Clean Water Action Council

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CAFO is More than a Four-Letter Word How Concentrated Animal Feeding Operations are Harming Northeast Wisconsin

"The principle of confinement in so-called animal science is derived from the industrial version of efficiency. The designers of animal factories appear to have had in mind the example of concentration camps or prisons, the aim of which is to house and feed the greatest numbers in the smallest space at the least expense of money, labor, and attention. To subject innocent creatures to such treatment has long been recognized as heartless. Animal factories make an economic virtue of heartlessness toward domestic animals, to which we humans owe instead a large debt of respect and gratitude."

Introduction by CWAC President Dean Hoegger

CAFO is in fact a four-letter word, a curse, and much more to many residents of northeast Wisconsin. For some, it is a living nightmare as the health of their family is threatened by contaminated drinking water and even unsafe wash-water. Rural property owners living near CAFOs have seen property values decline. Area bodies of water continue to become impaired as the spreading of millions of gallons of liquid manure continues to increase. In one county, residents report threats and acts of intimidation by CAFO workers and supporters. In Kewaunee County, residents have reached out to the DNR and the EPA for help, and they are still waiting.

In this issue, learn how we got here, what the current concerns are, and where we can go from here.



-Wendell Berry, "Stupidity in Concentration"

The Economic and Social Impact of CAFOs on Rural Communities

By Andy Wallander



Photo credit: http://old.artintheage.com/family-farming-the-end-of-an-era/

One aspect of large industrial-scale dairy farms, also known as Concentrated Animal Feeding Operations (CAFOs), that is rarely considered by the general public is the negative effects on the rural communities in which the operations are located.

What began with a pursuit of efficiency to improve production for all dairy farmers, has unintentionally resulted in a decline in economic freedom for them and an imbalance of economic power favoring large CAFO farms within the industry, rather than smaller individual producers. How did it get to this point, and what are the effects of this loss of economic freedom and power balance in animal agriculture?

As technological advances were made in dairy farming, farmers were eager to adopt them as they seemed likely to increase efficiency and maximize profits. However, the technology was usually capital-intensive, meaning that farmers who adopted the technology had to utilize it at full capacity to achieve profits. In the past, when the demand for a commodity (such as milk or cheese) fell, farmers would simply produce less to maintain the correct balance of supply and demand. Since large, technologically invested dairy farms must produce at maximum capacity to make a profit, they must maintain, or even increase production in the face of falling demand. This often forces smaller producers, who would normally lower

their production to remain solvent, out of business.

What are the effects of the loss of economic freedom and power balance on rural communities here in northeastern Wisconsin? One significant outcome in the industrialization of dairy farming is a change in the relationship between these farms and the rural communities around

> which they are located. The Farm Foundation, in a 2006 report entitled, "*The Future of Animal Agriculture in North America*," pointed out that "as animal production units become larger and more technologically complex, and as production shifts from independent farmers to vertically integrated operations, linkages that formed the social, as well as economic, foundation of rural communities are by-passed."

> Economically speaking, numerous research studies over the past half century demonstrate that the encroachment of large industrialized farming operations upon rural communities result in lower relative income for certain segments of the community and greater income inequality and poverty, a less active "Main Street," decreased retail trade,

and fewer stores in the community.

The Farm Foundation's report also concluded that farms with a gross income of \$100,000 made nearly 95% of their expenditures locally, while farms with gross incomes in excess of \$900,000 spent less than 20% locally. This means that most dollars made by large farm operations do not stay in the community and help it to thrive, but instead leave the community, draining it economically. Smaller farms that typically purchase inputs and make sales locally have a greater "multiplier effect." In other words, the money they spend in the community stays in the community and creates more jobs and economic trade.

The communities these farms used to support and rely on increasingly show a lack of social capital, the "glue" that holds a community together, including trust and interdependence. Numerous studies have shown lower quality of life, greater poverty, lack of social services, and lowered civic participation in communities dominated by fewer larger farms as opposed to numerous small farms. In addition, there are numerous public health issues in communities in the vicinity of industrial animal production facilities.

There is also evidence that living near a CAFO affects property values. The reasons for this are many. The fear of loss of rural amenities, the risk of local air or water pollution, and the increased possibility of nuisances related to odors or insects are just some of the concerns voiced.

The most certain fact regarding large industrial-sized dairy farms and property values are that the closer a property is to one, the more likely it will be that the value of the property will drop. The exact impact of the CAFO fluctuates depending on location and local specifics. The size and type of the CAFO can affect property value as well. Decreases in property values can also cause property tax rates to drop, which can place stress on local government budgets.

It is getting harder and harder for people not to come to the conclusion that the single-minded pursuit of economic efficiency within large industrial dairy agriculture has resulted in a loss of economic freedom and created an imbalance of economic power favoring big agribusiness over independent farmers. As a result we are seeing the transformation of rural Wisconsin from a setting of many small, productive family farms and economically diverse, viable rural communities into a state of relatively few ever-growing factory farms and dying communities.

The Impact of Liquid Manure on Groundwater Quality

By Andy Wallander

One issue associated with large Concentrated Animal Feeding Operations (CAFOs) stems from the amount of manure they produce. Manure, often managed as a liquid, can contain plant nutrients such as nitrogen and phosphorus, pathogens such as E. coli, growth hormones, antibiotics, chemicals used as additives to the manure or to clean equipment, animal blood, silage leachate from corn feed, or copper sulfate used in foot baths for cows.

Depending on the type and number of animals, manure production can range as high as 1.6 million tons a year. Large CAFOs can produce more waste than some U.S. cities. **Though sewage treatment plants are required for human waste, no such treatment facility exists for livestock waste.** Ground application of untreated manure is one of the most common disposal methods due to its low cost.

Groundwater is a major source of drinking water, often at much higher rates in rural areas. Unlike surface water, groundwater contamination sources are more difficult to monitor. Contaminated groundwater can also move laterally and eventually enter surface water, such as rivers or streams.

Elevated nitrates (often from manure) in drinking water can be especially harmful to infants. Nitrates oxidize iron in hemoglobin (red blood cells) to create methemoglobin. Most people convert methemoglobin back to hemoglobin fairly quickly, but infants can't make the conversion as fast as adults. This hinders the ability of the infant's blood to carry oxygen, leading to a blue or purple appearance in affected infants. Low blood oxygen in adults can lead to birth defects, miscarriages, and poor general health. Nitrates have also been speculated to be linked to higher rates of stomach and esophageal cancer.

Pathogens are parasites, bacterium, or viruses that are capable of causing disease or infection in animals or humans. The major source of pathogens from CAFOs is animal manure. There are more than 150 pathogens in manure that can impact human health. Healthy people who are exposed to pathogens can generally recover quickly, but those who have weakened immune systems are at increased risk for severe illness or death. Those at higher risk include infants or young children, pregnant women, the elderly, and those who are immunosuppressed, HIV positive, or have had chemotherapy.

When groundwater is contaminated by pathogens, it can lead to widespread outbreaks of illness. Salmonellosis, cryptosporidiosis, and giardiasis can cause nausea, vomiting, fever, diarrhea, muscle pain, and death, among other symptoms. E. coli is another serious pathogen, and



can be life-threatening for the young, elderly, and immunocompromised.

When groundwater is contaminated by pathogenic organisms, a serious threat to drinking water can occur. Pathogens survive longer in groundwater than surface water due to lower temperatures and protection from the sun. Viruses can become attached to sediment near groundwater and continue to leach slowly into groundwater.

Water tests have also uncovered hormones in surface and groundwater around CAFOs. Studies show that these hormones alter the reproductive habits of aquatic species living in surface waters, including a significant decrease in the fertility of female fish. CAFO runoff can also lead to the presence of fecal bacteria or pathogens in surface water. Fecal bacteria pollution in water from manure land application is also responsible for many beach closures.

Antibiotics are often included at low levels in animal feed to reduce the chance for infection and to eliminate the need for animals to expend energy fighting off bacteria, with the assumption that saved energy will be translated into faster growth, more meat, or higher milk production.

Since many CAFOs use subtherapeutic antibiotics with their animals, there is also the possibility that diseaseresistant bacteria can emerge in areas surrounding CAFOs. Bacteria that cannot be treated by antibiotics can have very serious effects on human health, potentially even causing death.

There is strong evidence that the use of antibiotics in animal feed is contributing to an increase in antibioticresistant microbes and causing antibiotics to be less effective for humans. This is a serious threat to human health because fewer options exist to help people overcome disease when infected with antibiotic-resistant pathogens. The antibiotics often are not fully metabolized by animals, and can be present in their manure. If manure pollutes a water supply, antibiotics can also leech into groundwater or surface water.

CAFOs Release Hazardous Air Emissions

By Breanne Rasmussen, Intern

When thinking about the ill effects of Concentrated Animal Feeding Operations (CAFOs), you probably imagine the massive amounts of manure spreading waste that results in serious water quality issues. However, the concentration of animal waste also causes air quality concerns as well.

Most regulations that affect CAFOs focus on water quality issues including sections in the Clean Water Act (CWA) that pertain to CAFOs and outline the water quality regulations which they must follow. However, the large barns and feedlots also contaminate the air with damaging chemicals such as ammonia, methane, particulate matter, hydrogen sulfide, and volatile organic compounds (VOCs). These emissions can also result from the soil application and decomposition of massive amounts of animal waste on surrounding croplands.

According to a 2003 study by the National Research Council, animal waste accounts for about half of the total natural and man-made ammonia in the United States. Air emissions result from the volatilization or vaporization of ammonia that occurs when the animal waste is applied to the land. These animal waste emissions come in two phases, one which occurs immediately after the manure is applied, and another that occurs later and lasts over a longer time period.

Although land application of animal manure is the primary way that toxic particles pollute our air, ventilation systems in CAFO buildings also release contaminants to the outside air. A study done by Iowa State University found that over the course of a year, two chicken houses in western Kentucky emitted over 10 tons of ammonia into the air, approximately 5.1 tons per chicken house.

There are a number of immediate and severe health effects associated with the air pollution from CAFOs. For example, breathing in too much ammonia can severely irritate the respiratory tracts of farm workers and children living nearby, causing severe chemical burns to the respiratory tract, eyes, and skin. Coughing and chronic lung disease can also result from over-exposure to ammonia. According to the CDC, on average, children take in significantly more air than adults for their size, approximately 25-50% more, which makes them more susceptible to the diseases and health effects that can be caused by ammonia and other noxious gases released by CAFOs. Many studies have proven that the closer children live to CAFOs, the higher their risk of asthma.



Besides ammonia, CAFOs release particulate matter and dust particles which originate from animal feed, bedding materials for chicken coops, dry manure, animal dander, and many other sources. Inhalation of particulate matter and dust has been linked to increased rates of asthma and bronchitis.

Exposure to particulate matter over extended periods of time leads to decreased lung functioning and if smaller particles are absorbed by the body it can cause fatal systemic effects, including cardiac arrest. The development of chronic bronchitis and asthma

by farm workers and children is alarming and serves as a window into what can happen to our communities if the expansion of CAFOs continues to be allowed by under current regulations.

For many years, environmental advocates have been calling upon the EPA to put Clean Air Act (CAA) regulations in place for CAFOs. These CAA regulations will subject CAFOs to similar standards that apply to coal fired power plants and other stationary sources. Brent Newell, a general counsel member at the Center on Race, Poverty, and the Environment, a California non-profit organization that has been fighting the CAFO industry over pollution in court stated, "without question they are a stationary source, they emit a lot of pollutants, and they should be getting permits."

CAFOs are responsible for a considerably large amount of air pollution, and should be held accountable for it just like other polluting industries. Although CAFOs can be hard to regulate because there is no "point source" or specific smokestack that can be identified and monitored, it is necessary to protect our communities. The difficulty of CAFO regulation is not a legitimate excuse for their release of pollutants to continue to be unregulated. To its credit, the EPA has moved forward with many studies researching the amounts and types of air emissions coming from CAFOs, but no concrete regulation has been imposed yet.

With the continued expansion of CAFOs in northeast Wisconsin, this is an issue that must not be overlooked. The government continuously allows CAFO expansion without question, and family farms have been replaced by CAFOs at the expense of our community's well-being. The threat CAFOs pose to the health of citizens and our communities is a crucial issue that we must continue to oppose, and one which will have long-term implications on rural air quality and health of CAFO neighbors.

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Green House Gas and Wisconsin's CAFO Industry

By John Hermanson

As a state, and as northeastern Wisconsinites, we are challenged by the need to reduce greenhouse gases (GHGs) that the reality of climate change demands.

A 2011 study by the Agriculture Research Center of the Department of Agriculture found that a commercial dairy with 10,000 milk cows generated an average of 3,575 pounds of ammonia, 33,092 pounds of methane, and 409 pounds of nitrous oxide every day.

The dairy sector in Wisconsin accounts for 30% of the state's agricultural sector of GHG emissions according to the University of Wisconsin Extension.

In 2014, the U.S. Environmental Protection Agency (EPA) stated 9% of U. S. GHGs came from the agricultural sector. They further break this down by various management practices for agricultural soils such as tillage, fertilization and irrigation, which creates nitrous oxide that contributes for more than half of the agricultural GHG emissions. Livestock, especially cattle, produce methane that represents a third of the emissions; while manure management contributes methane and nitrous oxide representing 14% of the agricultural sector's GHG emissions.

The Green Cheese Project may provide some solutions to GHG emissions. It is a collaborative partial life cycle assessment integrating dairy and biofuels production systems in Wisconsin. Partners include dairy producers, Wisconsin Department of Agriculture, Trade and Consumer Protection, Wisconsin Department of Natural Resources (WDNR), and faculty at the University of Wisconsin College of Agriculture and Life Science.

According to the authors, the objective of the Green Cheese Project is to develop a tool that will provide guidance to dairy farmers, dairy processors, and policy makers to:

- 1. Quantify and evaluate the energy, GHG, and nutrient balances of dairy systems combined with biofuel production, energy generation, and conservation technologies.
- 2. Investigate synergies and opportunities to reduce net energy intensity and environmental impact of dairy and biofuel production in Wisconsin."

According to the UN Food and Agriculture Organization 2013 report, the meat and dairy industry could reduce its emissions by 30%, while another recent study this year suggests a higher emission reduction is possible under favorable conditions.

Other practices identified by the Green Cheese Project as best practices include breeding cattle for less methane production, better feeds that increase productivity and reduce methane production, using microbiology to support better animal digestion without methane production, and possibly vaccines that would discourage certain methane producing bacteria.

Other suggested practices include nutrient management plans for efficient crop production and handling manure in a solid form rather than adding water to flush it, which would decrease methane production. More information on this subject is available at the International Panel on Climate Change: *Climate Change 2014: Mitigation of Climate Change.* Chapter 11, "Agriculture, Forestry and Other Land Use" addresses this issue in detail.

Adding further context to the challenge of GHG reduction that agriculture will face in the future is a 2016 Food Policy study entitled,



"How can the EU climate targets be met? A combined analysis of technological and demand-side changes in food and agriculture." The study states that unless GHG emissions from food consumption are reduced by three quarters by 2050, the EU target will not be met.

The authors go on to explain that beef and dairy consumption will need to be significantly modified. Technological and economic barriers will not allow GHG reductions of beef and dairy to be significant enough. They explain that it currently takes 200 pounds of CO_2 to produce one pound of protein of beef, while dairy is only slightly less harmful. Poultry and pork are 10 pounds and 30 pounds, respectively, and have much less climate impact.

Inside Climate News reports in a recent article, "California's Methane-Reduction Crosshairs, Dairy Industry Faces Regulation for the First Time," that on Sept. 19, 2016, Governor Jerry Brown signed a law that regulates methane from agricultural sources. The California dairy industry has been avoiding regulation on this issue, but has succumbed to demands to address climate change goals and therefore adopted a 2006 law which will meet overall targets to reduce GHG emissions by 40 percent of the 1990 levels by 2030.

For starters, the state will direct \$50 million from fees gathered under its capand-trade program toward digesters and other methane-reduction technologies. The article goes on to explain that the EPA has said that GHG emissions from agriculture have climbed 11% between 1990 and 2014, due in large part to methane and nitrous oxide emission from manure lagoons where large farms, including CAFOs, manage animal waste. California often leads in progressive laws that other states eventually adopt.

As a footnote to this article on GHG and CAFO's, The Green Cheese Project is an exemplary attempt to try to address concerns of GHG and efficiency, but the model should be put in context of geographic place and current public policy. In northeastern Wisconsin this model may be used as it relates to solving the problem of nutrient management. Without proper oversight by environmental protection agencies, along with necessary massive capital subsidies, it may seem too risky a proposition to many residents. Large anaerobic digesters, combined with fractured bedrock, shallow soils, and agriculture fields with drain tiles are a combination needing further evaluation.

There is a case to be made for another model of agriculture that would be based on rotational grazing methods, in which carbon would be sequestered in permanently covered grasslands. Comparatively, management practices of agriculture soils as well as manure management would create far less reduction of GHG.

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The Practice of CAFO Confinement and Animal Cruelty

By Rebecka Eichkorn

The realities behind today's Concentrated Animal Feeding Operations (CAFOs) have raised concerns on many levels. Environmental degradation, human health concerns, and animal welfare are some of the greatest concerns linked to CAFOs. Most people have never seen or been exposed to the inner workings of the CAFO industry, which can be a merciless world for animals. Access to these massive operations to activists, journalists, and the general public have been limited for decades. Ag-gag laws have further restricted monitoring. This should certainly raise a red flag in all of our minds. Knowledge of how the animals are raised and what is contained in the end product we eat and feed to our families should be made transparent to all consumers. We deserve to know how safe these products are and, additionally, how humane the production process is.



There is a reason the CAFO industry has been kept quiet and hidden by those who run it. The treatment of these innocent domestic animals is purely inhumane and ruthless. These animal factories are designed and operated with only efficiency and profit in mind. Simply put, the goal is to feed and raise the largest number of animals in the smallest amount of area, with a focus on minimizing any expenses associated with labor or attention to the animals. Subjecting animals to this environment is madness, yet the CAFO industry continues to prosper and grow. This profitdriven industry does not view animals as living, feeling beings. During their shortened lives these animals are kept from expressing their natural behaviors.

The life span of the industrial beef cow is a good indicator of how CAFOs have changed this industry for the worse. Steers once lived for four to five years before slaughter; this decreased to two to three years in the 50's and today is a mere 14 to 16 months. Their lives have been shortened for profit. Cows that are naturally grass fed take longer to reach a suitable slaughter weight so the industry has expedited this process. Now these animals are fed corn protein supplements and growth hormones. This type of diet can get an 80-pound calf to 1,200 pounds in a quick 14 months.

Industrial swine can live by the hundreds or thousands in warehouse-like barns in wall-to-wall pens. There is no exposure to fresh air, sunlight, or earth. These sows live in pens too tight to even turn around. This is where they are fed, artificially inseminated and even give birth. The hogs live in large groups in tiny pens. For hogs with even minor open wounds, this type of living space can lead to cannibalism. These barns can reach temperatures higher than 90 degrees. The air trapped in these barns can be lethal to the pigs at times since it is filled with gasses from waste and chemicals. Exhaust fans run constantly, but if they break down these animals start to die from the terrible air quality. These pigs are covered with insecticides and given large amounts of antibiotics and vaccines. Without them, the majority of these animals would likely die from disease. When the pigs are ready to be slaughtered, they are often very ill. In order for them to be able to walk to the slaughter house on their own they are given as many drugs as needed. Pigs can be killed and sold for meat as long as they are able to walk.

Meat chickens average a short seven-week lifespan on poultry farms. They are born in commercial hatcheries and moved to factory farms where they never set foot outdoors. They are given growth hormones that cause them to grow extremely fast, so fast in fact, that their legs, heart, and lungs cannot support their unnaturally large body at this point in their lives. Many cannot eat or drink and die prematurely. They live in barns with upwards of 20,000 to 30,000 other birds. They typically get less than a square foot of living space in these concentrated living areas, keeping them from any normal freedom of movement. Unsurprisingly, they often live in filthy conditions full of pollution, feces, filth, and highly polluted air. These conditions result in extremely stressed birds, disease, and high death rates.

The animal abuse that occurs in CAFOs extends to other animals including dairy cows and farmed fish. For the average consumer, only the neatly-packed end product of these animals is seen, not how it was produced. This is something that should alarm all of us. The confinement and cruel treatment these animals receive is ethical madness. Animals should not be treated like objects. They deserve humane conditions.

Kewaunee County CAFO Owners and Supporters are Alleged to Use Underhanded Tactics

By Dean Hoegger

Little has been written nationally about CAFO operators using underhanded tactics to fight CAFO opposition including threats, intimidation, harassment, and vandalism. However, incidents in Kewaunee County could be the first chapter in a book about such practices.

For some citizens attempting to document manure spreading operations by CAFOs, and more often their hired operators, it is intimidating to have the men in these trucks take photos of them, their vehicles, and license plates. This is reported to be a common practice in Kewaunee County, and I have been in the camera lens several times.

Even worse, three CWAC members reported that



after doing some water monitoring and photographing manure runoff, they were threatened by an approaching truck from the Dairy Dreams CAFO, which raced towards

the citizen monitors at a high rate of speed. They stated that the truck forced them off the road in order to avoid a collision, and then pinned them there while harassing them about taking photos.

So serious was this threat that the sheriff's Department was called and a report filed. It was no surprise to the three members, that when they later read the report, the driver of their own vehicle was listed at the perpetrator. All three members independently stated to CWAC that the Kewaunee County Sheriff's department frequently has not been responsive to complaints made against CAFO owners and operators. They all believe the Department has a bias that favors these owners.

While reluctant to give CWAC an interview, it is no secret that owners of a Kewaunee County business were victims of numerous acts of vandalism. These acts were intimidating to the owners as well as other activists in the county. Besides being intimidating, the vandalism resulted in thousands of dollars in damages, and there is speculation that these acts contributed to the owners' decision to close the business.

There are many other reports of vandalism committed against those speaking out against CAFOs, and with such frequency that the victims feel they were definitely targeted due their activism. Damaged mailboxes, spray-painted obscenities, and even damage to a water kiosk serving residents with contaminated wells were reported.

Direct intimidation of activists by CAFO supporters has also been reported. I was a victim of such intimidation at an outdoor, nighttime fundraising event in the town of Euren, Kewaunee County. I was visiting with some fellow first responders in a far corner of the tent. When they departed, I noticed a prominent business man pointing to me while talking with two strapping men in farm clothes. They immediately approached me and intensely demanded why I had a problem with CAFOs. I felt threatened enough to examine my fight or flight options while working to diffuse the situation through a discussion of the issues. Unfortunately, they were unable to see why they should also have a problem with CAFOs. They were in fact dairy farmers with herds of fewer than 200, a rapidly disappearing class of farmers.

A feeling of intimidation from CAFO owners apparently is even felt by those in local government. While I was giving a presentation to the supervisors of the Town of Casco about the dangers of spraying manure, the officials seemed genuinely interested in learning about the issue. However, suddenly they stopped asking questions, avoided eye contact with the concerned citizens, and moved on to the next agenda item. As I sat down, I happened to turn around and discovered that CAFO owner John Pagel had walked into the town hall and was looking intensely at the town board. Pagel is the owner of Pagel's Ponderosa and is the chairman of the county's Land and Water Conservation Committee.

If these incidents continue to grow, citizens working to protect the waters of Kewaunee County may need to demand a John Doe proceeding (https://docs.legis. wisconsin.gov/statutes/statutes/968/26), and one with a prosecutor from another county, to determine if there is a conspiracy to deny their constitutional rights.

Why Wisconsin's Agricultural Laws Fail to Protect Public Health and the Environment

By Tressie Kamp

Residents of northeast Wisconsin are not new to the discussion about public health and water quality impacts of large-scale agriculture. Midwest Environmental Advocates, Wisconsin's only non-profit environmental law center, has worked on agricultural-related water impacts in northeast Wisconsin since at least 2004, when a family's private well water was contaminated by irresponsible winter spreading of cow manure.

In areas of Wisconsin outside of Kewaunee County, MEA staff often hears that communities do not want to turn into the next Kewaunee County. This message was heard many times at a recent listening session in Eau Claire, where our regional EPA administrator and high-level EPA Water Division staff heard from Wisconsinites about a myriad of water quality and quantity issues. Testimonial from a Kewaunee County resident—wherein she stated that "we're just protecting special places that we call home"—was the first testimonial to get an applause from the audience.

Kimberlee Wright, the Executive Director of MEA, generally receives murmurs of assent from audiences when she says that citizens expect that their government is working to protect their air and water resources. So why isn't this the case? Why haven't our laws validated the agricultural-related public health and water concerns that northeast Wisconsin residents have been voicing for over a decade?

The short answer is that there is not a regulatory scheme in place at any level of government that prioritizes public health or water quality. At the local level, Wisconsin governments have "home rule" authority to protect public health, safety, and welfare. Yet there is a state law—the Livestock Facility Siting Law—that makes it very difficult for local governments to regulate more stringently than the DNR to protect water quality. Certain spheres of local control still exist; for example, to protect public health, to regulate traffic, etc. In the context of CAFOs the scope of local control is relatively new and untested in the court of law and local governments often require extra guidance and assurance before feeling comfortable with agriculturalrelated regulation.

At the state level, the WPDES permitting process in place for CAFOs is founded on Nutrient Management Plans, commonly known as NMPs, that regulate how, where, and when animal waste is placed on farm fields. At first glance this NMP system would seem to be able to protect ground water, surface water and corresponding public health impacts. Yet NMPs are intended first and foremost to maximize crop growth. In other words, NMPs serve primarily agronomic rather than water quality or public health purposes.

If a permit applicant such as a new or expanding CAFO submits all of the correct paperwork and appears to meet these agronomic standards, the DNR is very constrained and generally must grant the permit at issue. This is the response that Door and Kewaunee County residents have long heard from DNR staff at public permit hearings where attendees ask for more stringent protection of ground and surface water. The existing state law gives the DNR some authority and discretion to issue more protective permits. However, legislative action is needed to change state law to give the DNR more authority to impose conditions in permits that regulate CAFOs in ecologically sensitive and CAFO-dense areas differently than in other parts of the State.

More regulation is not a solution that CAFO owners and operators generally believe in. At the aforementioned EPA listening session, a Dairy Business Association member farmer stated that we need to stop with "nonsense regulations" at the state and federal level and instead need to "come together" to protect Wisconsinites and our environment. These owners are indeed covered by complex, lengthy state and federal regulations and NMPs that CAFOs describe as "book thick." The disconnect remains—these regulations are not primarily intended to put precaution, public health, or water quality before other interests.

Furthermore, end-of-pipe industries like paper mills and wastewater treatment facilities have to submit reports to the government that help citizens and the government understand whether an industry is complying with federal laws like the Clean Water Act. These are relatively publicly comprehensible reports. CAFOs have to submit certain annual reports and NMP updates to the government, but these often require scientific or technical expertise for full comprehension. This is one reason why CAFOs are often called a self-reporting and self-monitoring industry.

So why is there reason for hope in the effort to address CAFO impacts in northeast Wisconsin and statewide? Some of the fiercest Wisconsinites with whom MEA works are from these landscapes: farmers and teachers and local leaders that protect northeast Wisconsin just like another family member. These leaders are built and then tested by situations ranging from private well contamination to the Green Bay dead zone to algal blooms in Lake Michigan and smaller area lakes. These leaders will help find opportunities for change and progress at the local, state and federal level to move toward laws that are sensible, logical, manageable for large-scale agriculture and—most importantly—better protective of Wisconsin residents and our precious water resources.

Tressie Kamp, Staff Attorney with Midwest Environmental Advocates, has worked tirelessly to protect human health and our water resources in Wisconsin. She is MEA's lead attorney for the Petition to the EPA for Corrective Action of deficiencies with Wisconsin's administration of the Clean Water Act.



CAFOs Use Public Relations to Fight Needed Ag Reforms

By Brian Wagenaar, Intern

As the adverse effects of Concentrated Animal Feeding Operations (CAFOs) become better known to the public, many of the larger farms and farming organizations across the country have turned to public relations campaigns to block the real reforms needed, and then continue with business as usual. This cycle of CAFO establishment, expansion, public backlash, and the industry's public relations response has already been occurring in the hog and chicken industry throughout the U.S. Wisconsin dairy farms are simply another chapter in this story.

This strategy appears to have come to Wisconsin in the form of a newly formed group of Door and Kewaunee County farms called Peninsula Pride Farms Incorporated as non-profit, and the recipient of a \$20,000 state grant, the group has received a fair amount of positive publicity from local media. Yet a list of member farms in the organization has thus far been kept a secret.

Looking at the Peninsula Pride Farms logo, you would think it was an organization of small, organic farms. If you just glanced at the pictures on their web site, which include a swooping bald eagle, several presumably local streams, and a rather intense-looking owl, you could reasonably conclude that this was a nonprofit dedicated to wildlife preservation, or perhaps safeguarding the watershed. What you probably would not have gathered at first glance is that the organization's membership includes a CAFO with 6,000 dairy cows, which by various estimates produces levels of waste like the human waste from the cities of Appleton or even Green Bay, and then spreads that untreated waste onto farm fields.

Peninsula Pride is a 501(c)3 nonprofit organization, the same as the Clean Water

SPIN US REALITY

- **THE SPIN:** Those who oppose CAFOs are radical environmentalists who do not understand farming and invented the term "factory farm" to make honest farming look bad.
- **THE REALITY:** A University of Illinois study found that 70% of people opposed proposed CAFOs in the rural communities surveyed in Illinois, where knowledge and understanding of farms is high, and only 5% were in support. CAFOs are light years removed from more traditional farming or the idyllic view of a family farm, and their methods and ideology are much more industrial than agrarian. Animals are treated like cogs in the machine, so the terms "industrial agriculture" or "factory farming" are suitable.

THE SPIN: CAFO owners have the legal right to do with their land what they please.

THE REALITY: Although technically true under current laws and permitting structures, legality does not make a practice morally, economically, or environmentally sound. When a system is unjust and allows the trespass of property rights and the health of nearby people and ecosystems, it should be altered.

THE SPIN: These types of operations are the backbone of rural communities.

THE REALITY: CAFOs employ very few people, and the decline in the number of farms and farmers since the 1970's can largely be attributed to the meteoric rise of CAFOs. Returning to smaller farms would employ more people in farming, revitalizing rural communities.

THE SPIN: CAFOs are necessary to feed the world and keep food prices low.

THE REALITY: Smaller traditional and organic farms can oftentimes be just as productive if not more productive than the sprawling and largely inefficient CAFOS, and U.S. food prices have outpaced inflation rates over the last two decades of heavy industrialization in agriculture.

Action Council (CWAC), and was formed in March 2016 as a coalition of 40 farms ranging from 66 to 6,000 dairy cows. The slickly-designed website for the group makes references to our "precious soil, water and air," and to their stated goals of protecting, nurturing and sustaining the environment.

However, hearing the stories of many citizens unfortunate enough to reside near some of these farms in Kewaunee and Door County, the two counties covered by the fledgling group, it would appear that "precious" soil, water and air has already been thoroughly abused. The track record from some of the known members in the group does not exactly inspire confidence in their motives and practices.

That is not to say that CWAC does not hope that genuine efforts for reform come out of Peninsula Pride. Indeed the Nature Conservancy has worked with the group and praised some of its initial efforts, but there is legitimate concern the organization may just be the local iteration of a growing national trend of public relations campaigns deployed by the agricultural industry to defend its activities.

Peninsula Pride recently launched a program to provide clean water and filtration systems to residents with wells with bacterial contamination. However, it does not take much investigation to determine that manure spreading is largely the reason for the local water woes, including the presence of E. coli.

These programs all sound well and good, but they are simply bandages treating injuries that residents believe is the result of manure spreading. The actual participation in these programs has been quite low. A common response by Kewaunee County residents is, 'Why would I make an application with confidential information to the people we see as perpetrators of our groundwater contamination."

Another P.R. strategy some CAFOs employ is to open their doors for public tours and to provide informational meetings about their operations. While these actions may be perceived as the CAFO being a good neighbor, it provides no reduction in the untreated waste they spread. To truly understand CAFOs and the public relations machine backing them, it is helpful to examine a sample of the arguments made in defense of CAFOs, as well as the corresponding scientific, economic, and moral realities (see diagram on previous page).

References:

http://fox11online.com/news/local/lakeshore/peninsulapride-farms-holds-first-field-day

https://doorcountypulse.com/peninsula-pride-farms-funds-clean-water-projects/

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http://web.missouri.edu/ikerdj/papers/ IllinoisTruthofFactoryFarms.pdf

http://www.wisfarmer.com/story/news/2016/09/07/group-offers-clean-water-protect-homeowners/89955234/



Opposing CAFO Expansions in Northeastern Wisconsin

By: Adam Dziewa, Intern

"Our response to the factory farm is ultimately a test of how we respond to the powerless, to the most distant, to the voiceless—it is a test of how we act when no one is forcing us to act one way or another. Consistency is not required, but engagement with the problem is."

-Jonathan Safran Foer, Eating Animals

Pollution from factory farms or CAFOs, is a growing threat to Wisconsin's rivers, lakes, and wildlife. The reason factory farms can be so dangerous to wildlife and certain environments is because they produce more manure than they can safely dispose. Since these farmers



have accumulated this excess manure, they must spread the liquid manure on hundreds of acres, leading to one of the main environmental concerns here in Wisconsin—algal blooms.

Algal blooms are caused by storm water runoff pushing excess manure into Wisconsin's lakes and rivers which causes extreme increases in nitrogen and phosphorus. Not only are these algal blooms foul smelling and unattractive, they also illustrate the imbalance of nutrients within a water body and cause immense declines in dissolved oxygen affecting wildlife populations to decrease.

Increased algal blooms have caused the dead zone to increase in the Bay of Green Bay, leading to large unproductive areas of the water. Algal blooms have the potential to not only alter existing aquatic food webs, but to pose additional dangers to human health. Some of these additional dangers to human health include: rashes, respiratory health risks, damage to the nervous system and organs, and increased rates of liver cancer when people cook or drink with untreated surface waters from the contaminated source.

One way to reduce these algal blooms is to focus our time and resources on educating the public of these detrimental effects on human health and minimizing the overall number of CAFOs within Wisconsin.

A first step to opposing factory farm expansion is identifying who is directly affected by the pollution associated with a CAFO. The pollution caused by a CAFO ultimately leads the surrounding neighborhood to be prisoners in their own home since people are unable to go outdoors due to the extreme stench and adverse health effects. Often their well water becomes contaminated, as has been the case for many in Kewaunee County.

Because of these problems, people who live closer to a

CAFO often see their property values decrease substantially. These stakeholders need to join together to take action keep factory farms from causing harm to their families and their way of life.

We must bring together friends, neighbors, community members, and non-CAFO farmers who are all being harmed by CAFOs and help them to discover that a common theme they can act upon is preserving the non-CAFO farms. These farmers go out of business when they are outperformed by the scale of CAFOs. To help prevent the loss of these small family farms, the community must promote and help market locally produced milk, beef, pork, and vegetables by making food purchases directly from farmers, whole food co-ops, and local outlets. For a complete list of locally-sourced food, go to the 2016 Farm Fresh Atlas of Eastern Wisconsin https://farmfresheastwi.org/. Many of these outlets also sell organically grown foods and Organic Valley Dairy has many milk producers in northeast Wisconsin. Through our purchasing choices, we can help make small farms successful.

Education is one of the best ways to contend with factory farms since it will allow more people to better understand why CAFOs pose a threat to our quality of life. Concerned community members can form a nonprofit organization to help rally more support which can inspire more people to be involved, as did activists in Kewaunee County who formed Kewaunee CARES. In the battle against CAFOs, sitting on the sidelines is not an option, unless you are willing to see the waters of northeast Wisconsin become further contaminated and the health of rural residents threatened.

Once sufficient opposition is formed, the process of lobbying government officials and agencies can begin. We must elect and support government representatives who will overturn Wisconsin's State Livestock Siting Law (Wis. Stat. § 93.90), which legislators passed in 2004. The law effectively took away control from elected officials in local governments to regulate livestock farming. We must return authority over siting and expansions of CAFOs to local authorities so they can determine what form of agriculture is best suited to their county or town. As voters, we must also support state representatives that will keep existing town rights untouched by the state. Towns must retain the power to pass nuisance ordinances that can ban manure spraying and even limit the shipping of manure from one town to another town.

Individuals leasing farmland can also do their part to limit CAFO expansions. With land lease agreements, landowners have the ability to limit the amount of liquid manure spread on their land. The limitation on liquid manure spreading can reduce CAFO expansion when land lease restrictions are used by a large number of landowners. The Door County Soil & Water Conservation Department has direct links to the <u>land lease agreement form</u> as well as the <u>Farmland Preservation Program</u>. Non-profit organizations like the Clean Water Action Council (CWAC), can provide assistance to your community to oppose CAFO expansions. You can help these non-profit organizations oppose factory farms by making a tax-deductible donation to assist with expensive CAFO legal actions, and you can volunteer to help educate the public on current issues.

Resources:

http://www.deq.state.mi.us/owis/Page/main/Home.aspx

https://wisconsinacademy.org/magazine/algal-blooms-wisconsin

http://www.sierraclub.org/michigan/how-stop-approvalnew-cafo

http://www.sierraclub.org/michigan/organize-communitymembers-help-stop-cafo-pollution

http://map.co.door.wi.us/swcd/

If Not Industrial Farms, What Then?

By Dean Hoegger

You have read in this issue how the CAFO model of farming is harming northeast Wisconsin. How the vast amounts of manure that is spread untreated on farm fields significantly contributes to both surface and ground water contamination. How CAFOs contribute to poor local air quality and create excessive amounts of global warming gases. How animals are concentrated into small spaces with little or no movement, and as a result have greater health problems, require more drug therapy, have shorter lifespans, and as most would agree, are not treated in a humane way. And you have read how this industrial model of farming is having a negative economic and social impact on rural communities.

So what are the alternatives to CAFOs and the industrial farm model? Contrary to the argument that in order to stay in farming, farmers must become part of the new global supply chain and abandon animal husbandry practices in favor of factory style production, the reality is quite different.

John Ekerd, Professor Emeritus, University of Missouri, Columbia argues that there are a variety of new farming activities emerging in response to growing environmental and social concerns regarding industrial agriculture. As an example, he notes that the market for organic foods has been doubling every three to four years. Is the preference for organic foods more than just a desire of consumers to avoided chemical residues in their food? Ekerd surmises it is much more, and he notes that recent surveys of American consumers found that around three-fourths indicated a

preference for locally grown foods from small family farms, and that trust is an important reason for the choice.



As consumer awareness

of conditions within industrial style farms grows, we have witnessed a demand for cage-free, free-range, pasture fed, hormone–free, and antibiotic-free meat products. To date over 160 major companies, including McDonald's, Disney, Kroger, Campbell Soup, Walmart, ConAgra, Starbucks and even White Castle, are working to meet demands by the public for more humanely produced eggs and meat products.

This greater food awareness is bringing more customers to local farmers and returning diversification of many farms to pre-CAFO days. It is becoming more common for dairy farms to also produce some pork, poultry, eggs, and other products such as honey and maple syrup. And as CWAC reported in the *Fall 2015 Newsletter*, farmers are also improving their bottom line through agritourism.

One of the most significant success stories for sustainable farming in northeast Wisconsin is the use of rotational grazing. First used by beef farmers, and now by pork and dairy producers, the practice keeps the soil protected with grasses and places manure right where it is needed. Rotational grazing does so without the addition of vast amounts of water, as is the current practice when feeding confined animals.

One example is Sheboygan County's Heidel Dairy which has evolved into an organic, 100% grass-based dairy. "We became graziers because it is in line with the mantra of our farm: Simpler is better. Most dairying seems to go the other

way. It's more and more complex and makes farming more stressful," David Heidel explained. Grazing opened Dave's eyes to a whole different world of dairying. As they fed less



and less grain, he saw that their cows did better. More information about the Heidel Farm and the Sustainable and Healthy Foods Movement in NE WI, can be found in the CWAC *Winter 2014 Newsletter*.

Ekerd also argues, "Virtually every socioeconomic study done on the subject in the past 50-years has shown that both the social and economic quality of life is better in communities characterized by small, diversified family farms." Let us continue to move northeast Wisconsin in that direction by further educating consumers and using our own food dollars to support sustainable farms.



The Action in CWAC

By Dean Hoegger

THE 2017 MEMBERSHIP DRIVE HAS BEGUN

Membership dues are based on a calendar year, so our membership drive for 2017 begins with our Winter Newsletter. Please consider a more generous donation in 2017 if you missed last year. Thank you to the many members who made donations in 2016. Our membership donations make up a significant part of our budget. Please see your newsletter label or e-mail notice for the last year that you donated.

VOLUNTEER!

Please contact Dean at 920-421-8885 to volunteer at the office. We are located at A307 MAC Hall, UWGB. You can help us with issue research, grant writing, newsletter mailing, and office work. Internships are available for college students. E-mail us for the internship description.

Read below about actions we have taken in the last three months.

Be sure to contact us if an environmental issue arises in your community. CWAC is here to support citizen action. The following are our most significant activities since September.

LEGAL ACTIONS

As a citizen organization, an important function of CWAC is to take legal actions on behalf of our members to protect human health and the environment. Because individual members may be reluctant to file a legal action, the CWAC board believes this is an important part of our mission as an organization. Here are some current legal actions.

UPDATE ON SAFE DRINKING WATER ACT (SDWA) PETITION FOR EMERGENCY ACTION, FILED WITH EPA OCTOBER, 2014. PETITIONERS INCLUDE CWAC, MIDWEST ENVIRONMENTAL DEFENSE CENTER, ENVIRONMENTAL INTEGRITY PROJECT, MIDWEST ENVIRONMENTAL ADVOCATES, CLEAN WISCONSIN, AND KEWAUNEE CARES.

Attorney Sara Geers from MEA, Lynn Utesch of Kewaunee CARES, and Dean Hoegger of Clean Water Action Council met at the Region 5 EPA office in Chicago on October 11. Representatives from other petitioning agencies were also on the phone. EPA staff included Water Division: Chris Korleski, Peter Swenson, Dean Winn, Cheryl Burdett, and Barbara Van Til. Office of Regional Counsel: Rett Nelson, Joanna Glowacki, Robert Thompson, and Chris Grubb.

The petitioners present describe how the DNR is not taking satisfactory action on this petition, especially that no provisions were made to make safe drinking water readily available and to make the well compensation program available to more citizens with contaminated wells. Thus far, only one water kiosk has been available for the entire county, and that was provided by the generosity of a private company and a school district. Previously, the EPA's Acting Region 5 Director Bob Kaplan told the public in September that a safe drinking water solution was at a hand. This solution, also touted by Nelson, turned out to be the Peninsula Pride Farms (PPF) offer to provide water treatment equipment that many Kewaunee County residents were quick to dismiss. This solution required those with private wells to submit an application to PPF for a well water treatment system, pay some of the cost and in many cases, purchase a water softer, all from the group's designated vendors.

The program being offered by PPF was only for wells with bacterial contamination. Yet the vast majority of wells found unsafe are contaminated with nitrates. The program offers no remedy for nitrates, which is linked to agricultural fertilizers and animal manure.

Many people in Kewaunee County see the industrial farms which make up some of PPF's membership (actual membership has not been made public) as being the primary source of their well contamination. The EPA and the DNR have failed to see that residents feel they are being asked to make an application for assistance to the very people they see as the perpetrators of their polluted groundwater. At this meeting, we pushed the EPA to see that this was not an ideal solution. Specific well test results in Wisconsin are not made public. What would PPF do with this and other private information they collect in an application? As an alternative, PPF should provide funding to Kewaunee County for a well compensation program, and the application made, not to PPF, but to the county where private information could be safeguarded.

That being said, we also pushed the EPA to recognize their authority in this case as outlined under Section 1431 of the Safe Drinking Water Act. Until this meeting, EPA representatives were claiming that because these were private wells that were contaminated, their authority was limited. EPA representatives at the meeting all fully acknowledge EPA has this authority, but still would not commit to any action under 1431.

The EPA, led by Nelson, was also not forthcoming about what compliance actions they were conducting nor were they willing to make any real commitments of action other than scheduling a meeting again in January. Overall, other than acknowledging authority under 1431, the meeting outcomes were not satisfactory.

Twenty-five months of waiting by Kewaunee County residents, and still no measurable actions by DNR or EPA to provide emergency assistance to residents with contaminated wells.

The petition and supporting documents can be found at: www.cleanwisconsin.org/kewaunee-safe-drinking-water

CITIZEN PETITION FOR CORRECTIVE ACTION, FILED OCTOBER 2015

The 16 petitioners, including CWAC Board members Dean Hoegger and Jim Wagner, and members Bill Iwen, Nancy Utesch, Lynn Utesch, and Elaine Swanson, are represented by Midwest Environmental Advocates.

Several petitioners including CWAC President Dean Hoegger and attorneys from MEA met in Madison on October 12 with EPA representatives: Lead legal contact was Barbara Wester; Lead NPDES technical contact was John Colletti; Other NPDES technical/permitting staff in attendance were Lou Ann Ungerand Mark Compton.

Petitioners, including former DNR staff members Ronald Grasshoff and Dave Marshal, shared their personal reasons for being petitioners for this legal action which requires the EPA to examine Wisconsin rules and WDNR practices to insure that Wisconsin is working toward compliance of the 75 deficiencies that the EPA had previously identified.

The EPA staff was in the middle of four days of reviewing DNR files when we met with them. They are also assigned to a similar petition in Minnesota. They noted that the passage of Wisconsin's Act 21 brought more pressure for the EPA to take action to enforce the Clean Water Act.

(See https://wcmcoop.com/2012/04/27/scott-walkers-stealth-bomb-act-21/)

MEA staff, and the petitioners present, all thought the EPA staff was working diligently to review files and the 75 deficiencies. In fact, the EPA staff had delisted a number of resolved deficiencies after recent interpretations by Wisconsin's attorney general limiting the DNR's authority.

Currently there are only six deficiencies that are now considered resolved. To see the current status of EPA's review, go to: https://www.epa.gov/sites/production/ files/2016-07/documents/wi-lar-status-20160728.pdf

See petition documents and letters of support at: https://www.epa.gov/wi/npdes-petition-programwithdrawal-wisconsin

COAL PILE DUST, POTENTIAL LEGAL OR NEGOTIATED ACTION

In recent years, complaints of coal pile dust causing air quality concerns in Green Bay near the C. Reiss coal piles were increasingly coming to CWAC. In August, CWAC began discussing this concern with attorney Heather Govern, Staff Attorney with the National Environmental Law Center.

An inquiry with the DNR indicated the company had not been cited for any permit violations related to coal dust migrating from the piles along the west shore of the Fox River near downtown Green Bay. In recent years, C. Reiss has been watering the piles and doing some tarping to control dust.

The CWAC Board then authorized staff to personally distribute issue letters to residents of the Astor Neighborhood living close to the Fox River. That action brought many additional complaints from residents such as: "I have to wash the black dust off my house every couple of weeks," and "My kids have black feet from coal dust when they walk barefoot on the deck." Based on reports from these residents, it became clear that an analysis of the dust was needed to confirm the presence of coal dust. Samples were taken and submitted for analysis, and the evaluation was positive for coal dust. We are seeking a donation of \$300 to do a follow-up test to determine how quickly coal dust is being deposited on those homes before requesting air quality monitoring be done by the DNR, Brown County, or the City of Green Bay.

Contact us if you have concerns about coal dust pollution in your neighborhood.

S&S AG ENTERPRISES LLC, DOOR COUNTY, PERMIT RENEWAL AND EXPANSION HEARING REQUEST

CWAC requested a hearing on this renewal permit and we urged others to do so as well.

The minimum of five citizen requests was met, and the DNR's Brad Holtz indicated a hearing would be held after January 1.

This permit renewal and expansion from 6,820 animal units to 10,230 animal units has received preliminary approval from the DNR. However, many residents have serious concerns about the impact of the expansion. S&S has recently shown a lack of cooperation with Door County Soil and Water Conservation Office, especially with working with the department to identify areas that do not meet the minimum requirement of 24 inches to bedrock for manure spreading, a clear threat to the groundwater. In addition to groundwater concerns, many of the fields where S&S does manure spreading are in the Sugar Creek or Ahnapee River watersheds, which are both designated as phosphorus impaired.

Holtz told CWAC that the only aspect of the permit that could be challenged is the nutrient management plan (NMP). Therefore, the board has authorized expenditure for consultation with a NMP expert who has already provided key concerns regarding the NMP.

We will keep you posted as to when the hearing will be and where.

Here's the link to view further information, including the public notices and proposed permit documents: http:// dnr.wi.gov/topic/wastewater/PublicNotices.html

CWAC'S EDUCATIONAL EFFORTS IN THE COMMUNITY

Contact us to schedule a presentation for your group on a variety of environmental issues including: The Hazards of Manure Spraying, The Petition for Corrective Action to Protect the Waters of the State, The Hazards of Burn Barrels, Communities on the Road to Zero Waste and more. The presentations can be tailored to your group's age and available time. Also, contact us if you would like us promote or co-sponsor your event or presentation.

EXHIBITS

CWAC exhibited at the University of Wisconsin-Green Bay Food Day, Lake Michigan Day in Bailey's Harbor, and at the two CWAC sponsored presentations noted below.

PRESENTATIONS

CWAC sponsored a health forum with Martine Davis speaking about how to keep our indoor air safe from contaminants. Her slide presentation is available by e-mail. A release of a portion of the film, *Right to Harm*, was also hosted by CWAC at UWGB and Brown County Library.

WEBSITE UPDATES

The Impaired Waters Interactive Map, created by GIS Specialist Tyler Hoegger is now linked on our website, www.cleanwateractioncouncil.org. It provides detailed information on area CAFO's and location of EPA designated impaired waters. The map continues to be updated and can be found directly at http://arcg. is/2bR4OTL

OUTREACH THROUGH NEWSPAPER AND RADIO

CWAC Vice President Charlie Frisk frequently shares his various environmental concerns by submitting letters to the editor, primarily the *Green Bay Press Gazette*, and he is willing to draft a letter for you to submit. E-mail us if you would like to submit a letter. CWAC President Dean Hoegger spoke to *Door County Daily News*.com radio regarding DNR Secretary Cathy Stepp's announcement that the DNR would be reorganizing to shift some regulatory duties to the private sector. (See Weekly Update e-mail 12/6/16)

GRANT FOR SPRING HEALTH FORUMS: PROTECTING YOUR FAMILY FROM TOXINS IN THE HOME AND ENVIRONMENT

CWAC is seeking Thrivent Financial members who will request a community grant for a health forum. One member completed the application in a matter of minutes and received notice of the award in just a few days. Or, you can sponsor a health forum directly at a cost of \$200.

See page 15 for details about our February 11 Health Forum: *Protecting your family from cancer causing hormone disrupters*.

WEEKLY CWAC UPDATES

Each Tuesday we e-mail a weekly update of actions, alerts, events, and the latest information on topics of concern. Send your postings by Monday evening. If you are a member with an e-mail address and you are not getting the CWAC Weekly Update, check your spam folder before e-mailing us to request to be put on the mailing list. E-mails are sent via Bcc to protect your privacy.

<u>PLEASE SUPPORT THE BUSINESSES</u> OF OUR MEMBERS

Our members are our greatest asset! Please support the businesses endeavors of these donor level members who are also working to protect human health and/or the environment with their business. E-mail us for our Member Business Promotion Policy if you would like to participate. In this issue, we feature sustainable farming operations.

Full Circle Farm

Our farm has been in the Adamski family for over 100 years. Our connections and commitment to the land are strong. Our mission statement is to "model sustainable farming that promotes health and well-being of the community, values family labor and people, and does no harm to the environment."

We practice managed grazing as a key tool to conserve land and keep manure, soil and nutrients out of the water. We bank the nutrients in the soil for future generations rather than letting them slip off the farm and into waterways where they become pollutants. We have been USDA Certified Organic for 13 years. Through managed grazing we raise 100% grass-fed, organic beef that is available either as an assorted "box" of cuts or as half or quarter animal. We donate 5% of any sales to the Clean Water Action Council. For more information contact Rick Adamski at radamski@granitewave.com or 920-373-7105.

Meet Our New Intern



Adam Dziewa is a graduate of St. Norbert College in De Pere, Wisconsin, with a Bachelor's Degree in Environmental and Natural Science. While at St. Norbert's, he participated in two direct research projects.

In these independent research projects, he studied the health of coral reef systems in the Caribbean Sea and the behavioral changes of African penguins due to human presence. He is currently enrolled in the Master's Program in Environmental Science & Policy with an emphasis in Policy and Ecosystem Studies at the University of Wisconsin—Green Bay while working on his thesis. While attending UWGB, he is also working towards his Environmental Management Business Institute Certificate focusing on sustainability. Adam is excited to make a difference in the natural world, one day at a time.

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Clean Water Action Council Presents: THE ENVIRONMENT AND BREAST CANCER RISKS



Brown County Central Library, 515 Pine St., Green Bay Saturday, February 11, 10:00 a.m. to 11:30 a.m.



Children's activities provided to allow parents to attend.

Dawn Anderson, former Executive Director of the Wisconsin Breast Cancer Coalition (WBCC), illuminates cancer risk factors in the environment and helps identify strategies for reducing that risk in a presentation that brings findings from the Breast Cancer and the Environment Research Program (BCERP) to the public. Anderson is a graduate of the National Breast Cancer Coalition's "Project Lead" advocate training program and served as a community advocate partner with BCERP from 2010-2015. Her interest in environmental factors in breast cancer risk spans about 20 years and has fueled her advocacy on the state and national levels, including 10 years leading the WBCC.

In "The Environment and Breast Cancer," we learn about "Windows of Susceptibility," time periods in a life course that describe the heightened vulnerability of girls and women to breast cancer.

A definition of "environmental risks" is offered, along with an overview of recent efforts to address substances linked to cancer risk, such as BPA, BPS and phthalates.

Practical tips for protecting yourself and your family against these risky substances end the presentation, along with resources for further inquiry.

CWAC staff and interns will provide children's activities in Meeting Rm. 2 while parents attend the presentation in the adjoining Meeting Rm. 1

To register, e-mail us at: contact@cleanwateractioncouncil.org or text or send a phone message to: 920-421-8885

See MARK YOUR CALENDAR! See Meetings, Events and Happenings

X Saturday, January 14 & 28, 1:30 p.m. - 2:30 p.m. <u>Family Snowshoe Hikes</u>

Green Bay Botanical Garden, 2600 Larsen Rd., Green Bay

Learn the basics of snowshoeing, explore the winter adaptations of the plants and search for tracks and signs of animals. Program will be held as a hike if there isn't enough snow for snowshoes. More details at: http://www.gbbg.org/ event/familysnowshoehike/?instance_id=458

Register by January 6 for the January 14 date. Free for members; \$5 for non-member families.

Bay Beach Wildlife Sanctuary 1660 E Shore Dr., Green Bay

Programs held in the Nature Center at 7:00 p.m. Free! http://www.baybeachwildlife.com/events/large-calendardisplay/

January 19th:

Northern Goshawks in WI—their history, ecology and status. Presented by Tom Erdman, Richter Museum, UW-Green Bay. **February 16th:**

"Atlasing for Beginners for the Wisconsin Breeding Bird Atlas II Project". Presented by Erin Geise, UWGB Cofrin Center for Biodiversity.

W January 21, 9:00 a.m. – 1:00 p.m. <u>Electronics Recycling Drive</u>

Bay Beach Wildlife Sanctuary 1660 E. Shore Dr., Green Bay

Recycle your old computer, fax, printer, TV, other electronics and household appliances. A portion of the fees will go to support the Friends of the Wildlife Sanctuary. There is a fee for TVs (\$10.00 each) and Monitors (\$5.00 each). The drop off area will be the lower lot of the Nature Center.

More at: http://www.baybeachwildlife.com/events/largecalendar-display/?cid=mc-1fa4a091cc05d31edb3f379445e829f c&mc_id=2976

ﷺ January 28, 1:30 p.m. - 2:30 p.m. <u>Bird of Prey Tour</u>

Bay Beach Wildlife Sanctuary, 1660 E. Shore Dr., Green Bay

Ever wonder how the captive birds of prey came to the Sanctuary? Bird of Prey tours are held outside the Observation Building. Meet in the lobby after for an up-close look at some of our resident birds of prey.

Call (920) 391-3685 for more information. FREE! http://www.baybeachwildlife.com/events/large-calendar-displ ay/?yr=2017&month=1&dy=&cid=mc-1fa4a091cc05d31edb3f 379445e829fc

X Saturday, January 28, All Day <u>Toward Harmony With Nature</u>

Oshkosh Convention Center, 2 N. Main St., Oshkosh, WI

Celebrate the 21st Toward Harmony with Nature conference with Wild Ones Fox Valley Area. The morning keynote is *"The Surly Surveyor: A Look at the Pre-settlement Landscape"* by Rob Nurre, Landscape Historian. The all-day conference also includes nine break-out sessions by experts on a whole spectrum of topics related to nature and natural landscaping. Visit with vendors and exhibitors, pick up helpful resource materials and bid on silent auction items.

http://www.towardharmonywithnature.org/ for full details.

W Thursday, February 2—Saturday, February 4 <u>Grassworks Grazing Conference</u>

Chula Vista Resort, 2501 River Rd., Wisconsin Dells, WI

For nearly three decades, Grassworks has served as a membership organization that provides leadership and education to farmers and consumers for the advancement of managed grass-based agriculture to benefit present and future generations. This 3-day conference features many great speakers and breakout sessions about grazing. http://grassworks.org/?110340 to find out more.

X Friday, February 17, 6:00 p.m. - 9:00 p.m. Spring Thaw Lecture with Ellen Ecker Ogden

Green Bay Botanical Garden, 2600 Larsen Rd., Green Bay

6:00 p.m.: Cocktail hour with cash bar, book signing with Ellen **7:00 p.m.**: Ellen Ecker Ogden presents "*The Art of Growing Food*" Ellen Ecker Ogden is an award-winning food and garden writer and kitchen garden designer who is known for her informative and fun loving garden talks. This lecture is ideal for new and experienced gardeners.

More info at http://www.gbbg.org/springthawlecture/ Register by February 10, price for the lecture only Members: \$20, Non-Members: \$29

Due to space constraints, we could not post all the great events going on, but check out these sites for more exciting events:

http://www.gbbg.org/calendar/

http://www.woodlanddunes.org/upcoming-events/

http://www.baybeachwildlife.com/events/large-calendardisplay/



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Phone numbers are listed under Board Members

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