

14. Lance Foster. Personal Correspondence. Summer 2018.

15. John Doershuk. Protecting Something Sacred. Iowa Natural Heritage Foundation, March 2018. Accessed June 10, 2018 from: www.inhf.org/blog/blog/protecting-something-sacred/

16. Lyz Lens. How Do You Reopen a State That Never Closed? Gen, April 28, 2020. Accessed May 15, 2020 from: gen.medium.com/how-do-you-reopen-a-state-that-never-closed-33eb43f63129

17. Ian Richardson. Nowhere to sleep: Sioux City's Homeless Counts Declining, but Needs Abound. Sioux City Journal, June 24, 2018. Accessed May 12, 2020 from: siouxcityjournal.com/news/local/nowhere-to-sleep-sioux-citys-homeless-counts-declining-but-needs-abound/article_b03bf769-07fb-5cf4-9071-5135897863e3.html

18. Dan Charles. Iowa Farmers Look to Trap Carbon in Soil. NPR, June 15, 2007. Accessed February 23, 2021 from: www.npr.org/templates/story/story.php?storyId=11951725

19. Gleb Raygorodetsky. Indigenous Peoples Defend Earth's Biodiversity—But They're in Danger. National Geographic, November 16, 2018. Accessed on September 2, 2018 from: www.nationalgeographic.com/environment/article/can-indigenous-land-stewardship-protect-biodiversity-#:~:text=Recent%20research%20demonstrates%20that%20while,percent%20of%20the%20global%20biodiversity.

20. International Year of Soil Conference. Food and Agricultural Organization of the United States, July 6, 2015. Accessed on February 23, 2020 from: fao.org/soils-2015/events/detail/en/c/338738/

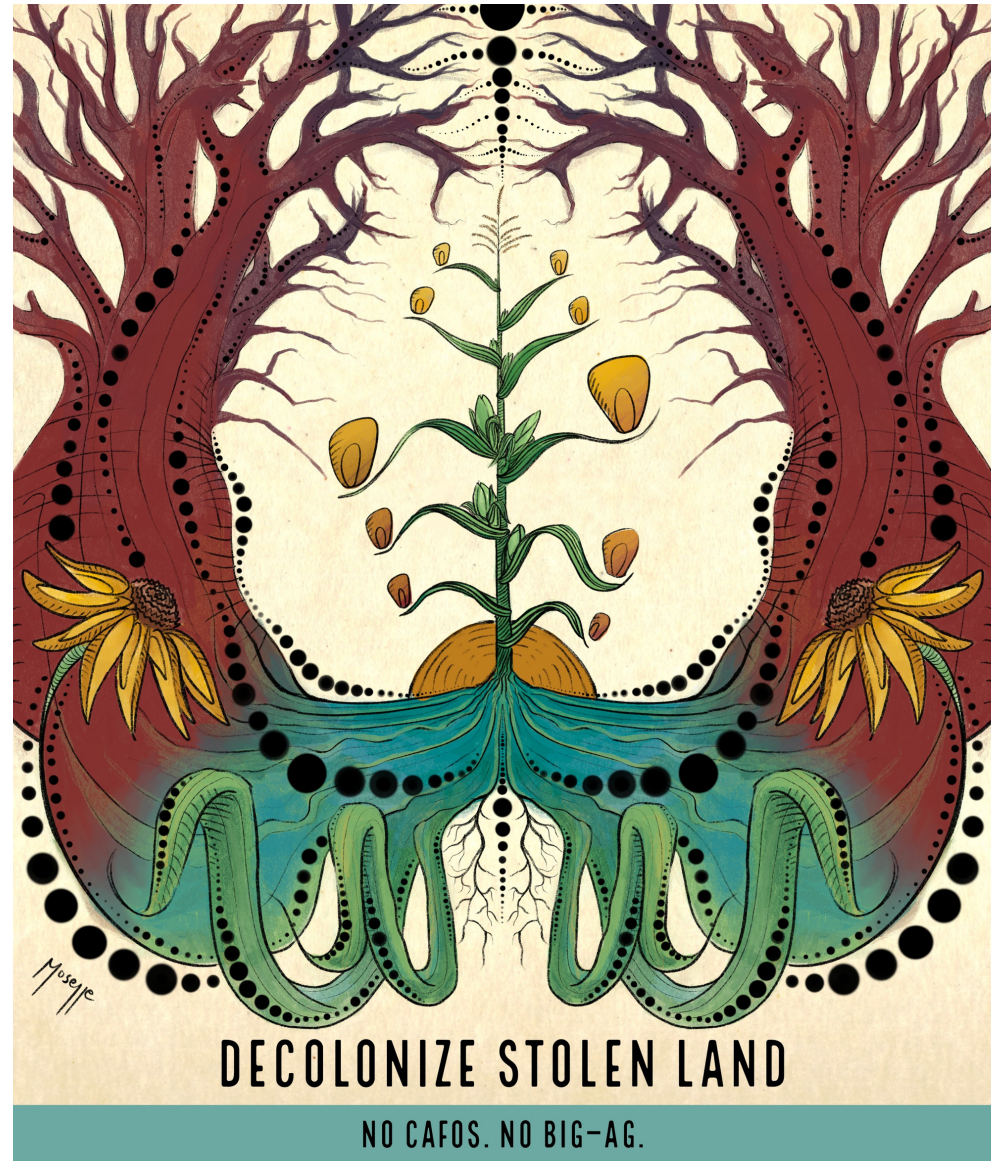


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END STAGE IOWA

BIG-AG'S SACRIFICE ZONE AND INDIGENOUS RESISTANCE



DECOLONIZE STOLEN LAND

NO CAFOS. NO BIG-AG.

WRITTEN BY SIKOWIS (CHRISTINE NOBISS), PLAINS CREE/SAULTEAUX
FRONT PAGE ART BY MOSELLE SINGH AND OTHER GRAPHICS BY SIKOWIS
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THE PROBLEM WITH IOWA: BIG-AG'S SACRIFICE ZONE

This zine provides an Indigenous perspective on the environmental catastrophe known as the State of Iowa where the water is poisoned, animals are dying, the soil is disappearing, and the landscape is turning into a desert. Indigenous concepts such as regenerative agriculture, sustainable land use, and compassion for the earth have been violently oppressed by an imperialist heteropatriarchy to make way for colonial-capitalist farming practices which are now killing us and wreaking havoc on the climate. The only way to heal this land is to adopt Indigenous ways of being and uplift an Indigenous regenerative economy.



No other landscape in the country has been biologically altered to the extent that Iowa has. Iowa is Big-Ag's sacrifice zone. Big-Ag, also known as Agri-Business, is the business of agriculture, which commodifies food systems for ultimate profit and product efficiency that satisfy the colonial-capitalist model. The Pesticide Action Network states that "industrial agriculture treats the farm as a factory, with 'inputs'

(pesticides, fertilizers) and 'outputs' (crops). The end-objective is to increase yields while controlling costs — usually by exploiting economies of scale (i.e. 'monocropping'), and by replacing solar energy and manual labor with machines and petro-chemical inputs." (1)

According to the Iowa Prairie Network, Iowa used to be as biologically diverse as many rainforests in South America but now its diversity is comparable to that of a desert. It is almost an artificial environment where food is grown in soil that needs constant application of fertilizers and other nutrients due to monocropping and heavy crop rotation schedules. These colonial-capitalist farming practices are not just affecting Iowa, but land all the way to the Gulf of Mexico and contributing greatly to the climate crisis.

BIBLIOGRAPHY

1. The Lynchpin of Industrial Ag. Pesticide Action Network. Accessed September 20, 2018 from: www.panna.org/pesticides-big-picture/lynchpin-industrial-ag
2. Mark Edwards. Trails Funding Important to Iowa's Parks. Iowa Chapter Sierra Club, July 2017. Accessed June 10, 2018 from: www.sierraclub.org/iowa/july-2017-newsletter
3. Sarah Carter. Lost Harvest: Prairie Indian Reserve Farmers and Government Policy. Montreal: McGill-Queen's University Press, 1990. Page 18.
4. Sarah Carter. Ibid.
5. Christopher Doering. Farmers Turn to GMO-Free Crops to Boost Income. Des Moines Register, March 2018. Accessed September 24, 2018 from: www.desmoinesregister.com/story/money/agriculture/2015/04/18/non-gmo-farming/25951693/
6. Georgina Agustin. Factory Farms Put Climate at Risk, Experts Say in Urging Health Officials to Speak Out. Inside Climate News. Accessed September 21, 2018 from: www.google.com/amp/s/insideclimatenews.org/news/22052017/factory-farms-cafos-threaten-climate-change-world-health-organization%3famp
7. In 2019, a study by the Coalition to Support Iowa Farmers, states that there are almost 25 million hogs in the state, however, grassroots activists say the number is much higher and closer to 40 million because CAFOs do not have to disclose numbers for pregnant hogs and piglets.
8. Jonathan Foley. It's Time to Rethink America's Corn System. Scientific American, March 2013. Accessed September 25, 2018 from: www.scientificamerican.com/article/time-to-rethink-corn
9. Carol Hunter. Which Iowa Leader has Courage to take on Big Pork? Des Moines Register, March 2018. Accessed June 10, 2018 from: www.desmoinesregister.com/story/opinion/editorials/2018/03/22/cafo-iowa-reynolds-hogs-big-pork/448567002/
10. Donnelle Eller. Iowa could support 45,700 livestock confinements, but should it? Des Moines Register, March 2018. Accessed June 10, 2018 from: www.desmoinesregister.com/story/money/agriculture/2018/03/08/iowa-can-support-47-500-cafos-but-should/371440002/
11. Brian Bienkowski. My Number One Concern is Water": As Hog Farms Grow in Size and Number, so do Iowa Water Problems. Environmental Health News, November 2017. Accessed June 10, 2018 from: www.ehn.org/water-pollution-hog-farming-2504466831.html
12. Diabetes Still Highest Among AI/AN. National Indian Council on Aging, Inc. Accessed March 2, 2021 from: www.nicoa.org/diabetes-still-highest-among-ai-an/#:~:text=According%20to%20the%20CDC%20and,diagnosed%20with%20type%202%20diabetes.
13. Nathan Donley. The USA lags behind other agricultural nations in banning harmful pesticides. BMC, June 7, 2019. Accessed March 1, 2021 from: ehjournal.biomedcentral.com/articles/10.1186/s12940-019-0488-0

INDIGENOUS TRADITIONAL ECOLOGICAL KNOWLEDGE

For Indigenous nations and individuals working to rematriate land, stop environmental disaster, and mitigate the climate crisis, Iowa is a disturbing example of an end-stage environment created by genocide and violent colonial-capitalist farming practices and over-development. For instance, The Food and Agriculture Organization of the United Nations has estimated that the world only has about 60 years of harvest left based on massive soil loss and degradation on every continent; **(19)** Iowa is definitely a forerunner in this disturbing practice of land abuse. This is why, as we stand on the precipice of mass extinction, we need knowledge and advice from Indigenous Peoples who have been practicing sustainable and regenerative agriculture from time immemorial.



Lance Foster, Iowa

For most First Nations, wealth was seen through one's ability to give back to the community and provide for the people. It's a completely different perspective, which offended settlers to the point where the Canadian government banned potlatch ceremonies (giveaways) and Indigenous folks were forced to carry out their ceremonies underground for fear of retribution. This is one example of how an Indigenous-led regenerative economy will curb the climate crisis while putting an end to colonial-capitalist induced social injustices. This ideology combats the christian doctrine that "god gave man dominion over the earth" and

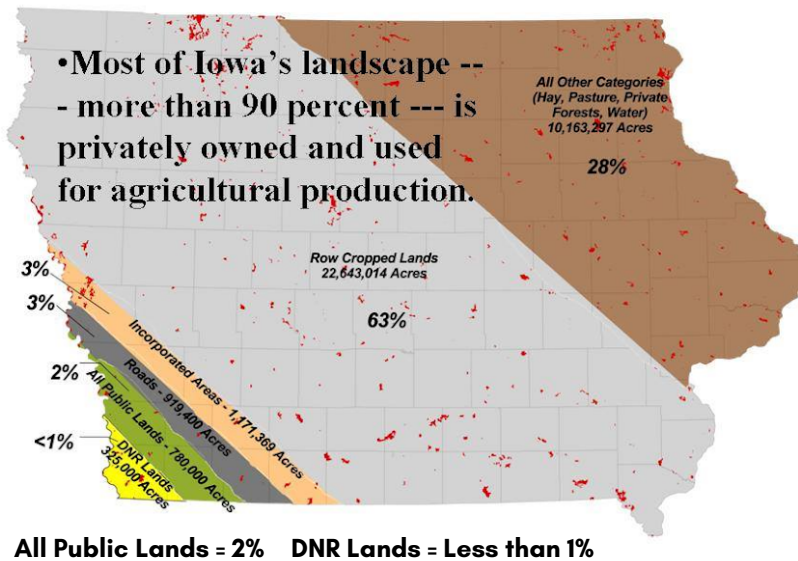
can help us better understand how to interact with the earth while fighting corporate conglomerates who carry out unethical, unhealthy, and inhumane colonial-capitalist farming practices.

The facts and numbers are worrisome, but knowing that we can curb the climate crisis through the pre-existing, long-practiced and living examples of Indigenous lifeways is definitely encouraging. Indigenous Peoples are tenacious and resilient and have resisted assault to our bodies and land for hundreds of years. However, folks everywhere must start standing up for the land outside of "Indian country" and challenge the status quo in places where Indigenous voices are less heard—places like modern-day Iowa. Imperialist borders and reservation boundaries should never be a deterrent to challenging colonial authority, especially in the face of the climate crisis, poisoned landscapes, and the oppression of BIPOC folks.

To date, this state has lost an incredible amount of topsoil from excessive runoff. The Environmental Working Group has reported that Iowa annually loses twice the amount of topsoil than the federal government estimates. Contained within that run-off is animal waste, herbicides, pesticides, fertilizers, and commercial by-products, which all flow down-river to the Mississippi. Climate change is also a contributing factor to soil erosion as there is an increase in extreme rainfall events and severe flooding. According to Mark Edwards, retired Iowa DNR Trails Coordinator and environmental activist:

*Today, Iowa competes for the very bottom in state parks and public lands. We are known as the most biologically altered state in North America. Roughly 98% of Iowa has been altered for agricultural use, cities, and roads. All our state parks and forests had been logged and heavily grazed. We still fail to realize that these areas are healing landscapes...Iowa has no old-growth forests left. We have less than one-tenth of one percent of the prairies which covered our state and produced our rich soils. Only 10% of Iowa's remaining prairies and forests lie within the public domain and its limited protection. This makes these parks very, very special not only for people but for the dwindling plants, wildlife, and natural areas...Less than two-tenths of one percent of Iowa's land is designated and protected as state parks. Almost all parks can be walked across in an hour and you are rarely more than a mile from a road...We continue to make bad choices as farmers converted roughly the size of our state parks or around 50,000 acres of grassland, scrubland and wetlands from 2008 to 2011 to farmland. Urban sprawl has increased 50,000 acres in the last ten years. We have now covered 23.6 million acres, about two-thirds of the state in just two species - corn and soybeans. **(2)** (see map on page 3)*

Historically, Iowa is an area where Indigenous genocide and relocation was a severe and vast process due to the colonial desire to farm this fertile ground which lies between the Missouri and Mississippi Rivers. With the influx of settler vigilantes and colonial militias, the land now called Iowa was eventually completely stolen and colonial-capitalist farming practices have made the land almost unrecognizable. It is now a highly mono-cropped, GMO state. Where there used to be tallgrass prairie, oak savanna, wetlands, and woodlands there are now rows and rows of genetically modified corn and soy interspersed with CAFOs, food, fertilizer and ethanol processing plants, suburban lawn landscapes, infrastructure and, urban sprawl.



BIG-AGRICULTURE—THEFT OF ALREADY STOLEN LAND

Big-Ag is a result of colonial-capitalist thinking which has roots in christianity and the belief that god gave man dominion over the earth. This dogma influenced the *doctrine of discovery*, which is a concept that gave christian invaders the right to lay claim to land that they "discovered". In America, the doctrine of discovery was later expressed as *manifest destiny*, an extension of this ideology that drove 19th-century U.S. territorial land theft. Manifest destiny was a justification to annihilate and "civilize" the "Indian" in order to lay claim to stolen land. It recognized the fundamental desire for land expansion through ethnic cleansing and slavery. Thus, this country was founded at the point of a gun by the actions of settler vigilantes and colonial militias with a maniacal lust for Indian killing and the control of Black folks--all for the sake of free real estate and labor. In the process, they enforced an individualistic, capitalistic agrarian culture across the continent. Agriculture was even considered the solution to the *Indian problem*, as Sarah Carter, in her book, *Lost Harvest*, writes:

Agriculture was seen as the solution to the at-best peculiar and at worst deplorable characteristics and idiosyncrasies which the Indians tenaciously and perversely cherished. The Indian had to be taught to make his living from the soil. No other occupation could so assuredly

tactics like this have only created large hot spots, particularly in the Sioux City tri-state area, home to several meatpacking plants and many other factories. Furthermore, locals have reported how many plant workers refuse to self-disclose symptoms as their livelihood is jeopardized when they already live paycheck to paycheck. These plants have high labor turn-over rates as many houseless and impoverished folks take on positions there. For instance, many Native Americans work in the Sioux City plants. Though, Native Americans make up less than 2% of the Sioux City tri-state population, they account for 48-63% of the houseless population. (17) These numbers need to change, lessening the need to take low-wage/high-hazard jobs perpetuated by the commercial food production industry.

LONG TERM GOAL IN IOWA

Great Plains Action Society's long-term goal is to reMatriate extensive swaths of Iowa in order to revive tallgrass prairie, restore buffalo populations, along with many other insects, birds, fish, and animal species eradicated from these lands. The buffalo is a keystone species of the prairie as their migratory patterns, individual movements, and diet assist in creating hardier flora resistant to sickness and climate shifts or irregular weather patterns. Many will say that by reintroducing prairie, we are pushing out valuable land space for crop and meat production. However, as stated earlier in this publication, Iowa hosts 40 million hogs, 4 million cattle, and 75 million chickens; plus, nearly half of its corn production is used as the primary ingredient in livestock feed while the other half of total corn produced ends up as ethanol.

Prairie reclamation is vital to resolving Iowa's environmental issues and combating the global climate crisis. For instance, most prairie grasses have deep and extensive root systems effectively holding soil in place and protecting them from drought conditions. This is particularly important due to increased severe precipitation events and eventual large-scale drought caused by climate change. Prairie plants also help to clean water sources. Most importantly, prairie reclamation can recapture billions of tons of carbon. According to Rattan Lal, a soil scientist at Ohio State University, it is imperative as "from time immemorial when world agriculture began, we have lost roughly 140 billion tons of carbon from trees and soil...Over half, almost 80 billion tons, is from soil alone. In fact, up until the late 1950s, plowing had released more carbon dioxide into the air than all the burning of coal and oil in history." (18) Needless to say, carbon farming is a key way forward and Indigenous Peoples are leaders in this capacity as National Geographic reported in 2018, "Comprising less than 5% of the world's population, indigenous people protect 80% of global biodiversity." (19)

population resides, is where we are organizing to start a food sovereignty program led by our First Foods Program Directors to promote healthier diets and lifestyles. Most importantly, creating and providing alternatives is the ultimate form of resistance, as it eliminates commercial farm dependence and reallocates power back into the hands of the people.

3. ADDRESSING WORKER MISTREATMENT

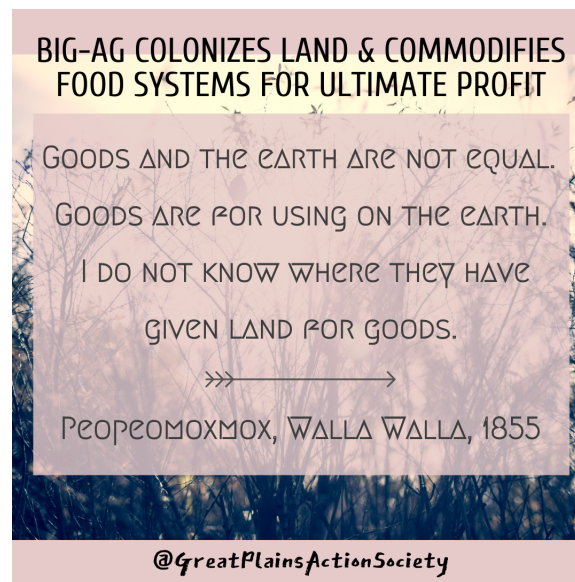
Another important aspect of rallying against the effects of Big-Ag is calling out the mistreatment of workers, many of whom are Latinx/Indigenous migrants. For example, through Great Plains Action Society's Urban Native COVID-19 Response, we have addressed this issue in the Sioux City tri-state area, which is home to Iowa's largest Native American population and a very large Latinx/Indigenous migrant population. In fact, in Iowa, the Big-Ag working majority are refugees and first-generation Indigenous migrants from Mexico and South America. Since the very beginning of the pandemic meatpacking plant facilities across Iowa experienced significant COVID-19 outbreaks because working conditions in these plants and CAFOs are already deplorable. Even worse, Governor Kim Reynolds worked with President Donald Trump on The Defense Production Act to ensure that the meat industry continued mass production and was protected from litigation, even with disagreement from health agencies. As written by Lyz Lenz, concerning these statistics, "The people being sacrificed on this altar of ideology are the immigrants, refugees, and formerly incarcerated Iowans who work in the food processing plants." (16)

Kim Reynolds also never mandated meatpacking plants to report COVID-19 cases unless over 10% of the employees tested positive because it exposes the high rates in these spaces. However, cover-up



dispossess the Indian of his nomadic habits and the uncertainties of the chase, and fix upon him the values of a permanent abode and the security of a margin of surplus. Agriculture would teach an appreciation of private property and impart a will to own and master nature... Farming a piece of land would promote an independent spirit and foster competition, qualities which would erode the tribal unit. Agriculture would nurture habits of industry and diligence. (3)

Though the Indigenous population of Turtle Island (North America) resisted policies that attacked their cultural traditions, many nations adapted to the enforced agrarian lifestyle and even excelled at it. However, austere government policy and settler racism soon ruined their farming accomplishments and the fault was put on their inability to overcome their innate, "savage" instincts. If settlers and their descendants paid any attention to Indigenous knowledge on this matter we might not be facing the climate crisis and environmental collapse. A quote by Smohalla, Nimiipuu, and founder of the Dreamer Religion, that was often used to substantiate the racist notion that Indigenous folks could not farm can also be used today in a different context concerning the success of no-till farming; a method now being implemented by small, organic, environmentally-conscious farmers. Smohalla said:



You asked me to plow the ground. Shall I take a knife and tear my mother's breast? Then when I die she will take me to her bosom to rest. You ask me to dig for stone. Shall I dig under her skin for her bones? Then when I die I cannot enter her body to be born again. You ask me to cut grass and make hay and sell it and be rich like white men. But how dare I cut off my mother's hair? (4)

Not only was Smohalla speaking about the damage that would occur through the use of the plow and monocropping but he verbalized the damage that would take place to the land through aggressive and exploitative extraction of fossil fuels, minerals, and other geological materials from the earth. According to The World Bank, in most regions of the world, over seventy percent of freshwater is used for agriculture and, in the US, the EPA estimates that the same industry is responsible for seventy-five percent of water-quality issues in our lakes, rivers, and streams. A staggering 260 million acres of US forest have been cleared; much of which was to make room for GMO mono-cropped fields.

As reported by the Des Moines Register, “[In 2013], an estimated 97 percent of soybeans and 95 percent of corn grown in Iowa were from biotech seeds, figures that were both higher than the national average.” (5) It’s important to note that there is also a growing increase in non-GMO and organic farming in Iowa. Not only is the land and water affected by Big-Ag’s runoff, but CAFOs are highly responsible for increased air pollution because, according to the EPA, animal waste contributes 50% to 85% of US ammonia emissions. According to the World Health Organization (WHO), “The livestock industry’s contribution to greenhouse gases come from direct sources, including methane emitted from the animals belching and their manure, but also from indirect sources, including land conversion and deforestation linked to growing feed.” (6) Iowa is a prime example of direct source emissions, as it is host to 40 million hogs, (7) 4 million cattle, and 75 million chickens; and nearly half of its corn production is used as the main energy ingredient in livestock feed while the other half of all corn produced ends up as ethanol. Jonathan Foley, writes in Scientific American, “In short, the corn crop is highly productive, but the corn system is aligned to feed cars and animals instead of feeding people.” (8)

CONCENTRATED ANIMAL FEED OPERATIONS - HOGS THEN AND NOW

Hidden from big cities, but an immediate threat to rural communities, are over 15,000 concentrated animal feed operations (CAFOs) with producers rapidly building more due to a surge in commercial demand for pork (i.e., China and Mexico). Shockingly, a Department of Natural Resources study states, “based on the state’s fertilizer needs, that Iowa could support 45,700 concentrated animal feeding operations—

and Great Plains Action Society—all of which are doing work in Iowa, which is home to approximately 16,000 Native American people. Great Plains Action Society has implemented a Frontline Land Defense Program focusing on the work of Indigenous Peoples who have traditional and territorial ties to Iowa, in order to take a more cohesive stand against land, climate, and social injustice.

SHORT TERM GOALS

1. ORGANIZE AND CHANGE LAWS AND GOTV

Along with many others in Iowa, Great Plains Action Society wants to remove and change dangerous laws that allow colonial-capitalist farming practices to harm. We are on the Iowa Alliance for Sustainable Agriculture steering committee, campaigning for a factory farm moratorium. We also worked with the Women, Food and Agriculture Network to consult on a two-year project with the Pesticide Action Network who released an animation on the global repercussions of Big-Ag, which can be found at seedsandtruth.com. GPAS is a proud member of the Emerald Cities Collaborative Emergent Community Capacity Building program for 2022/23, which consists of BIPOC orgs across the nation focused on Justice 40 initiatives. Emerald Cities has recognized our good work and asked us to serve on their member-leader governance team for their Sustainable Building Sector Initiative. We are also a member of the Midwest Environmental Justice Institute Cohort and serve on their Leadership Advisory Committee. The RE-AMP Iowa Clean Energy State Table asked us to join them starting in 2022, which is also a Justice 40 coalition. We are proud co-founders of the Iowa Green New Deal Network coalition that we have named Buffalo Rebellion, which is made up of Indigenous, Black, Latino/Latina, migrant, 2SLGBTQIA+, and youth organizations with a sharp focus on environmental justice and anti-racism work in the climate movement.

2. INNER-CITY COMMUNITY GARDENS



A huge issue, in Iowa, is that few BIPOC folks own land or farm. Furthermore, the majority of these populations live in urban centers like Sioux City, Des Moines, Waterloo, Cedar Falls, Cedar Rapids, Iowa City and the Quad Cities. For this reason, it’s important to provide resources and inner-city land plots to locals to set up BIPOC community garden spaces. Sioux City, where 70% of Iowa’s Indigenous

Many small family-owned farms were affected by eminent domain abuse and, right now, the easement where the pipeline sits is largely a no-grow zone. In terms of production, this may not matter to large agribusinesses, but it definitely has affected small farm owners who work hard to grow food ethically. Eminent domain abuse cannot be discussed without recognizing the genocide of Indigenous peoples and the detrimental colonization of their land. All stolen land rests upon a stratified history of the people that came before. As Lance Foster, Tribal Historic Preservation Officer of the Iowa Tribe of Kansas and Nebraska, wrote, "Tribes with deep history in Iowa are the Iowa (Ioway), Otoe, Omaha, Ponca, Ho-Chunk,...Meskwaki, Sauk (the previous two also called the Sac and Fox), Dakota, Yankton...and Illini. The Potawatomi also settled in Iowa for a time during Indian Removal. The only tribe to now remain as a nation in Iowa is the Meskwaki with a settlement near Tama. The Omaha and Hochunk still own lands here." (14)

Connected to the Big-Oil and Big-Ag industries is the greenwashing scam of carbon capture and sequestration through CO2 pipelines. Private corporations are racing to steal new federal tax credits intended to be used in developing green solutions that will openly prop up fossil fuel extraction and ethanol production. If approved, these pipelines will form an extensive web of hazardous liquid waste CO2 lines throughout Iowa. We are trying to stop them but the fight is far from over. You can get more information at carboncapturefacts.org.

GREAT PLAINS ACTION SOCIETY- FRONTLINE LAND DEFENSE INITIATIVE

Environmental ignorance and financial corruption run deep in the Iowa government and it's up to local farmers, organizers, and invested sovereign First Nations to stop it. As John Doershuk, State Archeologist has stated, "There are twenty-six tribes we currently work with that have an interest in and connection to Iowa. Many of those tribes don't live here anymore, but still feel that this is their historical homeland and that the features found here are an active part of their culture today." (15) These nations have been involved in more than just archeological protection—many have helped throughout the years to protect the integrity of Iowa's land and fight for social justice.

In Iowa, there are few but mighty, First Nation programs, Indigenous organizations, and individuals that are carrying out environmental and social justice work. For instance, the Meskwaki Nation runs Red Earth Gardens and a food sovereignty program which are dedicated to growing first foods, prairie reclamation, and nurturing buffalo to better the health of their people. Other groups are (this is not an exhaustive list) the Native American Coalition of the Quad Cities, the UIOWA Native American Student Association, Sage Sisters of Solidarity, the UIOWA Native Spaces Project, the Urban Native Center in Sioux City,

four times as many as exist now." (9) There are already 40 million hogs, mostly confined to CAFOs, living horrifying lives, that create more than 10 billion gallons of "fertilizer" a year that sits in massive lagoons. Ironically, as Donnelle Eller from the Des Moines Register puts it, "Few places are better suited for pork production: Iowa, the nation's top corn producer, has ample feed, 30 million acres of crops that can use the fertilizer that CAFOs create, and a growing number of meatpacking plants to process the animals." (10) Irony aside, the reality of this situation is quite disturbing—to know that colonizers created a landscape so overfarmed and starving for nutrients that there is an actual need to pour antibiotic and heavy-metal laden pig waste on the land is very sad from an Indigenous perspective.



The sad reality of the mass commodification of animals and how pigs live in CAFOs.

Studies report that those who live in the vicinity of these CAFOs are more susceptible to elevated rates of childhood asthma and other diseases like MRSA. Although animal waste can be used as fertilizer, the sad reality is that much of it festers in lagoons because over-application inundates the soil with fecal coliform, nitrogen, phosphates, and heavy metals and is detrimental to the crops. This is a main reason why, in 2018, over 750 waterways in Iowa were considered impaired and do not meet the Clean Water Act standards. Every year, state beach closures increase due to threatening levels of antibiotic-resistant bacteria and microcystin — a toxin produced by some forms of blue-green algae which feed off nutrients like phosphorus and nitrogen and thrive in local high humid temperatures. Furthermore, according to the Iowa DNR Fish Kill database, "over the past decade 4,464,257 fish have been killed by animal waste". (11)

Not only is hog farming detrimental to the land, air, and water systems of Iowa but, historically, this animal is responsible for an abundance of death and land destruction in the Americas. Hogs are a non-native species that were initially introduced by conquistadors who were not concerned with the destruction of local crops or the influx of disease the animals brought. Some scholars believe that hogs are responsible for the initial massive population reduction in Mexico where they quickly spread disease. The French, who came after, have recorded their visceral reaction to this genocidal aftermath. Additionally, the damage was not limited to Mexico as both American continents have been greatly affected by disease influx spread by hogs.

Over time, some tribes were forced into swine herding. They were strong-armed out of their Indigenous lifestyles into becoming keepers of their colonizers' livestock. Franciscan monks have records detailing their approval of raising swine and its many benefits. And, yes, some tribes did benefit from raising these animals, however, hogs were either liked or disliked--but that was tribe dependent. Some embraced them and enjoyed the taste of the meat, while others thought they were dirty and/or devastated by the destruction of native plants and Indigenous ways of life.

These animals are still affecting our health in many ways. Currently, Native Americans suffer from the highest rate of diabetes in the country. (12) The rise in this disease is a direct correlation to the rise in obesity. And this statistic holds true for Americans as a whole, especially as populations across the board move into a state of obesity. Americans have been forced into a diet high in meat, sugar, fat, and processed food due to a lack of access to healthier foods often exaggerated by race and class barriers. Many inner-city neighborhoods, rural towns, and reservations are now deemed as food deserts. Since pork is one of America's largest commercial meat products it is often one of the most accessible foods in these deserts because it is inexpensive. Not only are CAFOs terrible for the immediate surrounding environments and our diets, but the Historical presence of this animal on turtle Island is yet another disturbing relic of European colonization standing testament to its assault not only on the land but also it's people. It is time to tell this story to Iowa legislators, like Iowa Governor Kim Reynolds, who support the dangerous increase of CAFOs.

OIL; IN THE GROUND, IN THE WATER, AND IN THE AIR

Iowa is not a fossil-fuel-producing state, but that does not mean that these substances do not have a big impact here. This state relies heavily on fossil fuel extraction for the sake of large farm machinery operations and processing plants, not to mention, the literal and intentional spraying of petroleum products onto crops. Carcinogenic compounds derived from oil are regularly applied to many crops in the state through the use of pesticides and herbicides. The active ingredients that were once distilled from natural substances are now largely synthesized in a laboratory. Tens to hundreds of millions of pounds of pesticides are used annually in the US, and in 2016, "322 million pounds were of pesticides banned in the EU, 26 million pounds were of pesticides banned in Brazil and 40 million pounds were of pesticides banned in China." (13) In essence, toxic hog waste and carcinogenic petroleum products are constantly being aerated and sprayed onto the land in Iowa to grow food that humans and animals, in the area, breathe in and others, from all over the world, will eventually ingest.

This oil problem is an all-encompassing issue, and bigger than we often think. Legislators have shown little to no interest in the long-term quality of Iowa's water and, in 2014, Governor Terry Branstad gave the green light to the construction of the Dakota Access Pipeline (DAPL) that now cleaves



Great Plains Action Society at the Mississippi

the state in half diagonally. Thousands of individuals, environmental organizations and Indigenous activists joined together in Iowa to protect the land from an imminent oil spill catastrophe as DAPL transports almost 500,000 barrels a day. However, even with massive protests and lawsuits from Iowans who pointed out that the Iowa Utilities Board (IUB) abused eminent domain and mismanaged permitting, the project continued and was completed in 2017.