."

- Amity Foster, ISAIAH

SIERRA CLUB LEGISLATIVE PRIORITIES AND RESULTS

Our top priority going into session was to ensure Minnesota did our part to address the climate crisis. We are now on track to do this.

CLEAN ENERGY & CLIMATE VICTORIES

100% Clean Electricity In February, the "100% Bill" passed. All utilities, including cooperatives and municipalities, must rely solely on carbon-free sources by 2040.

Minnesota Climate Innovation Finance Authority (MnCIFA) or the "Green Bank" This nation-leading legislation establishes and fully funds programs like community access to solar, electric vehicle charging, and getting more clean energy on the grid.

Funding for Renewable Energy Funding for a variety of other renewable energy initiatives, including electrical

vehicle and school bus programs; a heat pump subsidy program; solar on schools; electrical grid interconnection improvements; electric panel upgrades; energy storage; and clean energy grants for tribal communities.

Buy Clean Pilot Program

Buildings are a major source of climate pollution. The Buy Clean and Buy Fair pilot program will explore a Minnesota-specific approach to reducing climate pollution in the materials that are used to update our buildings and infrastructure.

Easier Access to

Community Solar Gardens A revised community solar program will allow easier access to community solar for residential customers - especially lower income customers and renters.

TRANSPORTATION VICTORIES

Transit Funding The Transportation Bill includes a historic and transformative investment which is decades in the making. For the first time ever, the Legislature has directly raised new revenue for or Metro Transit.

- \$300 million annually to build out a comprehensive network of faster and cleaner Bus Rapid Transit (BRT) lines with safety improvements and much better frequency.
- Funding for greater Minnesota transit and the Northern Lights Express train to Duluth.
 - A tax credit for up to 75% of the cost on an electric-assisted bicycle, the percent depending on the income of the taxpayer.
 - Bike/walk funding, including about \$40 million per year for the next two years.

Climate Impact of
Highways The bill
recognizes that Vehicle
Miles Traveled (VMT)
have been increasing
significantly in excess of
population growth and
that we cannot build our
way out of congestion,
neither financially nor
physically. So the bill
requires that MNDOT
and other agencies

make investment decisions

consistent with Greenhouse Gas (GHG) reduction and VMT reduction goals.

Electric Vehicles The Energy and Environment Bill includes significant appropriations for EV school buses, EV rebates, and EV fleets.



Graphic Credit: Devon Cupery

Wow! What an amazing state legislative session. As a result of our collective efforts, Minnesota will now become a national leader on clean energy and transit, environmental justice and climate adaptation, and securing federal matching funds for climate action.

ENVIRONMENTAL JUSTICE & REDUCING POLLUTION VICTORIES

Frontline Communities Protection Act Also called the "Cumulative Impacts Bill," this law will create stronger permitting requirements that will reduce additional pollution in already overburdened and marginalized communities. It applies to the seven county metro area, Duluth, and Rochester. Native nations may also opt in. The Sierra Club played a supporting role on this legislation following the leadership of EJ leaders and organizations.

East Phillips Urban Farm With support from legislators, East Phillips Neighborhood Institute has reached a monumental and historic deal with the City of Minneapolis to purchase the Roof Depot site.

Lead Pipes Removal With testimony and active support from our Water Stewards, the Legislature appropriated \$230 million to replace lead pipes carrying drinking water across the state in communities and schools.

PFAS Reduction Per- and Polyfluorinated Substances (PFAS) are a group of manmade toxic organic chemicals known as "forever chemicals" that are found everywhere in the global environment, are highly persistent, and are widely used in consumer products. With the active involvement of volunteers from our Zero Waste Team, the Legislature passed a law requiring manufacturers of consumer products to disclose the levels of PFAS in their products, and to, prohibit use of PFAS in consumer products unless their use can be shown to be "unavoidable." In addition, the legislature is requiring that the use of PFAS in firefighting foam be phased out.

Compostable/Biodegradable Labeling To fight false claims by manufacturers that products such as food containers are "compostable" or "biodegradable," the legislature, with the active support of our Zero Waste Team, prohibited the use of those labels on products unless the products are shown to meet recognized standards for compostability and biodegradation.

ONGOING FIGHTS

Protecting Habitat and Sequestering Carbon Sierra Club proposed a Lowland Carbon and Habitat Reserve which would protect habitat and keep carbon sequestered in high priority state-owned lowland conifer forests and peatlands:

ecosystems which are rare across the world. The chapter's Forests and Wildlife Stewards led this effort and secured passage of the bill in the House. Since it didn't pass the Senate, we were not able to get it through the conference committee. But we did pass \$500,000 for a study on the benefits of protecting these lands, which will be conducted by the University of Minnesota.

Extended Producer Responsibility Our Zero Waste
Team supported a bill to enact an Extended Producer
Responsibility (EPR) policy, which would hold producers
responsible for the plastic in their products and packaging
throughout the entire lifecycle. Our bill did not pass as there
is a disagreement between governmental entities and
environmentalists about how best to limit the amount of
plastics going into products such as food containers. This
discussion will continue and we expect to fight for new
legislation on this topic next year.

Sulfide Mining The "Prove it First" Bill, a moratorium on sulfide ore mining unless it can be proven safe, has not moved in the Legislature due to opposition in the Senate. A bill to preventing sulfide mining in the Boundary Waters watershed also did not pass for similar reasons. The chapter is part of a broad coalition of groups fighting to prevent sulfide mining in all Minnesota watersheds, and we expect to continue to push for legislation next year.

Wake Boats Wake boats have a special, expensive design to produce strong wakes and waves. If used without care, wake boats can be devastating to an ecosystem, resulting in long-lasting damage to shorelines, water quality, and lake bottoms.

This session, some additional training requirements are included in boating legislation, but not the type of restrictions favored by the Chapter. We will continue advocating for legislation to reduce potential harm.

Off-Road Vehicles With partners, our Forests and Wildlife Stewards introduced legislation to sustainably manage motorized recreation on Minnesota public lands. The bill will not move forward this year, but will be a continued focus of our work in future years.



THE 5 R'S OF A SUSTAINABLE LIFESTYLE

Maerin Renee

As the climate crisis accelerates, we need to take steps to reduce our carbon footprint and to hold companies and institutions accountable for the waste they produce. By remembering the 5 R's, you can work toward developing a sustainable zero-waste lifestyle and you can contribute to environmental advocacy. Let's get ready to Refuse, Reduce, Reuse, Repurpose, and Recycle!

Refuse

Use the power of your wallet to let companies know that you won't support industrial pollution, plastic packaging, or practices that harm the earth and her inhabitants.

- Write to a company you patronize and ask them to move from plastic packaging to more sustainable options.
- Do your research and buy from companies that are truly waste- and plastic-free. For example, use the Tare Market in the Twin Cities (they also offer shipping) or the bulk aisles of your local food co-op (bring your own container).
- Contact your legislators and encourage them to support bills like Extended Producer Responsibility for Packaging or thank them if they already support such initiatives.

Reduce

Buy less stuff. Before shopping, take an inventory of what you really need. Did you know that over one-third of the food produced in the US goes to waste?

- · Streamline your grocery list.
- Learn how to compost, or research options for collecting your food scraps. Many cities and counties are beginning to offer food scrap/organics collection services. Call your city or county office to get more information, or start at the MPCA's community composting website.

Reuse

Reuse something you already have, or invest in reusable items.

- Replace one-off items in your rotation with things like fabric shopping bags, glass food containers, metal straws, reusable water bottles, and coffee cups.
- Buy used from local thrift stores such as Sisterhood Boutique, which provides business and leadership experience to young women in the community. There are also a plethora of online thrift stores such as ThredUp (designer clothing), Poshmark, and GoodwillFinds. You can find a list at Sustainablejungle.com.
- Donate unwanted items that are in good, usable condition to charities or thrift shops, rather than tossing them out. Or make some money and sell items on an online auction site.
- Check out The ReUse Warehouse for appliances, building materials, home accessories, and more.

epurpose

This is where you get creative, such as using the fabric of an old article of clothing to create a new item to wear or using wine bottles as candle holders. Keep in mind that it doesn't have to be perfect.

- Research DIY websites for repurposing ideas, or contact a local makers group for inspiration. Twin Cities Makers and Duluth Makerspace both have classes, shops, and lots of ideas.
- Check out places like Darn Good Yarn, an ethicallysourced company that transforms used saris into a variety of clothing and household items, or Zero Waste Daniel, a company that creates fanciful clothing out of preconsumer cutting room scraps.

Recycle what you can: paper, plastic, metal, glass, electronics. Many local cities and counties have drop-off sites for items that are difficult to dispose of and for recyclable items.

· Research your city's or county's guidelines for recycling. Become the neighborhood expert.

· Check out sites like Hennepin County's Green Disposal Guide or Recyclemoreminnesota.org.

Share ideas with friends and neighbors and find out what they're doing. Although there are limits to what we can achieve with individual action, the more we work collectively, the more quickly we will move toward a sustainable, healthy world for everyone.

Maerin Renee is a volunteer with the Chapter's Zero Waste Task Force. She enjoys hiking, practicing Korean sword fighting, and sipping Irish hot chocolate in the lodge while everyone else goes skiing.

"I've been working to make my personal life more sustainable by adopting a "slow fashion" mindset. To me, this means investing in quality pieces that will last for years to come. Fast fashion may be cheap, but it comes at a high cost to both the environment and the people who make our clothes. In a recent interview with Your Style in Rochester's Post Bulletin, I suggested ways to decrease the quantity of clothing you purchase and increase the staying power of your wardrobe. For example, when I was in high school I found a 1980s pastel green and purple Burton jacket at a thrift store and I've been wearing it every winter for over a decade now. A ski patrol once offered me \$200 when he saw me with

it and I had to tell him no, I love it too much!" - Kris Acuña Kris Acuña practices a sustainable and fashionable lifestyle. Photo credit: Joe Ahlquist / Post Bulletin.

MEET YOUR NEW ROCHESTER **ORGANIZER**

Kris Acuña

Hi there, I'm Kris Acuña, the new Climate and Clean Energy Organizer for the North Star Chapter in Rochester. I'm a distance runner who loves exploring the outdoors

> and Rochester's trails, and I'm currently training (albeit casually) for the Trinona triathlon in Winona in June. I'm excited to introduce myself to you and share a little about what we've been working on.

> > Here in Rochester, we've been getting back to business with our regular inperson monthly meetings.

We've hosted legislators Rep. Andy Smith and Sen. Liz Boldon to discuss climate and environmental justice priorities at the State Capitol: we've organized with friends

from ISAIAH to save the county environmental commission and ensure community members have a voice in the county's environmental processes; and we've won our battle to keep bike lanes in downtown Rochester. Looking forward, we're continuing to build our base here in

Rochester and southeast Minnesota with some fun outdoor programming this summer. We believe that Rochester can be an energy leader for southeast Minnesota and bring along peer communities, which is why we're continuing to organize around new opportunities created by the Inflation Reduction Act and powering our

buildings with clean electricity.



Electronics recycling in action. Photo Credit: Repowered

Alison Brown Cerier

Multinational mining companies are proposing new toxic copper-nickel sulfide mines in Minnesota. They claim that we need the mines for electric vehicles and clean energy. But a recent study points to an alternative source of copper and other minerals: e-waste recycling. E-waste recycling is one of the ways Minnesota can build a sustainable, clean energy future while protecting our waters and communities, keeping toxic metals out of landfills and incinerators, and creating new jobs across the state.

That's good news to everyone in the Sierra Club who is working to stop the copper-sulfide mines that risk polluting Lake Superior, the St. Louis River, and the drinking water of downstream communities like Duluth and the Fond Du Lac reservation. The findings are "giving so much hope and excitement to advocates for water protection and clean energy," says Jenna Yeakle, Sierra Club's organizer in the Northwest. "They say this is what we've needed for so long — proof that there are alternatives to PolyMet and other mines. The study shows that if we were extracting all the copper

from e-waste, the amount of metals, like copper, would be very comparable to the Polymet mine over the span of the next twenty years or so."

Benefits of e-waste recycling

"The Economic Potential of E-Waste Recycling," a recent study from the Iron Range Partnership for Sustainability, Macalester College, and a Minnesota e-recycling company called Repowered, found that amping up e-recycling in Minnesota has the potential to generate:

- · 1,738 direct jobs
- 78 million pounds per year of valuable metals
- Enough copper for 155,000 electric vehicles
- Enough silver to supply 441,000 solar panels
- \$2.8 billion in annual revenue

The authors "envision this work as a pilot study that will lead the way to further research and investment in Minnesota's e-waste recycling capacity."

Minerals for clean energy

According to the study, "e-waste is a promising source for metals that are facing increasing demand due to the transition to renewable energy." Electronic waste like computers, IT and communications equipment, and appliances contain valuable minerals such as copper, nickel, palladium, iron, lead, aluminum, and zinc.

Our e-waste stream contains 25.3 million pounds of copper per year. PolyMet claims that its plan will extract 1 billion pounds of copper, total, over the life of the mine. What makes e-waste competitive with Polymet is that e-waste is continually produced each year while the mine has a finite lifespan.

If we can maximize the recovery of existing copper – the US recycling rate is just 33%, compared to Europe's 60% – then we could build a true clean energy economy. Doing so will require recognizing limits on resources and shifting mentalities. For example, not just switching to electric cars, but also driving less, building effective transit systems, and planning for sustainable land use and transportation.

Keeping toxic metals out of landfills

E-waste recycling not only captures valuable minerals, but also keeps toxic metals out of landfills and incinerators. Discarded e-waste contains 70% of the heavy metals in landfills, where the presence of toxins like lead and mercury cause pollution and health problems.

Creating sustainable jobs

The study also found that expanded e-waste recycling would create longterm, family-supporting jobs for Northern Minnesota. That's important to communities impacted by the boom-andbust cycle of mining.

Yeakle hopes the study will help "build bridges between environmental organizations and the workers and unions whose livelihoods have been tied to mining."



Electronics recycling in action. Photo Credit: Repowered

Changing the story about sulfide mining

"THE FINDINGS ON

E-WASTE POTENTIAL ARE

GIVING SO MUCH HOPE AND

EXCITEMENT TO ADVOCATES FOR

WATER PROTECTION AND

CLEAN ENERGY."

The mining industry says Minnesota needs new coppersulfide mines for clean energy. This study empowers us all to tell a different story about what we need in Minnesota.

According to the Minnesota Pollution Control Agency,

Minnesota currently captures only about 20% of our e-waste for recycling. We need to invest in building an e-waste recycling program that benefits both the environment and human health.

You can help stop sulfide mining and spark research and investment in alternative e-waste recycling and our clean

processes. Spread the news about - Jenna Yeakle, Sierra Club energy future.

Alison Brown Cerier is a new Sierra Club volunteer. She enjoys writing about climate action and the environment, and hiking with her mini labradoodle.



Say NO to sulfide mining projects that haven't proven that they can operate safely. Say YES to protecting Lake Superior, the Boundary Waters, the St. Louis River, and all the humans and animals who enjoy them.



sc.org/stop-sulfide-mines

A FIELD GUIDE TO TWO POPULAR MINNESOTA BIRDS

Bob Suchanek

THE WOOD DUCK

I remember the first time I saw a Wood Duck. Domestic ducks on my uncle's farm were black and white, the television spectrum of my childhood, but the Wood Duck was in Technicolor!

Due to commercial hunting and habitat destruction, in the early 20th century the survival of these beautiful birds was by no means certain. Concerted efforts to protect migratory birds, including the Migratory Bird Treaty Act of 1918 and human-made nesting boxes, have boosted their numbers. Now the Minnesota Department of Natural Resources estimates a breeding population of more than 100,000 Wood Ducks in Minnesota.



Wood Drake Photo Credit: Bob Suchanek

Both male and female Wood Ducks sport stylish crests and demonstrate an unducklike ability to perch in trees. The brown female is not as showy as the male, but her crest and white eye ring make her stand out in wetlands, ponds, and rivers. Whether the nest is in a human-provided box or a hollow tree, Wood Ducks lay a large clutch of eggs (often over a dozen) and incubate them for about a month.

The downy ducklings are fearless and precocious little birds who splash right into life. They aren't fed by their parents and require only the protection and leadership of mom while swimming and foraging for seeds, berries, insects and plants. Young birds are able to fly a couple of months after hatching and will join their parents in the fall migration to warmer climates.

THE GREAT BLUE HERON

I can't help but be impressed by this largest heron in North America and its fisherman's focus and patience. I've been privileged to sit quietly on a lake shore and watch a heron slowly wade past me in pursuit of tasty fish, frogs, or bugs.

During the 19th and early 20th centuries, many kinds of herons were hunted for sport and for their feathers. The display plumes of breeding male Great Blue Herons were particularly sought-after fashion accessories. Herons are now protected by the Migratory Bird Treaty Act. Great Blue Herons, like Wood Ducks, currently have a conservation status of "least concern."



Great Blue Heron Photo Credit: USFWS Pacific Region

There are no visible differences between male and female herons except that males are generally larger. Both heron sexes share in the incubation of a clutch of up to six eggs. In contrast to the Wood Duck, the Great Blue Heron begins life as a helpless hatchling demanding to be fed regurgitated food by its parents. This feeding continues for several months until the hatchling can fly, and it may even continue for a short time after the chick leaves the nest. Minnesota's Great Blue Herons generally migrate, but they may remain for the winter in the southern part of the state.



TIPS FOR NATURE WATCHING THIS SUMMER

Minnesota boasts many beautiful places to enjoy the peace of nature. Even the smallest park or backyard offers plenty of wild things if you know where to look. Here are a few simple tips for enjoying the show:

- Be present. Stop, look, and listen.
- Only use your phone for taking photos or use an app that can help you identify what you're seeing and hearing.
- Take care of yourself. Wear sunscreen, avoid snakes, carry a rain jacket, wear comfortable shoes, and consider using hiking poles to navigate rough trails.
- Don't be afraid to do nothing. It may reveal something you weren't expecting.

Bob Suchanek is a volunteer with the Water and Wetlands Stewards. He can be found looking and listening almost every day at Roseville's Central Park and the Harriet Alexander Nature Center.









Join us on a local outing to explore the wonders of our natural world and learn how you can help protect it. Our local outings program mainly has offerings in the metro but we are expanding statewide. We also have programming focused on creating safe spaces for BIPOC communities, veterans, and active service members to experience nature.

Our outings programs include hikes, bike rides, interpretation of the local parks and other fun activities like star watching or nature sketching.

Upcoming Programs:

- Thursday, July 20, 5:30 PM Cedar Lake & Theodore Wirth Park Bike Ride
- · Saturday, July 22, 10:00 AM Frontenac State Park Hike
- Saturday, August 12, 11:30 AM Backcountry Cooking And Food Safety (BIPOC centered)
- · Monday, August 14, 8:30 AM, Lebanon Hills Summer Wetland Restoration Hike
- · Wednesday, August 30, 6:30 PM Starwatch Event Full Moon (BIPOC centered)

More dates and programs online at sc.org/mn-outings

PORTRAITS OF THE PLOTS

- THE BIODIVERSITY EXPERIMENT



Portraits of the Plots. Illustration Credit: Don Luce

Don Luce

What is biodiversity good for? A critical question as our human activities are removing many species from large areas of the planet and driving others to extinction.

In the 1990s, a large-scale experiment was initiated at the Cedar Creek Ecosystem Science Reserve to try to answer this question. The Big Bio experiment involves over 300 plots, each 9x9 meters. Each plot was planted with a selection of native prairie plants. Some received just one species, some two, four, eight, or sixteen species. Each spring, the plots are burned, and in the summer they are weeded to remove plants that are not the designated species. Each year, the plots are sampled to determine how much biomass is produced. Carbon and nitrogen in the soil is measured, and insect abundance and diversity are studied.

The results demonstrated that more diverse plots produce more biomass, and this productivity has

increased over time. More diverse plots are also more stable, produce more during droughts, and are more resistant to invasion by weedy species. What is biodiversity good for? The Big Bio experiment answered the question – biodiversity is important for the productivity and stability of living systems.

Portraits of the Plots Project

For my Portraits of the Plots project, I selected nine plots with differing levels of diversity. I studied them from the perspective of an artist and a naturalist. I tried to capture, in a painting, the distinctive "portrait" of each plot, giving viewers an intimate perspective into each plot's character, diversity, and abundance. I also hope my series will give viewers a window into the significance of the Big Bio experiment, one of the first studies to quantitatively demonstrate the importance of protecting our Earth's amazing biological diversity.

As portraits, I wanted the paintings to be close-up views of the plots, allowing viewers to see the plots as if they



Portraits of the Plots. Illustration Credit: Don Luce

were looking down on them at a slight angle – as if they were trying to identify the plants and weeding out species that were not intended to be there. I took some liberties, combining plants that would normally flower at different times during the season. Though I painted each portrait individually, my intention was always to show them as a group to reflect the grid of the Big Bio experiment.

Portraits of the Plots will be on display at the Bell Museum until Sunday, July 16, at 4:00 PM.

Don Luce is retired from the Bell Museum of Natural History where he was curator of exhibits. He is also an outings leader with the North Star Chapter. It's always a treat to join one of Don's walks where you can learn about geology, along with plant and animal life.



REDUCE YOUR CARBON FOOTPRINT AND SAVE MONEY:

THE INFLATION REDUCTION ACT TO THE RESCUE!

John Krenn

Would you like to stop powering your life with fossil fuels and save money as you do so? Who wouldn't? A new federal statute, the Inflation Reduction Act (IRA), appropriates \$370 billion to programs that will cut climate pollution and create over nine million family-sustaining jobs. Signed into law in August 2022, the IRA is the most significant climate legislation in U.S. history – the culmination of decades of grassroots organizating for strong climate action. It will provide many tools to lower your own carbon footprint, fight climate change, and save money.

The IRA provides monetary incentives to encourage you to do two things:

- Get your energy from electricity, not from fossil fuels
- · Use that energy efficiently

Let's take a simple example. Your water heater is ten years old and burns fossil gas all year round to give you hot water. Depending on your income, you can get from 30% to 100% of the cost to replace that gas burner with an electrically-powered fuel pump water heater.

Here's another example; this one focuses on energy efficiency. You have an old wooden front door that leaks cold air all winter around the edges.



"As a dad of two young kids, I knew it was important for our future and theirs for us to electrify and reduce our reliance on fossil fuels. I'll admit I was nervous about moving to a heat pump - it almost feels like a magic technology when I think about how it works - but it's been a great investment. Our house is as warm and comfortable as before, even in the cold of our Minnesota winters. And we're not burning gas to do it!"

Its insulating value is much less than that of exterior doors sold today. The IRA will reimburse you 30% of the cost of replacing that door with an Energy Star-rated door. You will have a warmer home, you will use less fuel, and your energy bill will drop.

PRODUCTS THAT WILL SAVE YOU ENERGY

For your fossil-gas-guzzling appliances, the IRA offers a simple remedy developed by modern technology: the heat pump. Heat pumps are already widely used in lower latitudes of the US and now have been engineered to work in Minnesota's climate. Air-source heat pumps pull the heat out of the air around them and apply that heat as needed to heat your water, warm your home, and dry your clothes.

The IRA also reinvigorates another product that will keep your house warmer in the winter and cooler in the summer: insulation and related energy efficiency steps. Your meager tax credit before the IRA was \$500. Now you can receive up to \$1,200, renewable each year for 10 years, thus receiving up to \$12,000 in efficiency-related tax credits.

TAX CREDITS: SOME LIMITLESS!

Tax credits are available now. They fall into four categories.

First, anyone can get \$150 for a home energy audit to see what they need.

Second, everyone, regardless of income, can receive a tax credit of up to \$3200 each year until 2032 for energy efficiency improvements, with the credit amounting to 30% of the cost of the improvements.

- Up to \$1,200 is available annually for any combination of home weatherization improvements such as windows, doors, and skylights; sealing; house wrap and insulation.
- For the remaining amount up to \$3200, you can get up to \$2000 for items like heat pump furnaces or water heaters, and upgrades on your air conditioner or an

electric panel.

Because these credits are available for each tax year, you should plan your improvements out over a period of years.

Third, new electric vehicle tax credits of up to \$7,500 are available, and many used electric vehicles qualify for a tax credit of \$4,000.

Fourth, roof-top solar, geothermal, and battery storage tax credits at 30% of your cost (uncapped) are available for the next ten years.

REBATES: UP TO \$14,000!

As good as those tax credits are, the IRA in effect gives every lower-income and middle-income Minnesotan household a \$14,000 "bank account" which they can draw upon to invest in electrification and efficiency.

The rebates will provide up to 100% reimbursement of the cost of heat pump-based furnaces, air conditioning units, water heaters, and dryers, as well as up to 100% of the cost of electric stoves, cooktops, ranges, and ovens. (Reimbursement rates will vary by income levels.)

The rebates will become available once Minnesota establishes its rules for administering this program, likely in 2024.

So start planning what you can do to take advantage of the IRA to cut your carbon footprint and save money. The changes you make will benefit you now and the succeeding generations of Minnesotans who will occupy your residence down the road.

John Krenn is the chair of the Clean Energy Team and the Legislative Team for the Chapter. He gets his electricity from Community Solar and is now looking to use that solar energy (and the IRA) to electrify all his home power needs.

FIND OUT MORE:

Tax Credits for Homeowners | energystar.gov

Electric vehicles:

- New https://fueleconomy.gov/feg/tax2023.shtml
- Used https://www.irs.gov/credits-deductions/used-clean-vehicle-credit

IRA Calculator:

https://www.rewiringamerica.org/app/ira-calculator

MINNESOTA SENTENCES

You may have heard of the haiku, which is a Japanese poetic form typically arranged in three lines of five, seven, and five syllables. In the 1980s, poet Allen Ginsberg put all three lines together into a single sentence of seventeen syllables that he called the "American sentence."

We put out a call for what we named "the Minnesota sentence": one sentence, nineteen syllables (we wanted to give ourselves a little extra space), having something to do with water. Here are some of the submissions we received!

Mid-lake, on my back, crows above, perch below, while they chainsaw the cottonwood.

– Marya Hart

Objectification of your transparency ruins my peaceful floating.

- Corvus Eckdahl

Cannon flows springswift into Lake Billesby, tumbling to rushing Mississippi.

DE Green

Winter's spring meltcrests river banks—a liquid savings account for summer droughts.

- Becky Boling

Dive the shallow pool, my brother and I play hide and seek for the black hair tie.

- Stephanie Janssen

Ducks on the water, there goes a goose, maybe an otter, oh-em-gee a moose!

- Alison Sommer

A summer lake girl afloat freshwater sun sears alabaster flesh to peels.

– Autumn Washburn

JOURNAL

DONATE TO SIERRA CLUB NORTH STAR CHAPTER

Your support is essential. Gifts to the Sierra Club North Star Chapter help us hold Minnesota leaders accountable for decisions that affect our air, waters, lands and climate. Your generous donation is an investment in the future of our environment and the protection of our most special places! Best of all, 100% of your contribution stays here in Minnesota to work locally on the issues you care about.

THERE ARE MANY DIFFERENT WAYS TO SHOW YOUR SUPPORT.

Make a one-time gift or become a sustaining donor to the Minnesota North Star Chapter

Your investment means we can keep up the pressure on state officials to protect our waters, expand clean energy, and increase transportation options. Because we lobby effectively for better environmental laws, general contributions to Sierra Club are not tax-deductible.

Make a tax-deductible gift to the Sierra Club Foundation to support our Minnesota programs

Support the North Star Chapter's charitable public education and organizing by making a gift to the Sierra Club Foundation, designated for our North Star Chapter.

IRA Qualified Charitable Distributions (Charitable IRA Rollovers)

Your IRA charitable rollover must be made payable directly to the Sierra Club Foundation as the qualifying 501(c)(3) public charity, and can be designated for our North Star Chapter.

Make a gift to the Sierra Club MN Political Action Committee

Help elect environmental champions to office!

More Ways To Give:

- · Planned Giving
- Stock Gifts
- · Vehicle Donation Program for Sierra Club Chapters

We would love to talk to you about how you can support our planet & communities. Call or email us at: 612-659-9124,

north.star.chapter@sierraclub.org sc.org/mn-donate

Support Your Passion

for a Just and Sustainable World

Create a legacy that protects and restores the natural world for future generations by naming Sierra Club's North Star Chapter in your will or trust. Or, name Sierra Club Foundation as the beneficiary of your retirement plan for the benefit of your local chapter and leave less highly taxed assets to your loved ones.



To learn more about the advantages of making a planned gift and to become a member of the Rachel Carson Society, please contact us.



Julia Curtis • (800) 932-4270 • giftplanning@sierraclub.org • myplan.sierraclub.org

"OUR DONORS
PUT AN INCREDIBLE
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NORTH STAR CHAPTER
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TRUST US TO ACT ON
YOUR VALUES. YOU TRUST
US WITH YOUR CARE
AND CONCERN FOR THE
FUTURE. THANK YOU."

- Margaret Levin, State Director

NOW IS THE TIME TO SHUT DOWN HENNEPIN COUNTY'S TRASH BURNER

Mary Blitzer

Northsiders know what it means to organize for their community. For over 30 years, they've been organizing for clean air and fighting the HERC trash burner. The Hennepin Energy Recovery Center (HERC) is the state's largest trash incinerator and is located close to North Minneapolis amid neighborhoods, daycares, and places of worship.

One Northside organizer is Beverly Propes, a Minneapolis school nurse who got involved when she noticed her students in schools near the HERC were suffering more from asthma than those who lived elsewhere. Her observations are backed up by the data. Asthma rates in children living in the 55411 zip code are five times the national average. The HERC's smokestack emits mercury,



Beverly Propes, retired school nurse residing in the 55411 zip code and advocate for shutting down the HERC Trash Burner. Photo credit: Minnesota Environmental Justice Table

lead, carbon monoxide, and cancer-causing dioxins into the air daily, poisoning the air of the neighborhoods near it.

Like many in her community, Beverly has built a strong network of support among family, friends, and neighbors. In her 30 years living and working in North Minneapolis, she's watched children grow into adults and have children of their own. Beverly and her community deserve better from the county.

This toxic facility, publicly owned by Hennepin County, was built in one of our poorest communities and reveals the extent of environmental racism in our city. Every day the HERC burns 1,000 tons of trash: enough to fill up 11 Twins stadiums. This isn't just trash from Minneapolis; it is the collective waste of half the residents and businesses of Hennepin County. Because our trash is being burned, it's our collective responsibility to find a better solution.

Beverly, other residents, and folks across Hennepin County are now organizing through the Minnesota Environmental Justice Table (EJ Table) and their campaign to shut down the HERC trash burner. The Sierra Club is a founding member of the EJ Table and a proud coalition partner.

As one of the largest membership organizations in the coalition, we can connect our members from across Hennepin County to this issue. For example, we learned at a recent outing along the Rum River that two participants lived in one of the target county commissioners' districts. So we invited them to join an upcoming meeting with their commissioner on this issue.

Connecting folks across Hennepin County can lead to real results, as is the case with Judy Gregg. Judy Gregg is a Sierra Club member who also organizes on climate justice issues in Excelsior and is a leader with the West Metro Climate Hub, a faith network focused on climate advocacy. Judy has been instrumental in conversations with her commissioner about setting a shut down date for the trash burner.

The past legislative session has added momentum to our fight. The 100% Clean Energy law passed in February included an overdue correction. Previously, because of the county's lobbying efforts, the HERC was considered renewable energy, despite the carbon and other pollution it releases. Under this classification they were able to sell renewable energy credits. Now it is correctly classified as a non-renewable energy source, making it less financially

viable to operate. And the State Legislature passed a bonding bill which will award Hennepin County \$26 million for an organic waste processing project, but not until they see a plan to close the HERC incinerator.

Hennepin County's new Zero Waste Plan could also help if thoughtful action steps are included in the plan. Nearly 70% of what is now burned at the HERC is actually recyclable or compostable.

Although the remaining trash would need to be diverted to a landfill, the plant already sends approximately 23% of the tonnage it receives to landfills in the form of ash. And of course, the Zero Waste Plan should also include steps to reduce waste in the first place. For example, Hennepin County could advocate

they have been.

Any true Zero Waste Plan would include a shut down

for an extended producer responsibility (packaging waste

Any true Zero Waste Plan would include a shut down date for the HERC. This is what we are calling on Hennepin County Commissioners to do.

HERC

Pollution Facts

Serving Size 345,000 Tons

Amount Per Serving

Carbon Dioxide 3rd in the county

% Yearly Value*

Total Lead 12.1 lbs (3rd in county)

Nitrogen Oxides 404 Tons (1st in county)

Sulfur dioxide 12 tons (2nd in county)

PM*2.5 (21 tons) (2nd in county)

PM*10 (23 tons) (4th in county)

Emissions can increase cardiovascular respiratory, organ, and brain damage.

*The HERC incinerator is a false solution branded as *clean & green." This is far from the truth. In burning our trash, it recycles some energy, but it also is the biggest polluter in the county.

Graphic Credit: Minnesota Environmental Justice Table

You can help us put an end to toxic trash burning in North Minneapolis. Please sign the petition to shut down HERC trash burner and we'll follow up with more information on how you can get involved in the fight for clean, breathable air for all!

Mary Blitzer is the Senior Engagement Manager at the North Star Chapter. She is proud to be uniting members and supporters across differences of race, geography and age to fight for environmental justice.

reduction) law, rather than pushing for a limited version, as



LEARN MORE AT SC.ORG/HERC

WHAT'S GOING INTO THE HERC? PLASTIC WE NEVER SHOULD HAVE MADE



Photo Credit: Jaida Grey Eagle, Sahan Journal

Petrochemical companies have invested more than \$200 billion in a buildout of their plastic production industry over the last 10 years. This production is set to triple by 2060 even though a majority of people in the US believe we should reduce the amount of plastic produced – especially single use plastic. Adopting a strong Extended Producer Responsibility (EPR) bill is an opportunity to help change this unhealthy, unsustainable trajectory. Since 35-40% of plastic is used for packaging, a well-crafted EPR for product packaging bill could address a significant contributor to the plastic crisis with the added benefit of addressing waste overall. A weak bill, however, could lock in the producers' abilities to continue the escalation of plastic production and the harm it is causing the planet. Join the Zero Waste Task Force in supporting a strong bill to reduce plastic waste.

ENVIRONMENTAL ETIQUETTE: HOW TO BE GREEN BUT NOT MEAN

Dear Truly Green,

Friends invited our family to their cabin in Northern Minnesota. Since there are no electric charging stations near them, my husband plans to plug our electric car into their cabin to charge. To me, this feels gauche: they've invited us for the weekend, and now we're essentially asking them to pay for our gas. My husband says they shouldn't care if we use their electricity to get us home again. Which of us is right?

Sincerely, I'll Pay My Own Way

Dear I'll Pay My Own Way,

Since the average cost of charging an electric car from zero to full in a standard outlet in Minnesota runs between \$7-\$14, I am assuming you're worried less about the cost to your friends, and more about the awkwardness of making the request. When all cars are electric, this will become a moot point: you'll charge at my house, I'll charge at yours, and we'll call it even. Although we're not there yet, this vision of the future reminds us that addressing the climate crisis means radically transforming the way we think about our relationships to others. Your decision to drive electric, or to take the train instead, benefits everyone; and so you needn't feel badly

about asking to plug in the car or requesting a lift from the station. The reverse is also true, of course: the bottle of water you purchase will be littering the beaches of strangers you'll never meet long after you're gone. None of our actions is isolated. So ask your friends nicely, take them to dinner to thank them, and go to sleep knowing that you're all breathing easier.

Truly Green

Dear Truly Green,

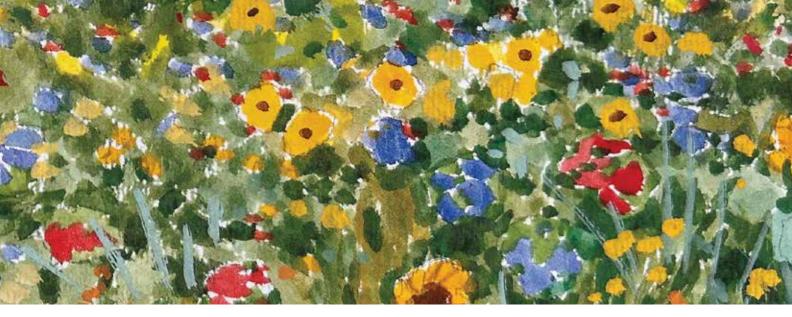
I love eating out, but I hate bringing home leftovers in styrofoam or non-recyclable plastic containers. Will people think it's weird or unsanitary if I carry reusable storage containers (glass, Tupperware) with me and pull them out of my purse to use at the end of the meal?

Sincerely,

Hungry for Change

Dear Hungry for Change,

Congrats on coming up with your own fantastic solution to this pervasive problem! A few caveats: the restaurant staff won't be able to carry any foreign containers into the kitchen, for health code reasons, so you'll have to do



the boxing up yourself; and they won't take kindly to anyone using such containers for buffets or all-you-can-eat fish fries. But there is absolutely nothing weird about working toward zero-waste, and ideally your friends and family will be inspired to follow your lead. If anyone raises an eyebrow, just smile and explain that you're only trying to cut back on waste. Then make a mental note to give them their own set of snazzy reusable containers for their next birthday. Thank you for making this change!

Truly Green

Dear Truly Green,

I have a wonderful relationship with my neighbors, but I become upset when they water their lawn during severe dry spells and spray their yard with chemicals. Is there a nice way to tell them that their desire for a picture-perfect yard is damaging the environment?

Sincerely,

Plant-Lover

Dear Plant-Lover,

Although there may not be a nice way to say this directly, there are still actions you can take. First of all, fill your own

yard with native grasses and pollinator-friendly plants. When you see your neighbors, remark on the benefits (ease of care, proliferation of butterflies) of this kind of landscaping. You might also consider gifting them a native plant to put in their own yard – say, coneflowers or anise hyssop—as encouragement. If these subtler methods don't work, try posing the question in a way that underscores the cost of their actions. "Your yard is gorgeous," you might say, "but it must take a lot of water and chemicals to keep it looking so lush. Have you ever thought about transitioning to an easier, more cost-effective, healthier alternative?" By framing the issue as a question rather than an accusation, you give them space to consider their behavior without feeling judged or defensive.

Good luck!

Truly Green

Do you have an environmental etiquette question of your own? Send it to deartrulygreen@gmail.com and find out what she advises.



Illustration Credit: Larry MacDougall from Hare and the Big Green Lawn. In the children's book Hare and the Big Green Lawn by Katharine Robey, the main character confronts the same problem as Plant-lover. When Hare plants wildflower seeds and refuses to water his lawn, his neighbors look down on him for being lazy. But when a beautiful wildflower meadow grows, he and his neighbors all celebrate the return of nature to the neighborhood.



or current resident

JOIN OUTINGS. VOLUNTEER. MAKE A DIFFERENCE.



Join us to organize, research, and advocate for our environment. There are lots of ways to be involved! sc.org/mn | north.star.chapter@sierraclub.org | 612-659-9124