

INDUSTRIAL HEMP • AFTER THE STORM: LOOKING BACK AT THE SUPER DERECHO

MORSEL

neighborhood.coop

Spring 2019

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**Hemp: A New Cash Crop
for Southern Illinois?**

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**Planting Seeds for
Growth: Industrial Hemp
in Illinois**

FREE



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DERECHO



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{CO-OP THROW BACK}

The Co-op was closed for the rest of the day after losing power in the aftermath of the derecho on May 8, 2009. However, we were open the next morning, using a household generator to power our Point of Sale (POS) system. A few days later we were back to full power after we rented a 100-kilowatt trailer generator which was pulled in from Evansville, Indiana. Getting the word out that we were open for business was difficult initially and we fell back to non-electronic forms of communication.

MORSEL

A QUARTERLY PUBLICATION OF
NEIGHBORHOOD CO-OP GROCERY

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EDITORIAL POLICY

Morsel is a quarterly magazine produced by Neighborhood Co-op as a means to share news from the Co-op, promote local food, celebrate the seasons, and inspire our owners and patrons to enjoy a healthy lifestyle full of delicious and nutritious food. The views expressed in Morsel are the authors' and do not necessarily reflect those of the Co-op's directors, staff, or ownership. Health and nutrition articles are for informational purposes only and do not constitute medical advice.

SUBMISSION POLICY

Morsel accepts submissions on an ongoing basis. Letters, articles, artwork, and ideas are all welcome! We reserve the right to edit content for brevity and clarity. Please send inquiries and submissions to amy@neighborhood.coop.

OUR STORE

1815 W Main Street, Carbondale IL 62901

Neighborhood Co-op is a cooperative grocery store owned by members of our very own community. Most of our staff are even owners! We are a founding member of the National Cooperative Grocers, a network of more than 200 cooperative grocery stores all across America. We combine our buying power to bring you the best food at the best value while staying locally governed. We work hard to support our community and improve our local food system.

OUR MISSION

Neighborhood Co-op Grocery aims to serve the needs of its owners and patrons by providing wholesome foods, economically, in the cooperative tradition and in ways that best promote the health of the individual, the community and the earth.

BOARD OF DIRECTORS

Generally, meetings are held in the Co-op Community Room once a month at 6pm.

Contact the Board at:
boardlink@neighborhood.coop

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Mary Avery
Kristy Bender
Susan Barry
Leslie Duram

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ECO PRINTING

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Sales & Events

at the Co-op

APRIL

3 **Wellness Wednesday**
10% off all wellness items!

6 **Board Voting Opens**
Spring Cup Sale
SIU Ceramics will be selling handmade cups to raise money for their department!

26 **Feed Your Neighbor 5K**
Annual 5K to raise money for Good Samaritan!



27 **Owner Fest**
Our annual meeting and party for owners!

JUNE

5 **Wellness Wednesday**
10% off all wellness items!

7 **Red Cross Blood Drive**
2PM-6PM

MAY

1 **Wellness Wednesday**
10% off all wellness items!

4-5 **Owner Appreciation Weekend**
Owners get 10% off their entire purchase this weekend!



JULY

3 **Wellness Wednesday**
10% off all wellness items!



GENERAL MANAGER'S REPORT



FRANCIS MURPHY

This May 8th will be the 10-year anniversary of the derecho that struck a swath of Southern Illinois causing enormous damage and knocking out power for days or weeks. For the Co-op, the derecho came at a precarious time. We had relocated to the current store exactly three years earlier and we had been losing money the entire time. By the time the derecho hit we had maxed out lines of credit, taken out an additional loan from the bank, and made three appeals to the Co-op's owners to loan us money. Most of the previous year we had negative cash, which meant that we had to run daily deposits to the bank faster than creditors could cash our checks.

There were signs of hope in the spring of 2009 that we were starting to turn the corner financially at long last. Our landlord agreed to delay a scheduled rent increase. We had a small balance in our checking account. Owners who had previously loaned us money agreed to maintain or increase their loans as they came due. Then, out of the blue, on a Friday afternoon a meteorological event that none of us had ever heard of before befell our region.

At the Co-op, the first indication that something was wrong was when the Murdale True Value greenhouse blew across the parking lot. A few staff ran outside and rescued a large rack of starter plants, rolling it into the store before it was carried away by the wind. Several of us foolishly stood in the front of the store and watched the whole storefront system of glass and aluminum flexing back and forth. When we saw the windows bursting in the neighboring businesses it was time to get all the customers and staff to the relative safety of the back of the store. Like tens of thousands of others, we lost electricity for what turned out to be an extended period.

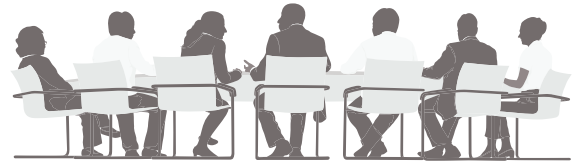
We closed the store for the rest of that day but on Saturday morning bought a small, household type generator in order to power the Point of Sale system. It was extremely

fortunate that the weather was beautiful with highs in the 70s in the aftermath of the derecho so we were able to leave the doors open. The Co-op's many windows, skylights, and solar tubes meant that you could easily find your way anywhere in the store; this allowed the Co-op to stay open during daylight hours. Within a few days, we were back to full power after we rented a 100-kilowatt trailer generator which was pulled in from Evansville, Indiana.

The derecho caused direct physical damage to HVAC and refrigeration units on the roof, part of the awning, and minor damage to the roof itself. These repairs cost approximately \$17,000. The Co-op also lost approximately \$28,000 in spoiled product. It was sickening to throw out that much good food. We also made an insurance claim for loss of business income and operating expenses based on the roughly \$45,000 in sales that we lost during the nearly seven days that we were off the grid.

We were helped enormously by our sister co-ops in National Co-op Grocers who essentially paid our outstanding invoices to our primary distributor, UNFI, totaling \$25,000, until we were able to repay them with the insurance proceeds. We needed them to do this because the Co-op would have run out of cash otherwise and would not have been able to make payroll.

The insurance company promptly paid our claims for repairs and spoilage but balked on paying us for loss of business income. I ended up filing a complaint with the Illinois Department of Insurance against both the company and our insurance agent. A week later we received a check for \$17,000. As it turned out this check represented half of our net income for the year making 2009 the first profitable year we had since the relocation to the current store. The derecho, in a strange way, marked the Co-op resurfacing financially after years of swimming in the red.



SUSTAINABILITY AND YOUR DIET

by **Leslie Duram**

According to the United Nation's Food and Agriculture Organization (FAO): "Sustainable diets are those diets with low environmental impacts which contribute to food and nutrition security and to healthy life for present and future generations." (FAO, 2010).

Agricultural production relies on natural resources: soil and water, of course, but nowadays also significant amounts of fossil fuels—directly for running farm machinery, and also indirectly because of synthetic chemical fertilizers and pesticides are manufactured from fossil fuels. In addition, agriculture—and particularly animal agriculture—impacts land use, water supplies, air quality, and greenhouse gas (GHG) emissions.

Land use change due to animal agriculture has a significant impact on the earth. Livestock animals far outnumber humans on earth. In fact, there are 19 billion chickens, 1.4 billion cattle, and 1 billion pigs (The Economist, 2011). Nearly 30% of the earth's ice-free land is used for livestock grazing, but that's not all—33% of all croplands are used for livestock feed production and 40% of all crops grown on earth are fed to livestock (FAO, 2012).

Most meat and dairy consumed in the U.S. comes from huge production facilities. Indeed, there are approximately 450,000 Confined Feeding Operations (CAFOs), defined by the U.S. Environmental Protection Agency (EPA) as agricultural enterprises where animals are kept and raised in confined situations. Specifically, a CAFO has more than 1,000 head of beef cattle, 700 dairy cows, 2,500 swine, 125,000 broiler chickens, or 82,000 laying hens confined on a site for over 45 days (USDA-NRCS, 2018). At these facilities there is a concentration of live animals, manure, urine, dead animals, and water demand, which can significantly impact the local community.

Fresh water is used to produce livestock; directly from watering the plant, and indirectly as plants are fed to animals. It takes 53 gallons of water to make one egg, 468 gallons to produce a pound of chicken, 880 gallons to make one gallon of milk, and—incredibly—1,800 gallons of water to produce one pound of feedlot beef (Kristof, 2015).

In addition, livestock contributes significantly to the anthropogenic emissions of greenhouse gas (GHG) causing climate change. In fact, livestock production is responsible for 15% of all human GHG emissions, which is equal to the combined exhaust from all transportation (Reuters, 2018). Research shows that plant-based diets produce significantly lower (35-64% less) GHG emissions than animal-based diets (Carlsson-Kanyama and González, 2009; Stehfest et al., 2009; Pathak et al., 2010; Bellarby et al., 2012; Berners-Lee et al., 2012; Hamblin, 2017).

A review of numerous research articles on the topic shows that GHG emissions could be reduced over 70% and water use by 50% by shifting the typical Western diet to more environmentally sustainable diets (Aleksandrowicz, et al., 2016).

These are ethical issues. Do citizens of wealthy countries have the right to use their agricultural system to produce crops that will be used indirectly and inefficiently for animal production, when 815 million people in the world do not have enough food to eat? (THP 2018). Stated a different way, growing crops that are "food exclusively for direct human consumption could, in principle, increase available food calories by as much as 70%, which could feed an additional 4 billion people" (Cassidy et al., 2013).

"It takes about 28 calories of fossil fuel energy to produce 1 calorie of meat protein for human consumption, [whereas] it takes only 3.3 calories of fossil fuel energy to produce 1 calorie of protein from grain for human consumption," according to Cornell University expert, David Pimentel (WWI, 2017). Further, 100 calories of grain are needed to produce just one calorie of beef (Foley, 2014).

Overall, sustainable diets are those that are appropriate for local environmental conditions, based on plants and fewer animal products, support local farmers, and build regional economies. We can all work together to promote a healthy environment by building local food systems based on sustainable diets. The first step is for each of us to think about how our food choices impact the Earth.

For References, see the book: Duram, L. A. 2018. "Environmental Geography: People and the Environment." ABC-CLIO Press.

COMMUNITY CONNECTIONS

Our second quarter **Wooden Nickels** recipients are **Southern Illinois Down Syndrome Community Group** and **Boys & Girls Club**.



Southern Illinois Down Syndrome Community Group

Our mission is to help connect, support, and encourage individuals and their families in Southern Illinois. We are in Partnership with the Down Syndrome Association of Greater St. Louis and all funds raised for the group is used here to benefit families in Southern Illinois. We provide free monthly social events and resources for our families such as therapeutic horseback riding, swim parties (for sensory play), and workshops, just to name a few. Our group has been making a difference in this area for more than 20 years!

The Boys & Girls Club of Carbondale is a youth development agency. Our mission is to inspire and enable all young people, especially those who need us most, to realize their full potential as caring, responsible and productive citizens. We have been in existence since 2004. Our youth enrollment this year is over 1300 youth with 325 average daily attendance. We provide after school programming that highlight 3 pillars: Academic Success; Good Character and Citizenship; and, Healthy Lifestyles. These are implemented through 6 core areas: leadership and service; college and career; education and STEM; The Arts; Health & Wellness; and, Recreation, Fitness and Sports. Our future goals is to continue our growth but also to reach youth in more southern Illinois communities.

Visit neighborhood.coop if you know of an organization that could benefit from our program.



Working with our Community

Red Cross Blood Drive

Jan. 4, we hosted a blood drive in the Co-op Parking lot. We have been a successful location for donors and will continue to work with Red Cross to support their needs. Next blood drive will be ???

Souper Bowl of Caring

Saluki football players were at the Co-op Feb. 2, to help the "Souper Bowl" of Caring fundraiser by collecting donations to help feed the homeless and hungry in Carbondale. In total, players collected \$???

Co-op Awards

Voted Best

This past February we found out that we were voted Best Local Grocery Store through the Southern Illinoisan's Readers' Choice Best of 2018 Awards. This is the second year in a row that we have won first place. We take pride in providing a welcoming atmosphere and friendly customer service. Connecting with customers and owners on a personal level allows us to tailor what we do to meet the needs of our community. This award means so much more than just a plaque we hang on the wall. It shows how our customers feel about what we do. Thank you all for your votes and support!

Winning Display

If you visited our store during the month of February, you might have noticed our Cascadian pollinator display that was located near the cash registers. We are pleased to announce that the Co-op won second place nationally for our creative display! A big thank you goes out to our staff that put in the hard work to get everything setup and looking so great! Even though it's heartwarming to get this recognition, for us, we love

working with companies that want to reduce their impact on the environment through positive farm practices. If you don't already know, Cascadian Farms is a large supporter of pollinators on their farmlands. A third of our food exists because of pollinators. There are so many benefits to preserving their existence. Cascadian, as an advocate for pollinators, has used its own resources for education and to support the movement protecting our environment. The purpose of the display we created was to allow us to educate our own customers and hopefully to increase awareness of the need to protect native pollinators in our area.



Hemp:

A New Cash Crop for Southern Illinois?

by **Andrea Hahn**

Its oil can be used in ink, paint and varnishes – and also for cooking or salad dressing, in soaps, moisturizers and sunburn lotion. Its stalk yields a multi-purpose fiber that can make everything from rope to paper to clothing to building-quality fiberboard. It even makes a durable plastic substitute.

"It," of course, is hemp, the much-discussed but still mysterious super plant.

Multi-use & Full Use

"You can use the whole plant," said Tabitha Smith Tripp, an advocate with Southern Illinois Growers Network (SIGN) as she explained her enthusiasm for the plant. SIGN is an intersectional group of Southern Illinoisans who support and promote the use of industrial hemp for food, fuel and fiber. You can find them on Facebook.

"The entire plant is useable, and there are so many uses for it," she said. The textiles made from hemp can be soft enough for diapers or sturdy enough to use like canvas. The oil is rich in omega-3 fatty acids. Hemp paper is longer-lasting than wood pulp paper, and because hemp

grows much faster than trees, a superior renewable source for paper products. The list goes on.

"Just about anything you can make with plastic you can make with hemp," Tripp said, adding that hemp, being biodegradable and non-toxic is far more Earth- and ocean- friendly than plastics.

She's particularly enthusiastic about the use of hemp fiber in building materials, such as fiberboard and even insulation. In

fact, even the dust from the fiberboard processing has a use: it can be pressed into pellets for use in pellet-burning wood stoves.

Guilt by Association: Hemp & Marijuana

So why the mystery? Why is a plant this universally useful not in production on America's farms? There are plenty of theories but the simplest is that it's a case of guilt by association. Hemp is a member of the cannabis family. Anti-marijuana campaigns, which began in earnest in the early 1930s, didn't discriminate. Cannabis was cannabis. The provisions of the 1937 Marijuana Tax Act dealt a

crippling blow to industrial hemp growers and processors. And the 1970 Controlled Substances Act, which labeled all species of cannabis a Schedule 1 Drug, the most severe designation, was the death strike.

But before that, Illinois was a significant player in the production and processing of hemp products. If patents are an indicator of a healthy industry, then Illinois and hemp were doing fine. Between 1891 and 1928, at least 14 patents of Illinois origin were registered with the U.S. Patent Office for inventions having to do with harvesting and processing hemp.

There was a temporary revival of the hemp fiber industry during World War II with the Hemp for Victory campaign. The "war crop" was needed to make rope and material for tents. In Illinois, more than 3,000 growers registered in the Chicago and Springfield areas in 1943 and 1944. When the war ended, so did government support for hemp.

"Hemp has been out of production for 80 years here," Tripp said. "We've lost a lot of research and development time."



New Fields of Research & Opportunity

But now, laws and public opinion about both industrial hemp and medicinal marijuana are changing. And Southern Illinois is ready to take a leadership role.

At Southern Illinois University Carbondale, a new cannabis science initiative combines resources from the science and agricultural sciences in support of this emerging industry. The first step is a five-acre hemp research field, with cultivation to begin this spring.

"Both of these crops – hemp and medicinal cannabis – show benefits in numerous areas... and we want a program to support this emerging industry," said Karen Midden, professor of horticulture with the SIU College of Agricultural Sciences, noting that potential growers, processors and students have been reaching out to the university. "They need the science we can provide, and we are positioning ourselves to help."

Karla Gage, assistant professor of weed science and agricultural systems, plans to incorporate industrial hemp into her weed control studies. Gage focuses on herbicide-resistant weeds, finding crop rotation and cover crops as useful allies against "super weeds." She'll be looking at how hemp could fit into Southern Illinois' crop rotation, and how it might fare as a natural weed resistor.

SIGN is optimistic that industrial hemp producers may be able to cultivate the plants on former mining ground – ground that, even after reclamation, is no longer good farmland. "Some of that former mine land isn't producing anything right now, including tax revenue," Tripp said. "We hope that research will be done locally to find a strain that will help reclaim abandon mine lands, return it to productive farm lands and create new revenue for counties that have been impacted by mining."

She said SIGN is also ready to consider another question: potential Southern Illinois sites for hemp processing as well as production.

Aldwin Anterola, associate professor plant biology at SIU, wants to see the university become a site for major stakeholder conferences, including considerations of marketing planning and scientific papers.

"We've been engaged and we are trailblazers in this, ahead of the other universities in the state," said Aldwin Anterola, associate professor of plant biology at SIU. "There's room for growth here and SIU could contribute a lot to that research."



PLANTING SEEDS FOR GROWTH:

Industrial Hemp

IN ILLINOIS



In August of 2018, Governor Bruce Rauner signed into law Senate Bill 22998, more commonly referred to as the Industrial Hemp Act. This act lifts restrictions on the production of industrial hemp in Illinois and makes hemp products no longer considered a schedule 1 drug. The Illinois General Assembly states that the Industrial Hemp Act allows individuals to “grow, cultivate, or process industrial hemp or industrial hemp products.” This opens up the playing field for farmers and manufactures to use hemp in the production of health food, supplements, construction materials, fabric, and biodegradable plastics in Illinois among many, many other options.

Hemp-derived cannabidiol (CBD) has rapidly become a very popular supplement at the Co-op.

CBD and Marijuana: What's the Difference?

There remains a lot of confusion regarding the differences between hemp and marijuana. Hemp and marijuana do share certain similarities in the botanical world due to both plant's biological structures. Both plants are derived from the *Cannabis sativa* family but they have several distinct and critical differences.

Cannabinoids, a group of chemical compounds, are found in both marijuana and full spectrum hemp oil. According to the University of Washington, Alcohol and Drug Abuse Institute “cannabinoids affect the user by interacting with specific receptors, located within different parts of the central nervous system.”

Marijuana's dominant cannabinoid is delta-9-tetrahydrocannabinol (THC.) This cannabinoid is responsible for the mind-altering effects marijuana causes, also known as getting high. Marijuana is frequently cultivated to produce THC-rich plants, which cause mind altering effects.

Full-spectrum hemp oil is created from the flowers, leaves, and stalks of the hemp plant, which contain the same levels of compounds and cannabinoids found in the original hemp plant. This oil contains a wide array of cannabinoids, alongside

many essential vitamins and minerals, protein, chlorophyll, flavonoids, fatty acids, and terpenes. The most plentiful cannabinoid present in this oil is cannabidiol, also referred to as CBD. By law, CBD products may only contain up to 0.3 percent of THC and therefore do not have the mind altering effects of marijuana.

Hemp plants are grown to create fiber, protein-enriched foods and supplements, hemp seed oil, paint, varnish, body care products, soap, and much, much more. It is important to note that hemp seed oil is not the same as the CBD-rich oil extracted from the flowers, leaves, and stalks of the hemp plant. Oil pressed from hemp seed contain little to no cannabinoids and do not contain THC. Hemp seed oil is a wonderful source of vitamins and minerals and contains a great balance of omega 3 and omega 6, all while containing no cholesterol, carbohydrates, proteins, sodium or sugar.

The CBD industry is one of the fastest growing sectors of the quickly emerging hemp market in the United States, and worldwide. CBD's benefits have been touted for helping an increasingly diverse variety of health issues. One of the goals written into the 2014 Farm Bill helped to generate and protect research about the potential health benefits of hemp products. The 2018 Farm Bill continued this effort. Protection for hemp research and the conditions which researchers are required to follow was re-extended and hemp research was included under the Critical Agricultural Materials Act. This recognizes the diversity, opportunity, and the importance of hemp and the many products that can be created using this amazing plant. This also brings to fruition an important point: there is still a lot doctors and scientists could learn about hemp.

I encourage readers to explore the benefits of supplementing with hemp-derived products. Our Wellness department staff is available to show you our diverse selection of CBD oils, capsules, gummies, salves, oils, and lotions!

After the Storm

LOOKING BACK AT THE MAY 8, 2009 SUPER DERECHO

by Sarah Tezak

In the Dale: A Personal Account

A lifetime living in tornado alley brings awe, anxiety, and abject curiosity in the power of sky. Nature painted a furious and colorful piece that day: petals torn from spring blooms screaming in the foreground, harmonized by a lilting fugue of trash alighted, punctuated with horn blasts and roof groans, winds playing our town like a pan flute, a crescendo lifting the tallest tree and throwing it to the earth. We were foolish to stand near the windows, but it satisfied human desire to witness such a show of force.

Wandering the streets of Carbondale after the storm was an exercise in observation of destruction. Pondering the normally hidden universes of tree tops and roots alike, witnessing branches formerly stories off ground smashed through living rooms, sniffing out gas leaks and watching water bubble from holes carved by uplifted roots. A clutch of motherless raccoon kits, home destroyed, wandering in a similarly dazed state as the students

in the streets. A quiet possible only in absence of the hum of power lines and driving cars settled in, severing ties to business as usual.

The next day, we awoke to generators and chainsaws which droned on for weeks. People found electrical outlets on the generator outside of the Coop and at any business with lights on, in order to charge phones and laptops. Word of mouth helped most find what they needed, and people became far more neighborly than any given Sunday. These disaster events help us to remember we can work as a community. If only pulling together did not need such a strong and catastrophic catalyst!

There were some shining lights in town. Resilience of mind, resolve of spirit, and finding solutions to problems is of utmost import in times of chaos!

At the Coop, Francis took coffee beans home to grind so 'cowboy coffee' could

be made on our store's gas range; a much appreciated treat for the dazed in a town full of electric appliances. As a result of the storm, our Coop installed an easy access to connect a generator if the need again arises, so a faster return of system can be had to minimize loss in a disaster.

Lance Jack, owner of the recently opened Fat Patties, not wanting to waste food, set up a grill on the strip and simply cooked all the food in stock before it spoiled. He took donations or gave free meals to people who had no access to money or food in the chaos following the storm. As more people ate and passed through, other food with nowhere to go showed up to be cooked for those families who needed it. The smell of grills was prevalent in the neighborhoods as well, as no one likes to waste food!



May 2009



May 2013



May 2009



May 2013

In the Books

The May 8, 2009 derecho provided opportunity for beginning observational studies of affected areas of the Shawnee in regards to forest health and composition. By an odd sort of luck, an area of LaRue Pine Hills near Otter Pond had been part of a tree survey in 2008. The team was able to resurvey the area just after the storm to assess the change in canopy and understory tree populations. Their observations "indicate that there is a distinct difference in the species communities among the overstory, sapling, and seedling strata and the loss of overstory oak via the super derecho is unlikely to be replaced by oak recruitment and regeneration" (1). Our eastern forests have been changing face since the century of fire suppression has taken its unexpected toll. There are simply a larger

population of shade tolerant trees in the understory in comparison to the oak dominance which has characterized these woods for centuries. The accelerated succession to a non-oak dominant forest does appear to be stalled by re-introduction of fire to the ecosystem in observations of other forests(1). As years pass and this study is revisited, hopefully we can start to understand the harmony of the ecology of this precious and species rich area.

Plots outlined in the tree study mentioned above were used to survey the prevalence of non-native invasive plants in 2011. Thankfully this study found a lack of apparent wind transfer of species in the interior plots, contrary to expectations based on similar studies

of tropical hurricanes. The forest edge provides a protective buffer zone from invasion inward, and though large chunks of canopy were broken, the dense understory remaining helped to prevent germination of sun needing plants(2).

There are currently surveys going on in the Shawnee to give a more updated picture in how damaged areas are progressing. Since there was no prior observational data on these specific ecosystems, when studies are revisited and expounded upon a more clear picture of how canopy loss and species shifting affects the forest composition, emerges from the trees to the mycweb and the beetles to the birds.

In the Woods

Our region is at the collision point of both weather and geographic patterns. Southern Illinois hosts species of north, south, east and west. This lends to ecology which has evolved around being resilient to erratic climate conditions. We must think of the forest as a balance, like all other factors in the ecology of life. As we have changed the forest by our practices since settling onto this continent, the shift in dominant species has been an ongoing progression. Events like the May 8th derecho bring our changing forests into focus.

Tornadoes, Midwesterners' normal weather concern, have relatively narrow paths of destruction comparative to hurricanes of the coasts. The misnomer at the time, the inland hurricane, certainly helped in garnering an early understanding of the scope of the storm that blew through. Videos can be found on youtube that illustrate why that early misnaming happened so readily.

In the wake of destruction a host of resources were rendered destroyed. The city lost millions of dollars and spent millions repairing electric and gas grids. The rush to fix our human infrastructures from unexpected events does not allow

for efficient use of the materials suddenly in glut. Ability to travel on roads and clear powerlines superseded utilizing natural resources to their fullest potential. Trees which would otherwise garner high dollar in the building market were burnt in a fire lasting for weeks. Each business in town was hit in different ways. Connections to larger networks allowed insurance and support, but many small businesses had no such backup.

In the forest, wilderness areas were left to recover on their own. While trails and roads were eventually cleared, there was far less disturbance by human hands due to the lack of our needs being affected. The forest has been left to decompose and sprout anew, in the pace of the turning seasons. The forest cares less for specific form and adapts to the conditions surrounding it. Populations shift, homes destroyed or created with each tree fall and new puddle.

As members of this micro and macro community, we must work towards finding a balance in coping with and preparing for systems to be shut down, and find how to balance our needs with an eye towards maximum utilization of resources resulting in as little waste

as possible. In the future hopefully we can allow our observations of nature's resilience and adopt lessons for our human ecology.

Hillsides shaded by dense woods for centuries suddenly seeing sun for the first time in all these years. Colonies of poke and all the small 'weeds' which normally would languish for lack of sun rush to crowd basking grounds created by canopy holes, fighting endless maple seedlings suddenly stretching in their newfound glory. Oak roots lifted and laid sideways exposing dirt and stone to air, allowing water to puddle into temporary ponds in the caverns remaining. Tree tops kissing the ground, and all the saplings in the path bending under the pressure of leaning giants and dangling limbs. Nesting spots used for decades crushed blown and tumbled, and countless new snags and decay for a host of other species to take up residence. These places are wondrous spots to watch the progression of time in the natural world, and contemplate the shifting of seasons in life.

Photo credits: Nathan Speagle, Board member of Green Earth. From the Brush Hill Trail, 2009 & 2013.

The Green Earth Nature Preserves in Carbondale provide accessible woodland covering a wide array of geographic terrain and ecological communities, all without having to leave town. The community of volunteers have developed and maintained a network of trails, recently installing informative kiosks and literature to assist all in learning about the ecology of our Shawnee Hills. Later this year, markers will be placed on the Brush Hill trail with

information about the derecho, including updates of the progression photos shared here. These trails are perfectly located for easy access and mild hikes, so get out and enjoy them!

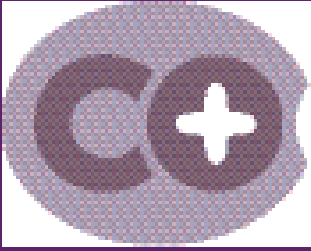
Green Earth holds volunteer workdays once a month, typically on the third Saturday from 9am to noon. Project work generally includes invasive plant removal, trail maintenance, or littler removal. Location varies, so check the website calendar of events for date and location information.

Volunteer workdays are family-friendly and open to everyone, no special skills are necessary. Tools, gloves, snacks, and water will be provided. Bring your own water bottle to refill from our cooler. Long sleeves, pants, and sturdy closed-toed shoes are highly recommended for working within the woodland. RSVPs are appreciated, especially for large groups, but not required.

*Call: (618) 201 - 3774
Email: director@greeneearthinc.org
Website: www.greeneearthinc.org*

1) Holzmüller, E.J., D.J. Gibson, and P.F. Suchecki. 2012 Accelerated succession following an intense wind storm in an oak-dominated forest. *Forest Ecology and Management* 279:141-146

2) Romano, A.J., M. Therrell, J. Schoof, D. J. Gibson 2013. Response of NonNative Invasive Plants to Large Scale Wind Damage. *Source: Natural Areas Journal*, 33(3):307-315



MORE WAYS TO SAVE WITH CO+OP BASICS!

As a local food organization, the Co-op is working to address food insecurities in our region. Our efforts have been achieved in several ways, from creating fundraising events to education-based programs. We qualified for a grant last summer that allowed us to participate in a Link Match program that offered free local produce to Link users. We host an annual Feed Your Neighbor 5K fundraiser that raises funds for the Good Samaritan house of Carbondale, which serves a wide variety of our most vulnerable community members. Even though these programs and events give additional support to those that need it, we also feel it is important to have a system in place that offers access to quality food every day.

The Co-op has been working hard to create a supportive food system within our store that allows all income levels to have access to quality food. Our Co+op Basics program was created with that purpose in mind. Co+op Basics program is a selection of popular natural and organic household staples that are priced below the suggested retail price. We've cut prices on hundreds of items across the store as way of offering

everyday low prices on quality food that is the building block for hearty meals and day-to-day living. The Co-op is able to offer this by working with a network of other co-ops through a buying power system that allows us to negotiate lower prices without repercussions to employees or farmers. There is no need to enroll in a special program, everyone is welcome to enjoy the discount. Just look for the purple Co+op Basics signs throughout the store. Visit www.neighborhood.coop to see a list of our food standards.



Look for this shelf tag for Co+op Basic deals!

There is a misconception about the co-op that we are here to preach about eating healthy. And yes in some ways we are. But it's not about the type of food you eat, it's about what's in the food you eat. Lack of access to good food can lead

to the sacrifice of proper nutrition thus leading to unwanted health issues. The Co-op's mission is to provide a higher standard of quality food that limits unwanted ingredients and inhumane processes. We also feel it is important to support the local food system by working with local farmers to bring the freshest foods available. As part of our ongoing commitment to deliver good nutrition, we continue to find ways to help family budgets stretch further than it has before.

Take advantage of these other great ways to save at the co-op:

- **Co+op Deals** – our biweekly flyer focused on packaged grocery; look for our sale signs through out the store.
- **Owner Deals** – ownership has its perks; look for our “Owner Buy” signs throughout the store. Ask a Co-op staff on how to become an owner if you are not one already!
- **Fresh Deals** – our weekly flyer focused on fresh produce, meat/seafood and deli.
- **Bulk** – save when buying just what you need; buy a pinch or a pound.

Co+op Explorers

National Bike Month

May is National Bike Month, which is celebrated in many communities across the U.S. The month serves as a reminder of the unique opportunities within the places you live. For example, Carbondale has month long activities that incorporate education on bike safety, expert demos on how to service a bike, and opportunities to get acquainted with the many bike trails in the area. As the weather warms up, this is a great time to get your family outside to enjoy fun and healthy activities throughout the month of May! Follow the Co-op on Facebook for updates about Co-op sponsored activities in May.

Important tips to teach your children:

- Do an ABC check on your bike before you ride – **A**ir, **B**rakes, and **C**ranks and chains
- Wear a helmet - Make sure buckles work and that your child helmet still fits properly. If you are involved in a significant crash, it is recommended that you replace the helmet.
- Don't wear loose clothes such as a dress or pants that might get caught in your bike chain. Think about wearing bright colored clothes so that you are visible to others on the road.
- If you ride at dusk or in the evening, consider attaching lights to the front and back of your bike.
- When riding on trails or sidewalks, respect others by announcing you are going to pass them so that you don't startle them or have them accidentally move into your path.



Healthy Trail Mix

Ingredients

- 1 cup raw almonds
- 3/4 cup raw cashews
- 5 raw brazil nuts, rough chopped
- 2/3 cup raw pumpkin seeds
- 1/3 cup raw sunflower seeds
- 2/3 cup air popped popcorn (no oil or salt added)
- 2 tablespoons unsweetened dried cranberries, chopped
- 2 tablespoons vegan dark chocolate chips
- sea salt

Guide to Trail Mix Ingredients

1) Nuts: Raw, "activated," or sprouted are best. In general raw nuts are always better for you than roasted nuts.

2) Seeds: Seeds are awesome! And so good for you. They can be a little challenging in trail mix because, well, they are so small. Chia and flax seeds are too small to get a handful of, so skip them in your trail mix.

3) Dried fruit: A little sweetness is great in your trail mix, just be sure to buy unsweetened dried fruit and keep it to a minimum. Raisins, dried cherries, cranberries and apricots are all great additions.

4) Chocolate: Avoid milk chocolate and sugar-filled chocolate products. Look for dark chocolate chips that are at least 70% cocoa.

5) Extras: organic popcorn (air popped), organic rice crackers, or any other little treats are fun to add, too.

What's New at the Co-op



Charlotte's Web

CBD and the other 80+ phytocannabinoids found in hemp support various processes in the human body. Among the many other benefits that our users experience, some of the key ones are: a sense of calm and focus, relief from everyday stresses, and help in recovery from exercise-induced inflammation.

Charlotte's Web includes a broad range of phytocannabinoids and other beneficial plant compounds including terpenes and flavonoids. Instead of using only CBD, research shows that using the whole plant maximizes benefits delivered throughout the body and provides additional wellness components.



Topo Chico

"Twist of Grapefruit" is the newest flavor of the Topo Chico line!

With a unique, natural flavor, without calories, it's the perfect option of an accompanying drink during any occasion. Its presentation in glass radiates elegance and freshness in each bottle.

Rebel Green



A little revolution now and then is a good thing. How we live, what we buy and what we throw away has ripple effects on the world around us. Therefore, we are dedicated to wrapping healthy and responsible up in eco-chic packaging you just can't wait to put in your home.

Rebel Green products are designed and manufactured only in the USA using responsibly sustainable materials. This local vision extends worldwide as a percentage of our sales go directly to clean air, clean water and clean food initiatives

At Neighborhood Co-op Grocery, we take the guesswork out of shopping for quality natural foods. We have purchasing guidelines to help our buyers select products that meet our high standards. These standards help us provide our community with delicious, wholesome foods that are natural, local, organic, fair trade, humane, minimally processed, minimally packaged and non-GMO/labeled GMO.

Strawberry Spring Salad



Prep time: 15 minutes

Yields 6 cups

Ingredients:

- 6 cups spring mix
- 1 cup sliced strawberries
- 1 cup halved red grapes
- 1/2 cup candied walnuts, roughly chopped
- 2 tbsp dried cranberries, finely chopped
- 1/4 cup crumbled feta cheese
- 1/4 cup extra virgin olive oil
- 3 tbsp lemon juice
- 2 tsp honey or agave nectar
- 1 tsp Dijon
- Pinch kosher salt

Instructions:

In a large salad bowl, combine spring mix, strawberries, grapes, candied walnuts, cranberries, and feta cheese.

In another bowl or jar, combine olive oil, lemon juice, honey, dijon, and salt; whisk or shake until thoroughly combined; chill until ready to toss with salad just before serving.

Source: Traci Antonovich (Former Co-op Deli Manager)
thekitchengirl.com/strawberry-spring-salad



CO-OP OWNER FEST

SATURDAY, APRIL 27 • 5–7 PM

THE WAREHOUSE AT 17TH STREET, MURPHYSBORO

5:00 pm - Be Happy Social Hour - with live music!

6:00 pm - Meeting (Last call for voting. Ballots close at 6:30 pm)

7:00 pm - Catered Dinner from the Co-op and 17th Street

To order your tickets visit www.neighborhood.coop/ownerfest

Tickets are necessary to attend the dinner. Tickets will be sold for \$5 each to help offset the cost of the meal. Owners are asked to pre-register whenever possible. However, tickets will be sold at the door for \$10 to allow flexibility for those owners who want to come, but are unsure of their schedules.

OWNER APPRECIATION WEEKEND

**10%
OFF**

**Saturday & Sunday
May 4-5, 2019**

SAMPLING • DEMOS • LIVE MUSIC

Owners in good standing receive 10% off their purchases. Sorry, no rain checks.

Spring Cup Sale



SATURDAY, APRIL 6

At Neighborhood Co-op Grocery
Ceramic cups and mugs are made by the students
and faculty of the SIUC Ceramics Program.



Neighborhood Co-op Grocery
1815 West Main Street
Carbondale, IL 62901



Registration - 4-5:30 • Start of Race - 6:00 p.m.

Proceeds donated to The Good Samaritan House of Carbondale. The Feed Your Neighbor 5K begins and ends at Turley Park located on the corner of W. Sycamore St and IL Rt. 13, Carbondale. The 5K race starts at 6:00 pm. This race is professionally timed. You can run or walk the 5K. If registered by April 19, all runners and walkers will receive a race t-shirt in their size, and a swag bag full of goodies courtesy of the Neighborhood Co-op's generous vendors.

All children under the ages 8 are welcome to participate in the race free of charge, but will not be eligible to receive a swag bag.

Since 1999, more than 1,900 race participants have been part of this great event, supporting Good Sam.

Join us to support this great cause!

Sign up at www.neighborhood.coop