

Hog Hegemony:

One local group's struggle to resist the expansion of
corporate hog confinements

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Abstract

This ethnographic study focuses on Poweshiek CARES, a recently-established grassroots organization that has garnered a great deal of attention since its formation last spring. Through the lens of political ecology and with additional insight from grid-group analysis and communications theory, the paper traces the origin of the group, exploring its membership, mobilization, and actions so far and suggesting how it may be successful in the future.

Introduction

Over the course of the semester, I conducted an ethnographic study of a grassroots organization called Community Action to Restore Environmental Stewardship. Known simply as CARES, the group consists of Poweshiek County residents who mobilized last summer against the proposed expansion of two corporate hog confinements located about five miles from Grinnell, Iowa. The group's agenda has since expanded to oppose the proliferation of confined animal feeding operations (CAFOs).

I knew that I wanted to study the social effects of industrial agriculture and, situated in the heart of the Midwest, in close proximity to both a number of small family-owned farms and larger industrial farms, Grinnell's location makes it ripe with opportunity to do so at the local level. As the controversy over the confinement applications began to develop, such a study became even more pertinent and intriguing.

After some initial background research, I developed the following questions: first and foremost, I wanted to know if and how a relatively small group of local citizens could be successful in their fight against a much larger corporate entity. As a corollary to that question, I needed to find out how members of the group defined success. The answer to my question was

guided and informed by the general theoretical framework of political ecology. Douglas and Wildavsky's examination of environmental risk based on grid-group analysis, and Thu and Durrenberger's concept of signal amplification provide additional insight within the field of political ecology.

My research involved attending the group's meetings and conducting interviews and focus groups with various members ranging from long-term conventional farmers to a current county supervisor, to members of the Grinnell College faculty. As of May the group officially consisted of 83 individuals focused on both stopping the immediate expansion and advocating environmental responsibility in the long-term through legislative action and community outreach; it is still growing.

CARES has already garnered a number of successes. With numerous letters to the editor published in the *Grinnell Herald Register*, and a visible presence at county supervisors' meetings, it has increased awareness and the transparency of the state's confinement application process. Construction of the two proposed new confinements has been stalled due to pending litigation that is largely the result of their activism. Additionally, the group has recently been selected as the focus of a federally-funded study conducted by an environmental health center affiliated with the University of Iowa. Through their own research and communication with each other, they have augmented personal knowledge of confinements and their environmental impacts, contributing to a feeling of individual empowerment.

Objectives for the future include partnering with other community organizations, continued engagement with elected officials and political candidates, passing regulations reforming the application process and continuing to promote awareness via social media. I suggest that given the theory, the successes presented in related case studies, and the sheer

tenacity CARES has demonstrated thus far, the group can ultimately be successful in driving the corporation out of the county and in continuing to raise awareness about negative consequences of CAFOs. I also posit that if they establish alliances with current and future legislators, continue to have a visible presence at public hearings and in local media, and voice their complaints in quantitative economic and scientific terms, such as the financial cost to the community and the negative effects on human health, the group can also affect reform in confinement regulations.

Methods

The project really began last summer when I was working as a Local Foods Community apprentice. The position involved learning about the area's local food systems and working with a number of small-scale producers. The apprenticeship introduced me to the Grinnell community's opposition to the two confinements proposed by Prestage Farms, Inc., an out-of-state hog and turkey production corporation. I attended a hearing at the county seat in Montezuma in July where the Board of Supervisors reviewed the corporation's application and gave citizens the opportunity to comment. I also attended two subsequent meetings held by local citizens at the Drake Library in Grinnell, where many continued to voice their outrage and call for action. These were the group's first meetings, before they officially became Poweshiek CARES. I continued to follow the issue in the local paper; it was out of this initial interest that this thesis project was born.

In the capacity of an ethnographic researcher and with the outlook of an activist anthropologist, I attended seven subsequent meetings, three in the fall semester and four in the spring. The meetings were held at both Drake Library and in a local church and typically lasted about two hours. The group's main leader guided the meetings following an agenda she had

prepared, but anyone in attendance had the opportunity to comment and bring up additional issues. The group was aware of my presence at the meetings, however I did not participate directly in the discussion. I took notes at each of the meetings I attended but I did not audio-record.

Currently, the group consists of 83 official members including Grinnell College faculty and residents of the town of Grinnell, in addition to residents of Chester Township, the district of the proposed expansion, who, as neighbors to the confinement, would be affected most directly. One member, a retired Grinnell College professor, and a current Grinnell student conducted a demographic survey of CARES membership last December. The survey indicated that the majority of members either live or work in Poweshiek County and are over the age of 18. Over 50 percent of members have lived on a farm and over 12 percent still do. Twenty-four percent are non-farm rural residents and 63 percent live in incorporated towns.

Based on my observations, I chose to interview 11 individual members, including the leader, a retired college professor, several concerned residents of the town of Grinnell, and a number of neighbors to the proposed confinements, including a vegan who runs confinement feeding operation with her husband. I also interviewed one past and one current member of the Board of Supervisors, both of whom had attended at least one CARES meeting. I recruited individual members to interview via email and recorded the interviews both in my field notes and using an audio recorder.

Finally, I conducted two focus groups at a local diner, which included two and six individuals, respectively. For the first, I recruited participants by emailing an invitation to all members whom I had not yet interviewed. The group communicates primarily through email. Because I am also on the general email list, I had access to other members' addresses. While I

received a number of positive responses, only two attended, however they are both vocal and active members of the group and made important contributions to my understanding of the group's members and their values. For the second, I worked with the leader of CARES, who specifically contacted neighbors of the proposed confinements in Chester Township. She participated along with five others. I took notes but did not audio-record the focus groups. The first focus group consisted of two retired, rural residents who grew up in Iowa, moved away, and returned. The second focus group consisted of Chester Township residents who had lived there for at least ten years.

Of all the individuals I spoke with, five were affiliated with Grinnell College in some way, either as former professors or current staff or faculty. One had served on the County Board of Supervisors and one currently holds a position. Four lived in town; others considered themselves rural residents, living either in Chester Township or another district outside the city of Grinnell.

Poweshiek CARES

THE GROUP'S HISTORY

CARES formed in May 2012 in response to a Chester Township resident's discovery that her neighbor had plans to double the size of his hog confinement operation. Facilities like the neighbor's are considered CAFOs and by legal definition consist of a totally roofed structure in which animals are fed and maintained for at least 45 days of the year. The definition also includes any structures constructed to store their waste (IDNR). Often they are one and the same. One of 55 confinements in the county, this particular operation currently consists of two sheds of 2,500 hogs. Though operated by a family in Chester, it is actually owned by North Carolina-

based corporation called Prestage Farms, a company that contracts with producers in North Carolina, South Carolina, Mississippi, Alabama, and Iowa. Prestage contracted with the family in Chester to maintain the operation, supplying them with inputs such as feed in exchange for a large percentage of the sales of the finished pork. For their labor and the use of its land, Prestage furnishes the Chester family with the manure, a free alternative to costly synthetic chemical fertilizers, which the family can then spread on its own crop fields. This type of arrangement between corporate producers and family farms has become increasingly common in the last decade. For many smaller-scale farm operations, contracting with livestock corporations has become a way to supplement their income (Thu and Durrenberger 1998).

Prestage submitted the application to the County Board of Supervisors last April, intending to build two new sheds of the same size, which would increase the total number of hogs from 5,000 to 10,000. The group's current leader was one of the first neighbors to hear about Prestage's application. Initially, she thought her neighbor, whose family has lived and farmed in the area for the past three generations, was responsible for starting the confinement operation and that he was profiting from it. "Of course I never said anything because that's just a part of living in Iowa," she explained, "and that's part of being a good neighbor." But last spring she learned that her initial assumption was incorrect.

The Iowa Department of Natural Resources (DNR) is the state bureau responsible for regulating all livestock operations. In Poweshiek County, in order to expand an existing facility, the interested party must submit an application, a manure management plan, a design statement for the construction, maps showing proper separation distances and a master matrix to the County Board of Supervisors, which reviews the documents before passing them on to the DNR with or without a recommendation to approve the expansion (Iowa DNR).

As part of the application process, the DNR also conducts an inspection of the site of the proposed expansion. CARES's leader attended the inspection and learned that it was Prestage rather than her neighbors who were profiting from the confinements. "Then I really got upset because there was no value whatsoever of having those hogs in my neighborhood," she said. "I felt that we were being used. I felt victimized." Feeling powerless and outraged, she called her neighbors to alert them to Prestage's application.

Other members of the Chester Township community echoed the first neighbor's frustration and in early May, they met officially to discuss their common concerns. The group continued to meet over the course of the summer, growing as more members of the community became aware of Prestage's pending application. As the group expanded, so did its mission. Individual members began to research the consequences of hog confinements and industrial farming more broadly and to voice their concern about their findings. In raising awareness, they attracted others, including Grinnell College faculty and town residents who would not be directly affected by the expansion but expressed a broader concern for the negative consequences of corporate confinements like Prestage.

On April 23, the same day as the DNR inspection, the Board approved Prestage's application, and it passed to the DNR for a final decision. Iowa state law requires that the public be notified of all such applications, stipulating that a two-inch bulletin in the local paper is adequate notification. While an announcement did appear in the Grinnell Herald-Register, the residents I interviewed did not get the paper or overlooked the small notice. "None of us knew about it," one member explained. "Word came to a Chester neighbor through a conversation at the hardware store." The perceived lack of adequate notification was one of several concrete objections to the application.

Additionally, CARES members took issue with the master matrix, a point system whereby applicants award themselves points based on items such as their proximity to businesses, other residences and public resources, their plans to manage waste from the confinement, and general operational procedures. One of the perceived flaws with the matrix is that the applicants only have to score 440 of the total 880 points. Furthermore, CARES members pointed out, there is no accountability for filling the matrix out honestly. No one from the state double checks. Despite the community's resistance, later in June, Prestage Farms submitted a second application to expand another CAFO in Chester Township, compounding the community's perception of being ignored and ultimately powerless.

Prompted by the community's vocal dissent, the Board denied the second application on the grounds that Prestage forged the master matrix by awarding themselves too many points. The application passed to the DNR without the Board's recommendation. Prestage withdrew it before a final decision was reached and resubmitted it 2 weeks later using a different scoring on the master matrix, suggesting that the Board had been correct.

As the second application was processed, the DNR approved Prestage's initial application. The Board appealed the decision on the basis that the points on the master matrix were incorrectly awarded on the first application as they had been on the second. Turning the tables once again, the specific committee within the department, the Environmental Protection Committee (EPC), denied the appeal arguing that the supervisors had already approved it. However, the EPC deliberated this decision in private, violating a state law that mandates that all reviews be open to the public. The Board of Supervisors subsequently filed for judicial review, aiming to void the DNR's approval of the first application on the grounds that they failed to follow legal protocol. The case has yet to be heard. Around the same time in August, Prestage

withdrew its second application again. A current county supervisor but not on the Board that originally reviewed Prestage's applications speculated that Prestage is waiting for the outcome of the case before deciding how to proceed.

DEFINING SUCCESS: THE GROUP'S CURRENT MISSION

The main underlying problem with Prestage's expansion, and with large-scale animal confinements in general, is that the site of the operation is not large enough to handle the amount of waste produced by the quantity of animals it houses. The surrounding ecosystem cannot naturally process that much manure (Ikerd 2013, Thu and Durrenberger 1998). The most immediate effect of this, and the reason most CARES members initially chose to mobilize, is the offensive and invasive odor, which lowers the quality of life for those living nearby and decreases the value of surrounding property. Members explained how the smell pervaded their homes, prevented them from going outside, and at times, even made them physically sick. One couple felt forced out of their home by the smell from a confinement. They had invested both time and their retirement funds in fixing up a small farm in a neighboring county. Two years ago, the construction of a large chicken confinement facility prompted them to move and their property for a fraction of the cost they had put into fixing it up. Now, with the chicken farm to the south and the threat of Prestage expanding from the north, they feel trapped. "It just wouldn't be right if we had to move again," one of them said.

But CARES's concerns extend beyond the immediate effects of CAFOs. In the long-term, excessive waste reduces air and water quality and can have a lasting effect on both environmental and human health (Donham 1998; Thu and Durrenberger 1998; Constance and Bonano 1999; Center 2004; DeLind 2004; Ikerd 2013). One member has noted a decline in his

respiratory health since moving to Chester Township and suspects his cough will worsen if Prestage's expansion is approved. In one focus group, others brought up their concern for the impact of resource degradation on future generations.

Another problem with large confinements is the use of antibiotics, required to prevent the pigs from getting sick from living in such close proximity, not to mention the antibiotics and hormones added to feed to increase meat production. Excessive use of such chemicals contaminates runoff and produces antibiotic-resistant strains of bacteria (Ikerd 2013).

Though it was not a priority for most, CARES members also objected to the treatment of the animals produced in confinements, who spend their entire lives in crowded holding pens. One member expressed a passion for animal rights, explaining how his interest in CARES was motivated by what he viewed as the unethical treatment of confined hogs. Another woman who incidentally operates a contract hog confinement with her husband, became a vegan after being exposed to the treatment of confined pigs. "I hate living near that many pigs that are imprisoned for their lives. I just hate it," she said. "It's a paradox really, trying to sleep at night when there are that many hogs screaming right next to you."

Yet another major concern is the fact that Prestage and corporations of its ilk are headquartered outside the community. The actual owners of the facilities profit from them without having to experience such negative effects. Consequently, they have no ties to the community, no incentive to remain on good terms with its members, and characteristically lack concern for the CAFOs' neighbors. According to the farmers of the group, good farming practices first involve being a part of and respecting the community. Members emphasized the importance of living on the site of the hog facility because it exposes the owner or operator

directly to the effects of the confinement. Out of state corporations like Prestage beget problems because, as one member, pointed out, “the real owners aren’t here to smell it.”

Living on site also puts the operator in closer proximity to his or her neighbors, motivating him or her to be more accountable and more neighborly, an important value associated with farming in Iowa. A former county supervisor described several confinement applications that were approved when he was on the Board from 2001 until 2004. He explains however, that these confinements were acceptable because they were confinements that farmers built on their own farm. He recalled one specific case where a man wanted to consolidate three existing confinements on his property. “He was very conscientious. He talked to the neighbors and no one objected.”

In light of these main concerns, the group defines its mission as follows

We are farmers, concerned citizens, and environmental activists residing in Poweshiek County. We believe that animal production factories, as designed and constructed by large corporations, are inconsistent with the values of neighborliness, good citizenship, and responsible environmental stewardship. Corporations have constructed several such factories in our county over the last few years and propose to construct many more. We advocate the exclusion and abolition of these unhygienic nuisances.

ACHIEVING SUCCESS: COURSES OF ACTION

Acting to change legislation is one central aspect of realizing their mission. According to one individual, “there’s no hope in driving out Prestage, not without the legislature.” CARES members specifically mentioned reforming the master matrix and adopting stricter regulations for waste management. Members put forward two alternate strategies for effecting legislative reform - increasing volume and visibility as a group, and allying and communicating with legislators at the individual level. As one notable example of the former strategy, many members of the group attended a Lobby Day in Des Moines organized by a citizen action group known as

Iowa Citizens for Community Improvement (ICCI). They believed that ICCI's communication methods, chanting and demonstrating, were an effective way of achieving visibility and communicating their frustration. Another member, however, expressed a different but equally common sentiment. "Lobby Day felt odd, like I was at a high school pep rally," she said. "I think it's a good way to build support but I think in order to be really effective we need to do more talking to the legislature and build relationships." Still others have suggested the value of combining both approaches. "The key is finding a balance," someone said. "There's a danger of being too in your face but it's also difficult to get people motivated unless they're angry"

Community outreach is another central component of the group's mission. "The education of local people, of raising awareness in that way, is vital," said one member. Disseminating information through letters to the editor of the local paper, pamphlets and worksheets, and presentations to community organizations were all seen as avenues to success.

Members emphasized affecting change at the community level and at the level of the individual. Many felt that community pressure was the best way to achieve the group's aims. One member brought up the strategy of a "healthy shaming" as a way to dissuade farmers from building confinements in the community. The former county supervisor described the effectiveness of that strategy, noting two additional cases early in his tenure on the Board where the community successfully pressured a family into withdrawing its application.

But CARES members also stressed the importance of individual action, notably the choices we make as consumers. "We speak with our wallets," said one member. "That's what really matters." Another member expressed her disenchantment with and disbelief in larger organizations. "Personal power is way more important," she said. "I feel powerless when it comes to the legislature. I can only control my actions."

BECOMING AND STAYING INVOLVED

As described above, residents of Chester were the first to form the group, due to the offensive odor of the confinements and the immediate threat to their quality of life the expansion posed. An additional initial concern was the potential decrease in property value. As members became more involved in the issue, they became more aware and concerned about the negative environmental consequences of confinements and the detriment to human health CAFOs presented. Members who joined the group later, including Grinnell residents and employees of Grinnell College, reiterated these broader concerns.

Members have stayed involved out of a sense of loyalty to the group and an obligation to the community. Furthermore, CARES has inspired a sense of friendship among members; the group functions as a support network. Members see CARES meetings as a place to speak freely and be heard. Many CARES members are retired and have the time and social inclination to stay involved. Additionally, as the group has grown, specific projects and responsibilities have been delegated to individual members, giving them something on which to focus their efforts, something over which to claim ownership, and consequently a desire to continue investing time and energy into the group and its pursuit of success. Projects include organizing a letter writing campaign, creating and maintaining the CARES's website, and drafting a letter to senior administrators of Grinnell College enlisting their support. Two of the group's less vocal members took on the task of obtaining the status of a non-profit corporation. "I'm not directly affected. I don't live in the area," one explained. "But I'm very committed to the issue and I want to be supportive in the ways that I can." In a separate interview, the other member echoed her sentiment. "I felt that in this way, I could be quiet but still supportive," he said.

STRUCTURE AND LEADERSHIP

As a recently incorporated non-profit organization, CARES falls under the legal status of a 501(c)(4) organization, which allows them to receive tax deductible donations and still pursue political advocacy. There is the perception among several members that 501(c)(4) status gives the group legitimacy, will make CARES a more appealing ally to other community action groups, and is ultimately essential to CARES's long-term sustainability as a grassroots organization. "I wanted the organization to continue after something had been accomplished or not accomplished with the CARES group," explained one member, a retired professor whose professional interests include the sustainability of nonprofit organizations. "The 501(c)(4) status makes us a real organization, not just a collection of individuals," he said. In a separate interview, another member highlighted the importance of this type of formal organization because it makes CARES responsible as a group rather than having a single individual be liable for actions taken on behalf of the group. As part of incorporating, the group was required to draft a formal mission statement, a set of bylaws, and to establish a board of directors, all of which are included on the group's website.

The group meets regularly, typically once every month at a church in downtown Grinnell or at the Grinnell public library. Meetings are usually held in the evening and last about two hours. Communication about and in between meetings occurs predominantly through email. Meeting minutes as well as relevant media coverage and information about upcoming events are also recorded on the CARES website. The group's founder has become the designated leader. As such, she sets the agenda and runs the meetings, but everyone is allowed to comment and to bring up additional topics for discussion. Furthermore, everyone interviewed was entirely supportive of her and endorsed her qualities as a leader, including those who are currently less

active in the group. “She gets the information out” and has assembled a good group of people, “a smart group who care about each other and really understand what’s happening,” said one member. “She’s the key. She was the spark,” said another. Another member noted that the sustainability of CARES as an organization was dependent on its leadership, describing how the dynamic between the group’s newly-formed board of directors and its current leader would indicate CARES’s success in the future.

ACTIONS SO FAR

Due in large part to the continued involvement of its members, CARES has garnered a number of successes already. Members have educated themselves about the effects of hog confinements, similar cases in other rural communities, and how to navigate the political system to prevent Prestage’s expansion. They have sought out expert advice from researchers at state universities, public health officials, speakers at Grinnell College events, and lobbyists who focus on grassroots mobilization. Their own personal education has created a sense of renewed empowerment in a political climate where local citizens feel powerless.

In pursuit of legislative change, the majority of CARES members have, attended “virtually every” County Board of Supervisors meeting. It was arguably their presence at the hearings that prompted the Board to file a suit against the EPC, which has effectively postponed the construction of the expanded confinements, at least for the time being. The group has also networked with current and future political representatives by sponsoring candidates’ fora and meeting with current state senator Tim Kapucian and house representative Dave Maxwell.

CARES members have also taken steps to impact the wider community through education and by increasing their visibility. Several members took on the task of compiling a fact sheet, 13,000 copies of which were distributed in the *Penny Saver*, a locally-circulated coupon bulletin, and 3,000 copies were printed and distributed elsewhere such as the College mailroom and businesses in town. A number of copies were also sent to other counties like Green and Dallas, which recently used the information in their own campaigns against confinements. One member of the group worked with a Grinnell College student who gave presentations at the Grinnell Middle School and at the Lion's Club. Still other members created what they refer to as a legislative agenda worksheet, which summarizes current related legislation and lists the members of the legislature that are involved.

In pursuit of increasing its visibility, CARES sponsored a float in the town of Grinnell's 4th of July Parade and later sent the float to the courthouse when they knew Prestage would be there. They organized letter writing campaigns, collecting letters to the editor which were published in the Grinnell-Herald Register and letters to state legislators and other elected officials. Their efforts have recently culminated in the potential to impact academic research; the University of Iowa received a federal grant to research the health effects of confinements on rural communities and have opted to study and work with CARES.

Most recently, members of the college faculty and staff have drafted a letter asking for the school's support. Grinnell College contributes a significant amount of revenue to local businesses. The odor from confinements would likely impact the decision of professors to accept positions and of prospective students to enroll, ultimately impacting the local economy. Fifty-two current or retired college employees signed the letter in support before it was sent to the college president and eight senior college administrators. So far, five of those administrators and

the president have expressed interest in exploring potential actions from the college against the proliferation of hog confinements in the county.

The groups' plans for the future include partnering with other organizations such as the Iowa Environmental Council and other community action groups; ICCI and the Iowa Farmers Union have been suggested as potential allies. Other members said they would like to invite local CAFO operators and CAFO proponents to their meetings to present their point of view. The group hopes to pursue grants to implement technologies such as scrubbers or simply woodchips to ameliorate some of the environmental problems of CAFOs. Finally, the group would like to increase their presence on facebook and maintaining a comprehensive record of their activity on their website.

CARES AND THE COMMUNITY

Arguably, the group has become an institution of the Grinnell community by establishing relationships among members and providing a forum where members can speak freely. The issue “really has drawn neighbors together. I’ve met people, my neighbors even, that I never knew before,” said one Chester resident. “I’ve had the opportunity to connect with other people and that’s a good thing. One of the positive things that’s come out of this is that it has brought us together as a neighborhood,” said another. Members independently brought up specific images associated with solidarity. “I keep thinking about a longboat with many rowers,” explained a member. “It’s important to have a bunch of rowers so that people can take a break when they get tired.” Another member described CARES as a “train with many cars, all moving toward the same thing.”

This solidarity is centered around the members' shared concern over the detriment CAFOs pose to their own quality of life and that of future generations. Yet the group is still somewhat divided on which issues to prioritize and the best course of action to pursue. Specific points of tension include whether to ally with ICCI and to adopt its method of communication. According to one CARES member who currently sits on ICCI's board, ICCI has wide-reaching appeal and speaks for all members of the community. "They're ordinary people like me," he said. "They're farmers, teachers, nurses, social workers - just people who want to get something done." He also noted that numbers and volume were the most important factors in sending a message to the legislature. "We gotta have a lot of people and we gotta do a lot of hollering or we're not going to get anywhere." For one member, ICCI inspired a great deal of trust and loyalty. After her calls for information and help were dismissed or turned away by researchers and the state legislature, she explained, "CCI actually listened, and for the first time, I felt that someone cared," she said. "They know. They listen."

Other members share her opinion of ICCI as helpful in initially mobilizing the group, but felt that their reputation as "rabble-rousers" would ultimately be detrimental to CARES's efforts to communicate with the legislature. "I have mixed feelings about CCI," said another member. "They definitely helped us initially start the process...but being so vocal and loud doesn't help." Another member noted the division explicitly. "[ICCI] alienated a lot of the early people because of their tactics," he explained. "They don't subscribe to a sort of Iowa way of being - quiet, making a point without making a scene. The original people that were in this aren't banner-waving sit-in type of people."

A few members perceive another division between the initial group of Chester Township neighbors and CARES, the group which they see has evolved out of it. "There's not a whole lot

of overlap. We have different goals, I think. The Chester group wants immediate action whereas CARES is focused on the bigger picture,” said one member. Another member used more divisive terms like alienation and outsider, linking the separation to a perceived division between urban and rural residents. Despite these differences of opinion, its members have reason enough to believe CARES will continue to live on as an organization. “I think that its members see a need for the group and want it to continue,” the group’s leader concluded in one interview.

CARES’s VALUES

CARES’s goals and actions so far speak to the group’s ideology on the whole. One of the strongest and most widely held values among members was respect for the community, accounting for the value they attribute to the local landscape, small-scale family-owned farms, the implicit understanding of neighborliness, and the wariness of Prestage as community outsiders. Members’ loyalty to the community compounded their anger and frustration at the loss of local control. CARES members viewed their fight as a global issue, contextualizing their fight as a local example of a broader change in the agricultural system. What is more, they viewed it as a moral issue, viewing the changes as unethical.

Many members of CARES were raised in Iowa or have lived in the area for years. These members had strong opinions about farming and life in the Iowa and ascribed a specific set of values to the Midwestern agricultural lifestyle. Members established that there are good and bad ways to farm and, according to one woman, “if you do it right it’s not a problem.” According to the farmers of the group, good farming practices first involve being a part of and respecting the community. Members emphasized the importance of living on the site of the hog facility

because, as explained previously, it exposes the owner or operator directly to the effects of the confinement.

Living on site also puts the operator in closer proximity to you neighbors, motivating him or her to be more accountable and more neighborly, another important value associated with farming in Iowa. For example, former supervisor Sandy Moffett described several applications for confinements that were approved when he was on the board from 2001 until 2004. There were a few applications, “but they were ok confinements,” he explained. “They were confinements that farmers built on their own farm.” He recalled one specific case where a man wanted to consolidate three existing confinements on his property. “He was very conscientious. He talked to the neighbors and no one objected.” To drive home the point, another member said in a focus group, “for me it’s ultimately a moral and an ethical issue. It’s about love and respect and consideration; about valuing your neighbor and your community.”

But respect for one’s neighbors should be mutual; farmers seeking to construct confinements should have their interests respected as well, exemplified by Joyce’s initial decision not to complain about her neighbor’s confinement, described earlier. “I didn’t say a word about the first ones - I assumed they were their hogs and that was their livelihood,” she said. “You don’t complain about your neighbors making a living. That’s not being a good neighbor.”

Additionally, the farmers of the group explained that good farming was something you just have a knack for, that often your family does it and it’s just in your blood. One member who operates a contract hog feeding business with her husband described her husband’s motivation to start raising hogs. “Ever since he was a kid he wanted to raise pigs,” she said. “It’s his joy in life. It’s what he was put on this earth to do.” “People who are farmers want to do it full time. It’s in

their hearts,” explained one member. However, all members emphasized that this way of life, the good way of farming is steadily becoming obsolete. “Now, most farmers have to have an off-farm job in order to stay farming...There’s no market for family farms any more,” the same member explained.

Members described a changing agricultural system, one that had become entirely profit-based and prioritized economic efficiency and individual gain over the well-being of the community. “Everything is different now,” said a member. “The diversity of the old family farm is gone. Now it’s all agribusiness and monocultures.” Members attributed many of the agricultural system’s current problems to an increase in competition and the development of much larger national agribusinesses that could out-compete family farms. “People used to be very conscientious of how their actions affected others,” explained a member. “Now greed has taken over. It’s a new ‘me generation’.” Other members corroborated her statement describing how community pressure use to be a more powerful check but now that out-of-state businesses had moved in, it has lost its effectiveness.

Theoretical Perspectives

Three theoretical perspectives can be applied to the phenomenon of CARES. Studies in political ecology, as well as specific concepts from Mary Douglas and Aaron Wildavsky (1982) and Kendall Thu and Paul Durrenberger (1997) provide insight into how and why the group formed, explain the group’s struggles and successes so far, and suggest how CARES might achieve its goals in the future.

THEMES FROM POLITICAL ECOLOGY

Political ecology is a holistic and interdisciplinary approach frequently used to analyze social responses to environmental change. Analyses typically highlight four major themes within the context of industrial agriculture. State control of natural resources, a dependency on technology, a dominant discourse of developmentalism that celebrates economic efficiency as an aspect of progress and modernity help describe the current political economy. Lastly, political ecology analyzes social mobilization as a response to the impacts of the first three themes.

According to Greenberg and Park (1994), political ecology is rooted in the intellectual work of Hobbes, Adam Smith, Malthus, Ricardo, and Marx, the last of whom “came closest to defining a dialectic between individuals, their productive activity in human society, and nature” (25). Drawing on ecology and evolutionary biology from the natural sciences and cultural ecology and political economy from the social sciences, the discipline arose in the 1970s out a developing consensus that it was not enough to focus on local cultural dynamics or international exchange relations, and that the past and present relationship between policy, politics, and the environment needed to be addressed (Robbins 2011). Though Eric Wolf is credited with coining the term in the early 1970s, Piers Blaikie and Harold Brookfield (1987) are often credited with establishing the approach with their analysis of resource control in what they term developing and developed world systems.

AGRICULTURE IN AMAZONIA

Schminck and Wood’s *Contested Frontiers in Amazonia* (1992) is an early, quintessential application of political ecology, which, in relation to the context of CARES and confinements in Poweshiek County, addresses the issues of state controlled agriculture, the championing of

technology and so-called “economic progress” over local knowledge and traditional ways of life, and the social consequences of such power and ideologies.

Their report analyzes the effects of Brazil’s National Integration Plan, a state-sponsored project launched in the early 1970s to develop land in the Amazon region. Comparing the project to the Homestead Act in the US enacted roughly a century earlier, the authors maintain that the subsidies and tax credits established by the project created a political economy that favored well-financed investors at the expense of local peasant farmers in the name of economic development. The project led to displacement of peasants and the redistribution of the population, which ultimately brought about vehement protest and deadly conflict.

Despite these social struggles, the Brazilian government passed a second National Development plan known by the acronym POLAMAZONIA. Their objective was to redirect both public and private investment into areas with economic potential, namely large-scale farming and mining operations. According to the authors, the project embodies the typical “developmentalist paradigm” which views capital accumulation, foreign investment, and big economic projects as a means of achieving high rates of growth. Embedded in such a view was a preference for large, capital-intensive investments rather than for small, labor-oriented projects. The approach invoked a firm belief in advanced technology as a means to promote the general welfare and to resolve external difficulties associated with economic growth, such as environmental degradation or the displacement of people.

Small producers were regarded as inefficient and peasants as culturally retrograde...traditional knowledge systems were believed to be worthless. The tropical forest was considered as having little economic or biological worth beyond the monetary value of a limited number of hardwoods. And communal property rights, typical of Indian and some peasant communities, were seen as antithetical to private property, an institution deemed essential to the expansion of a modern, capitalist economy (6).

The environmental and economic changes sparked social and political mobilization. Sporadic incidents of community protest grew into well-organized efforts, as previously ‘invisible’ populations united to resist threats to their livelihood. In local and state elections, people cast their votes for opposition candidates.” Sharing a new vocabulary and a similar set of goals, conservation and environmental activists participated in a new discourse that lent both visibility and legitimacy to the alternative proposed by small producers in the Amazon. The community movement was ultimately successful. By the end of the 1980s the direct links established with international lobbyists and the alliances forged with opposition political parties within the country empowered local groups with resources and credibility that they had never before enjoyed.

APPLICATION IN THE US

Studies in political ecology also reveal social and political dynamics in the context of the US agricultural system. Blaikie and Brookfield examined the expansion of industrial agriculture in the 1980s and the social response. In *Land Degradation and Society* (1987), they highlight the soil conservation movement as a social response to the rapid industrialization of American farming. Cockburn and Ridgeway called for a new theory to drive a research-based exploration of the human-affected changes in the natural environment, among them systems of energy production and food distribution. They titled this exploration *Political Ecology* (1979).

COMPETING DISCOURSES

Though neither considered political ecologists, Mary Douglas and Aaron Wildavsky provide insight into the power dynamics of communication, specifically with their

notion that differing perceptions of risk shape competing political discourses. *Risk and Culture: An Essay on The Selection of Technical and Environmental Dangers* (1982) describes how, though dangers are real in the sense that they have very tangible effects, the way we perceive and prioritize risk is a social and political process.

The authors also emphasize how images of nature and our related conceptions of the natural environment have always been political. Today we tend to think of nature as morally neutral due to, in their words, the “development of modern science and a whole package of other intellectual emancipations called modernization” (29). However, the limits of our perception are actually not much different from those of human ancestors. Where they politicized nature by inventing connections between moral transgressions and natural disasters, for example, conceiving a drought or an outbreak of disease a consequence of witchcraft or breaking social-taboos, we politicize nature by selecting what is natural, that is, what is inevitable, and what is not, that is, events that we can control. The authors explain that developments in science and technology have contributed to our idea of what ought to be normal or natural. They even go on to posit that, as such, the faith humans once placed in magic has been replaced with faith in technology.

Douglas and Wildavsky describe universal characteristics of the human species, that is, traits related to social organization that are shared by everyone. First, humans have a relatively narrow focus when it comes to environmental issues. Douglas describes this as a type of survival mechanism. The degradation of vital natural resources or the potential extinction of the human species are risks so great that no knowledgeable individual would accept them. To deal with this, we break them down into issues with a smaller scope to better process them. Furthermore, because we cannot attend to all of these component issues, we prioritize which risks to address.

Additionally, we make decisions based on a bounded rationality, that is, our choices are made based on the information we have. This means that the way we prioritize environmental risks is based on our conception of the natural environment.

The way we conceive the natural environment is in turn shaped by our surrounding institutions which can be grouped into two categories based on the locus of their power - the center and the periphery. The power dynamic between social groups operating from the center of society and those operating from society's margins is frequently addressed in the social sciences. According to Douglas and Wildavsky, the center and the periphery (borders), are arguing from different premises. They write, "Their views about risk are not to be considered as independent ideas or personal preferences so much as public statements topping different social structures. So long as their loyalties are turned toward centers or borders, people will buy a whole package of political judgements about nature, both human and physical, that go with center or border views" (174). They map out these premises using a mode of analysis called grid-group, which classifies these social institutions based on hierarchical organization, or "grid," and level of inclusiveness and insulation from the rest of society, or "group."

In other words, organizations classified as high-grid exhibit a rigid hierarchical structure; low-grid organizations are much more egalitarian. Organizations classified as high-group are very insular, inspiring a high degree of group loyalty and solidarity whereas those classified as low-group exhibit the opposite characteristics. Douglas categorizes organizations by measuring them by both variables. The examples of high-grid, high-group organizations include airline crews, garbage crews, and miners unions. They are clearly ranked and benefit the most from close collaboration. Craftsmen and traveling salesmen exemplify low-grid, high-group classification. They are unranked and unspecialized but still treated as a collective. Entrepreneurs

would be low-grid, and low-group as they seek opportunity and are successful without collaboration and operate outside of any hierarchy. The typology also functions as a framework to determine cultural values, including priorities and communication methods in the context of environmental risk (Douglas 1992).

SIGNAL AMPLIFICATION

With specific application in the US pork industry, anthropologists Kendall Thu and Paul Durrenberger provide further insight into the dynamics of power and communication. According to the authors, there have been numerous attempts within the social sciences to understand the power dynamics between the various groups of complex state systems, but none which quite fit the system of US industrial agriculture. Marx described the power dynamic as a dialectic between groups that own the means of production and groups that produce the product appropriated by the former in exchange for a wage. However, he predicted that when the producers understood the dynamics of the system, they would reorganize it to their advantage, which has yet to come to fruition, at least by any democratic means. Gramsci proposed that the ruling group maintains its power by controlling processes via religious, education, and media systems so that those disadvantaged by the political economy, that is, the system of production, consumption, and distribution of goods and its political underpinnings, never understand it enough to reorganize it. But Thu and Durrenberger point out that many family farmers and rural residents unhappy with the state of industrial agriculture do understand the system and are still feel powerless to affect change, as is certainly the case with CARES members. Still others have proposed that groups gain and maintain power by means of force, a concept that makes little

sense in this context, or that systemic change results from individual decisions and actions, which is also not the case.

Instead, they propose that states are information processing systems that assert their power by setting policy. In this context, it is these policies that shape the limits, forms, and organization as well as the environmental impact of food production and industrial processes in modern societies.

Focusing on the signals - among them complaints - and how they are amplified, distorted and damped draws our attention away from the technical details of ecological consequences of actions, individual decisions, class struggle, and theoretical considerations of power and force, to the social and political forms of policy making and implementation (1997: 28).

Groups within complex societies acquire power by communicating signals that amplify their own interests through the state system. The authors theorize that such communication is achieved primarily by coding the message in scientific terms, which impacts its reception in legislative, administrative, and judicial spheres of the state apparatus. “Because the rhetoric of scientific analysis is highly valued,” they write, “signals that achieve scientific status are highly amplified” (28-29).

Because proposed regulations are usually defined in terms of the best available scientific data, control of scientific production is also an important political tool in setting them at the legislative level, and implementing them at the administrative level. As such, “if interest groups can masquerade as providers of technical information or control the process, they can amplify their message and gain a large sphere of influence.” Regarding the judicial system, its function is to insure that proper procedure is followed, which is usually couched in terms of adherence to the scientific knowledge which governs the administrative processes. Neighbors’ objections “are powerless until they are translated into policy that curbs the process,” (32) they write.

The same paper (1997) examines the specific case of Murphey Farms in North Carolina, a hog corporation comparable to Prestage. The company's founder sits on the North Carolina State University board of regents, allowing him some ability to influence agricultural research agendas to study and support technologies that benefit big businesses. Furthermore, paralleling the situation in Chester Township, neighbors to Murphey hog confinements did not hear about them until plans for their construction was already underway, suggesting that groups also assert power by deciding who to include and who to exclude in the process of communication.

They explain that the case is indicative of a larger problem, a system in which "pivotal positions were simply traded among a group of politicians, agribusiness owners, attorneys, and state employees...rural residents expressed frustration and anger at the lack of respect for their concerns...as they have sought further for redress, and met further barriers, their frustration and anger has grown into a groundswell of organized opposition. Their signals had no way into the system - they were blocked at every turn" (1997:31). The example of Prestage, Inc. here in Poweshiek County certainly corroborates this theory.

The study ultimately reveals

a scheme in which processors communicate to providers of technology and policy makers. Meanwhile rural citizens communicate to policy makers to affect policy in their interests. The agricultural universities amplify the signals of processors and producers by providing scientific status for them, while they damp signals from citizens who object by labeling them as anti-progressive and emotional. Legislative and administrative processes further disproportionately amplify signals that favor industrialization and damp objections (32).

Application to the Situation of CARES

STATE CONTROL OF LOCAL INTERESTS

CARES members' frustration is indicative of a broader change in the US agricultural system, the industrialization of which reveals themes commonly addressed in political ecology.

The process can be traced back to as early as 1850, when the national government approved a federal land grant to build a railroad in Illinois. Railroads linked farms in the Midwest with new markets on the East Coast and in Europe, motivating the development of commercial corn and wheat belts in the Midwest. Consequently, demand for agricultural commodities became set by these new markets rather than by local or regional needs, establishing the basis for the current national food distribution system (Cockburn and Ridgeway 1979).

The land grant set a precedent of state involvement in local agriculture. As the agricultural system became more nationalized, standardization and regulation from a central authority became increasingly necessary. The United States Department of Agriculture was established in 1862 under president Lincoln, who referred to it as “the people’s department” (cit). Additional land grants passed later that year furthered the state’s involvement in the agricultural system. The Morrill Land Grant Act was one of two statutes that allowed for the creation of land-grant colleges, which set a precedent for funding the development of agricultural technologies, which has since become geared toward aiding large-scale production. Initial land-grant colleges also served as precursors to university extension systems such as those at North Carolina and Iowa State Universities, located in the nation’s leading pork producing states. The first Homestead Act was one of a series of laws that doled out parcels of land to applicants at little or no cost, in order to spur the development of the rural Midwest and effectively established a basis for federal ownership and control of agricultural land and underscored the priority of “development” in US agricultural policy (USDA 2000).

Over a century later, the processes and effects of industrialization are still under way. Beginning in the 1980s, the US pork industry underwent a dramatic industrial transformation as well. Production became increasingly concentrated and vertically integrated; the number of

independent producers and family farms fell as large-scale operations grew (Centner 2004). In 1974, there were 750,000 hog producers in the US. By the end of 1999, only 98,000 pork producers remained, representing 13 percent of the total number of producers 25 years earlier (Thu 2001). Currently there are 68,300 hog operations in the US. Pork producers that remain are increasingly large-scale operations, with 33,000 large-scale operations now accounting for 60 percent of total US inventory (USDA 2013).

As of 2010 census data, Iowa leads the country in pork production, contributing over 27 percent of the total US product. The state parallels the national trend toward concentration and vertical integration. In 1980, there were 65,000 hog farms in the state, averaging 250 hogs per farm. By 2005, though the number of hogs per farm had increased to 1,850, the total number of hog operations had decreased to less than 10,000 (Lawrence 2004).

Following the precedent set early on, the US Department of Agriculture has continued to pass legislation geared, at least nominally, toward promoting economic development. The laws typically favor large-scale national operations over smaller local farms, resulting in centralization, concentration, and a shift away from local control of production. In Iowa, at the state level, the Department of Natural Resources (DNR) regulates all livestock operations. According to CARES members, many members of the department also have an economic interest in corporate farms, contributing to relatively loose regulation policies. By only requiring that applicants score 50 percent of the total points on the master matrix, for example the application process encourages the construction of confinements and exemplifies how state regulations favor confinements over the concerns of local residents.

Underscoring the lack of local control, the DNR also has authority over county governments. In Poweshiek County, the Board currently consists of two Grinnell residents and

one Brooklyn resident. Though elected representatives of local interests and theoretically the seat of local power, in reality the Board has little political clout. According to a former supervisor, “they probably have less clout than just an organized citizens group,” who went on to explain that the Board is legally prohibited from making any major decisions related to agriculture. A current supervisor corroborated his statement, explaining that while the DNR listens to the supervisors’ recommendation, it rarely affects their final decision. “If the supervisors approve it than they rubber stamp it. It’s guaranteed approval by the DNR. If the supervisors do not approve it but it meets the regulations, they will probably still approve it. They’re not going to go out on a limb and do something they’re not empowered to do by the legislature.”

According to CARES members, the state legislature is heavily influenced by agribusiness interests. The current house representative for Poweshiek County, Dave Maxwell, a Republican who sits on the Agriculture and Environmental Protection Committees, received significant campaign contributions from the Iowa Farm Bureau, a powerful interest group which has habitually opposed government regulations intended to protect the environment on the basis that they interfered with farmers’ right to farm. According to one CARES member, “There is one organization in Iowa that is stronger than any other and that’s the Farm Bureau.” According to another, “the Farm Bureau’s a powerful force. They have clout with both Democrats and Republicans...they’re in the position to say you’re either for us or against us...and if you try to regulate at all you’re against us.” Tim Kapucian, a Republican State Senator who sits on the Agriculture Committee, also received significant campaign funds from the agricultural industry in the last election (Project Vote Smart).

The current agricultural system in Iowa is again reinforced at the national level by federal land grants, agricultural policies, and the national food distribution system, which is driven by

the demand for cheap meat. Producers able to provide pork at a low cost outcompete smaller farms, an intentional effect of the market system. According to political ecologists Piers Blaikie and Harold Brookfield, free market economies “embody a monstrous set of contradictions, not only, but especially, in their agriculture” (1998:231). While the profit motive governs production decisions and the restructuring of the industry on more capital-intensive lines, and while corporate control at the same time reduces the farmer’s freedom to make his own decisions, the intervention of the state has been more concerned to prop up farm incomes than to achieve social goals other than economic development, both in the US and other countries around the world (Blaikie and Brookfield 1987).

TECHNOLOGICAL DEPENDENCE

Changes in agricultural policy have been accompanied by increasing mechanization, as new technology became necessary to keep up with the increasing demand for agricultural commodities like wheat and corn. Eventually, however supply surpassed demand, resulting in federal subsidies and the search for markets abroad. Additionally, while machines made it possible to manage a farm with fewer people, they rarely increased yield per acre. “Once the farmer speeded up production through purchase of a machine, he was locked into the cycle of large-scale farming. He could not afford to go back. Often, in order to pay for the machine, he sacrificed his farm, and became a tenant on land he had previously owned outright” (Cockburn and Ridgeway 1979:165). This is true for one CARES member who with her husband operates a contract feeding operation and potentially explains the position of the family in Chester Township that contracted with Prestage.

As these cases show, Iowa is no exception to the widespread trend of increasing mechanization. The current physical landscape has been shaped by industrial technology, forcing producers to go big or get out and creating a cycle of dependence. The most evident of these innovations is the development of confined swine production technologies in the 1970s that moved hogs from pastures and partial shelters to completely enclosed facilities specially designed to control each step of the production process (Thu and Durrenberger 1998).

Confinements typically consist of a number of long, low-lying metal buildings or sheds, arranged in multiple rows and open air waste pits called “lagoons.” Inside, rows of holding pens sit atop concrete foundations beside elevated bulk feeding tanks. Metal office buildings and the frequent arrival and departure of delivery trucks give the appearance of a factory rather than a farm, and as one CARES member pointed out, “it’s not farming, it’s industrial farming.”

Proponents of industrial agriculture use this level of specialization and control to support the argument that such technological innovations are necessary for economic development. These enclosed facilities allow better control over factors critical to growth and profits, including exposure to climatic fluctuations, feeding regimens, and reproduction. One woman I spoke with whose husband runs a contract feeding operation also pointed out that the pigs are warmer when they are kept inside, so they burn fewer calories to maintain their body temperature. Fewer calories means less feed, which means lower input costs. In addition, genetic selection enables farmers to breed pigs that convert feed to meat more quickly and with less fat so that they are ready for market sooner. “My vision is they’re eventually going to breed things that make pork but that aren’t really pigs,” said one member. “We’ve gotten rid of the whole animal aspect altogether.”

Though studies show that intensive livestock operations are not actually more economically efficient than smaller-scale conventional operations (Thu and Durrenberger 1997, Ikerd 2013), the former have come to dominate the landscape, replacing small-scale farms that either have to adopt this style of operation or leave the business at the likely risk of being outcompeted. Furthermore, those who adapt have to produce more to turn the same profit. Consequently, a cycle of dependency emerges in which new methods of food production that require technical expertise are offered only to be discarded as obsolete as new innovations are recommended to farmers to enhance their competitiveness (Morrison 1998).

THE EFFECTS OF A CHANGING SYSTEM

Overall, the current political economic climate has engendered a feeling of powerlessness and disillusion among the members of CARES. They feel they are being excluded from the political process, that their voices are being silenced, and that they are victims of detrimental economic and environmental changes imposed from outside the community.

Members felt like they had lost control over their own lives. “The economy is structurally broken and our agricultural system is a piece of that,” explained one member in a focus group, noting that corporate entities are now profiting at the expense of family farms. “Farmers can’t negotiate the price of their inputs and don’t set the price of their outputs; they have no control at either end,” he said. “No farmer calls his own shots anymore.”

Members attributed many of the agricultural system’s current problems to an increase in competition and the development of much larger national agribusinesses that could out-compete family farms. “People used to be very conscientious of how their actions affected others,” explained a member. “Now greed has taken over. It’s a new ‘me generation’.” Other members

corroborated her statement, describing how community pressure used to be a more powerful check but now that out-of-state businesses had moved in, it has lost its effectiveness.

All members emphasized that their way of life, the good way of farming, is gradually becoming obsolete. “If you’re a farmer, it’s in your blood. You want to do it full time,” explain one member. “Now, most farmers have to have an off-farm job in order to stay farming.” Members described the new system as entirely profit-based, prioritizing economic efficiency and individual gain over the well-being of the community. “Everything is different now,” said a member. “The diversity of the old family farm is gone. Now it’s all agribusiness and monocultures.” “There’s no market for family farms any more,” the same member added.

In the midst of the changing system, members have changed their opinion about the role of the government, expressing an increasing ambivalence about its involvement in the lives of citizens. They have described the process of talking to representatives of the DNR “like talking to a brick wall.” Similarly, other members have expressed the futility of voicing their concerns to the State legislators, saying how their minds had already been made up and that they had no opportunity to fully explain their views. Just after returning from lobbying in Des Moines, one member said she felt like she was only able to communicate “sound bites,” which she said weren’t going to have a strong impact. “My whole philosophy on voting has changed. It’s hard to tell who’s helping us,” said one member. She continued, “the Republicans are all corporate-driven; the Democrats are liberal-driven. We need a new party that represents us.”

On one hand, a number of members expressed a fierce desire for independence and perceived any government regulation as a threat to that independence, or if they themselves did not feel that way, explained that the feeling was common among Iowa farmers. For example, one member explained a common frustration with EPA standards and a negative reaction to words

like “green” and “environment” stemmed from the perception that the government was telling them how to farm.

On the other hand, they recognized that government action was really the only way to block agribusinesses and out-of-state corporations like Prestage Farms and to truly hold people accountable given changes in the agricultural system. For example, the Farm Bureau has proposed a system of what it terms “voluntary regulation” whereby environmental standards would be provided but it would be up to individuals to decide whether or not to abide by them. But even the CARES members who oppose government intervention in general admitted that would not work. “People are not conscientious enough,” one member said.

THE DOMINANT DISCOURSE

The discursive landscape has similarly been shaped by the idea that the benefit of economic development outweighs any environmental or social costs, a third theme common in political ecology. Issues are framed in quantitative economic terms, which consequently prioritize the former over the latter. Those in power - agribusinesses, corporate lobbyists, legislators with a connection to the industry - stay in power by perpetuating this discourse through advertising, cheap prices, land grants, and favorable federal and state agricultural policies. Thus, while intensive livestock production is not more economically efficient, that is, cost-effective than production on a smaller scale, those who profit from them have the ability to maintain the perception that it is. This is a clear example of Thu and Durrenberger’s signal amplification.

But extensive literature shows that this is clearly not the case. Beginning as early as the 1940s with Walter Goldschmidt’s *As You Sow*, numerous studies have linked the

industrialization of agriculture with the degradation of rural communities (Goldschmidt 1947; Cantrell, Perry, and Sturtz 1996; Albrecht 1997; Constance and Bonanno 1999; Centner 2004; DeLind 2004; Constance and Tuinstra 2005). As it is for CARES members, the noxious odor from confinements and its detriment to the quality of life in the surrounding community was perhaps the most common community concern in the literature. In fact, according to the director for the Center for Agriculture History at Iowa State University, “Hog odor is the most divisive issue ever in agriculture, damaging the fabric of rural society and disenfranchising pork producers from their communities.” But, because it is not assigned a quantitative value, it rarely factors into economic analyses of CAFOs’ effects. When the issue is addressed, CAFO proponents respond to odor complaints with claims that odors can be controlled with good management practices and modern technologies.

In terms of social costs, conflict among community members was a common negative impact of CAFO construction in the literature, and a very clear consequence of Prestage’s proposed expansion in Chester. Prestage’s application has created tension between the family producing hogs for Prestage and their neighbors. “It’s torn our community apart,” said one member. She explained how they used to regularly meet for coffee but are now no longer on speaking terms. According to another neighbor, the family has alienated themselves from the rest of the community by allying with Prestage. One CARES member on the Grinnell College faculty also noted a tension between farmers and more affluent members of CARES, describing an underlying perception that they are denying them income or critiquing their way of life.

Furthermore, the economic benefits proponents espouse are not always realistic. A common argument is that confinements will create new jobs for both locally unemployed workers and workers who will move into the community, ultimately generating more economic

activity and local tax revenue. However, CAFOs typically employ far fewer people than non-industrial operations. Numerous studies indicate that the industrialization of the livestock industry has in fact ultimately resulted in the production of a similar number of hogs with fewer farmers. Workers who do migrate for employment often place a larger burden on local public services than their wages yield in taxes (Ikerd 2013).

Additionally, many confinement operations are headquartered out of state, meaning the profits that are generated are distributed elsewhere, outside the community, as is the case with Prestage. A number of CARES members also brought up that Prestage is taxed as a farm operation though by all intents it is an industry. Because agricultural property taxes are significantly lower than industrial taxes, the community receives lower revenue than its members believe it should. So it is truly a myth that the benefits of economic development outweigh the environmental and social costs associated with intensive swine production.

Within the larger framework of political ecology, Douglas and Wildavsky, though not political ecologists, analyze of competing discourses from the center and the periphery, shedding light on the reason for this discrepancy. According to them, the center and the periphery, or border, are arguing from different premises. Public interest groups fall among organizations that operate from the periphery. Defining it as a group “that seeks a collective good, the achievement of which will not selectively and materially benefit the membership or activists of the organization,” Douglas and Wildavsky classify a public interest group as them as low-grid, high-group. The objectives of such groups are explicitly global in range and include regenerating moral fervor and counteracting, in her words, a global conspiracy of evil. Public interest groups achieve their aims through small-scale organization, hold values against big technology, big industry, and big organization, and are on guard against outside infiltration. Public interest

groups are also aligned with sectarian cultural values, notably including the expectation that life in the future will undergo a change for the worse if the current system is not reformed (1982).

Based on this definition and these characteristics, CARES can be considered a public interest group. Though perhaps initially focused only on the local effects of the proposed confinements and their immediate impact on individuals, as the group has evolved the mission has become more inclusive and more forward-looking. According to the mission, the group aims to “promote social welfare...including advocating and promoting a healthy environment for present and future residents of Iowa, including specifically the promotion of environmental stewardship of land, water and air.”

The idea that the group is “for family farms, not factory farms” has become a kind of mantra, according to one member. Another, when asked about why he joined CARES in the first place, explained how he was against factory farms in general. This was true for many, especially CARES members who live far enough away from the confinements that they aren’t directly impacted.

Concerning morality, the group’s mission also states “we believe that animal production factories, as designed and constructed by large corporations, are inconsistent with the values of neighborliness, good citizenship, and responsible environmental stewardship.” As one woman explained, “for me it’s ultimately a moral and an ethical issue. It’s about love and respect and consideration, about valuing your neighbor and your community.” In fact, one of the strongest and most widely held values among CARES members was loyalty and respect for the community. Yet another problem they have with corporate CAFOs is the owners are outsiders. Because they don’t live on the property, they aren’t there to experience the negative environmental effects or their neighbors’ frustration. They have no ties to the community and no

motivation to respect it. Overall, CARES assesses value in qualitative terms such as quality of life, prioritizes the local community, and seeks a common good based on a holistic view of the environment.

In contrast, the dominant system of industrial agriculture is by nature high-grid, low-group. It is hierarchical, bureaucratic, and all inclusive. Characterized by an empirical, evidential ethos, value is defined quantitatively in both scientific and economic spheres. Specialization rather than holism is encouraged; free-market capitalism encourages competition and individual profit and borders are erased in the search for national and global markets. Whereas, by their nature, sectarian groups operate from the margins of society, agribusinesses and corporate confinements are clearly at the center.

FINDING A VOICE

The formation of CARES is a reaction against a system that prioritizes the individual over the community, uprooting traditional values of “Iowa neighborliness” and the family farm way of life to make room for larger, national corporations that have no ties to the local community. The power of CARES within this changing system depends on its ability to communicate its discontent as a group on the periphery to the power at the center. This involves structuring their message in a way that resonates in the new system.

Thu and Durrenberger provide some additional insight here. After numerous studies on the effects of hog confinements in North Carolina and Iowa, they posit that the value our political economy ascribes to scientific evidence is responsible for the misrepresentation of confinements as mutually and economically beneficial. They first propose that national and state governments are information processing systems that assert their power by setting policy. In this

context, it is these policies that shape the limits, forms, and organization as well as the environmental impact of food production and industrial processes in modern societies. Secondly, they emphasize how science is a central dimension of policy formation in all political spheres.

Using these two concepts as a basis, the author's central focus in the study is on how various interests amplify their own signals and damp the signals of competing interests to impact policy. Groups within complex societies acquire power by communicating signals that amplify their own interests through the state system. The authors theorize that such communication is achieved primarily by coding the message in scientific terms, which impacts its reception in legislative, administrative, and judicial spheres of the state apparatus. "Because the rhetoric of scientific analysis is highly valued," they write, "signals that achieve scientific status are highly amplified." Thus, if CARES members voice their complaints in quantitative economic and scientific terms, such as the financial cost to the community and the negative effects on human health, they are more likely to resonate with the national or state government responsible for legislating confinements and effect change. Supporting this conclusion, Edward J. Burger presents five case studies of environmental legislation and regulation that was enacted under the promise of protection, not of the physical environment, but of human health (1990).

Finally, a fourth relatively recent theme in political ecology offers some hope for CARES's future success - the effectiveness of grassroots mobilization in assuaging environmental degradation imposed by a central authority. A number of related case studies have reported the success of local citizens in preventing or ousting corporate confinements from their communities (Cantrell, Perry, and Sturtz 1996; Constance and Bonanno 1999; Centner 2004; DeLind 2004; Constance and Tuinstra 2005). In one of the most publicized examples, citizen action groups in North Carolina through continued protest and lobbying efforts pressured the

state legislature to impose and renew a moratorium on the construction of new CAFOs that effectively lasted a decade (Avery 1999).

These successes come at the expense of great deal of time and effort and are frequently tempered by unanticipated costs. It took North Carolina residents 2 years of protesting and a massive flood that exacerbated water contamination problems to finally impose the moratorium. Residents of Lake Ponderosa, another community in Poweshiek County, were able to prevent Prestage from building confinements within 6 miles of the neighborhood, but at the expense of exorbitant legal fees. Still, these cases show that the task is insurmountable.

Discussion

Though the two additional confinements in Chester Township have yet to be built, the process of industrialization and corporate expansion continues as CARES fights against it. In April 2013, the Board of Supervisors approved applications for three new confinements in Poweshiek County several miles south of Grinnell. Nonetheless the community made an impressive showing. Eighty-six members of the public attended the hearing, the second highest attendance record in County history.

The supervisors' vote to approve the three proposals underscores the same community-mindedness espoused by CARES members. Whereas Prestage is based out of state, the two supervisors who voted in favor of the application emphasized that the newest proposed confinements would be owned and operated by a Poweshiek County resident.

This community mindedness is a central aspect of the local way of life. Embodying Douglas's egalitarian low-grid, close-knit and high-group classification, members of the group espouse mutual respect among neighbors and a holistic value for the quality of local life.

Wendell Berry, American poet, critic, and farmer effectively describes this mindset as agrarianism, “primarily a practice, a set of attitudes, a loyalty, and a passion...a culture at the same time it is an economy.” The agrarian mind, he writes, is not regional or national, let alone global, but local. “It depends and insists on knowing very particular local histories and biographies.” It is “always a subsistence economy before it is a market economy.” Furthermore, “the stability, coherence, and longevity of human occupation require that the land should be divided among many owners and users” (2002:42-43).

But these values have been displaced by the individualistic motives of the current political economy, a global industrial system where the motives of the market economy are prioritized over local culture and the land is increasingly concentrated in the hands of a few, large-scale operations. It is low-group, high-grid, impersonal and bureaucratic. In contrast to ecological holism in line with the local outlook, the current system champions specialization; diverse family farms have given way to massive soy and corn monocultures. We might even go as far as to say that issues of non-point source pollution, environmental health, and public health, being somewhat more community oriented, are overshadowed by specific data on point-source pollution and individual human health.

So how has CARES managed to fight its way into this shifting political economy? It is first a diverse group, offering multiple perspectives and strategies for change. While many are native Iowans who subscribe to the community mindset and local way of life, other members are newer to the area and offer a different outlook. In this sense, the group bridges the community-individual divide. The presence of Grinnell College is likely responsible, drawing in faculty and students from outside the community and accounting for a higher level of education and affluence than other rural communities in Iowa. Their affluence also contributes to the

ability to voice their opinion in the current system where, as one member rightly noted, “people speak with their wallets.”

It will likely be a long process dependent on the continued involvement of CARES members but given the theory, the successes presented in related case studies, and the sheer tenacity CARES has demonstrated thus far, I think that the group can be successful in driving Prestage out of the County in continuing to raise awareness about consequences of CAFOs. I also think that if they establish alliances with current and future legislators, continue to have a visible presence at public hearings and in local media, and voice their complaints in quantitative economic and scientific terms, such as the financial cost to the community and the negative effects on human health, the group can also affect reform in confinement regulations. It is a worthwhile fight and I wish them luck.

Bibliography

- Albrecht, Don E.
1997 The Mechanization of Agriculture: A Historical Case Study of the Implications for Families and Communities. *Culture and Agriculture* 19(1&2):24-32.
- Allen, Brenda J. and Philip K. Tompkins
1996 Organizational Communication *in* An Integrated Approach to Communication Theory and Research. Salwen, Michael Brian and Donald W. Stacks, eds. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Avery, Alex
1999. North Carolina Hog Farming and Water Quality.
http://heartland.org/sites/all/modules/custom/heartland_migration/files/pdfs/14394.pdf, accessed January 23, 2013.
- Berry, Wendell
2002 The Whole Horse: The Preservation of the Agrarian Mind. *In* The Fatal Harvest Reader: The Tragedy of Industrial Agriculture. Andrew Kimbrell, ed. Pp. 39-48 Sausalito, CA: Foundation for Deep Ecology with Island Press.
- Blaikie, Piers M. and Harold Brookfield
1987 Land Degradation and Society. New York: Methuen & Co. Ltd.
- Bryant, Raymond, and Sinead Bailey
1997 Third World Political Ecology: An Introduction. New York: Routledge.
- Burger, Edward T.
1990. Health as a Surrogate for the Environment. *Daedalus* 119(4):133-153.
- Buttel, Frederick H., and Howard Newby, eds.
1980 The Rural Sociology of Advanced Studies. Montclair, NJ: Allenheld, Osmun, and Co.
- Cantrell, Patty, Rhonda Perry, and Paul Sturtz
1996 Hog Wars: The Corporate Grab for Control of the Hog Industry. *Culture and Agriculture* 18(2):86-91.
- Caulkins, Douglas and Elena Gartner
December 2012 Poweshiek CARES Membership Survey: Animal Confinement.
- Centner, Terence J.
2004 Empty Pastures: Confined Animals and the Transformation of the Rural Landscape. Chicago: University of Illinois.
- Cockburn, Alexander, and James Ridgeway
1979 Political Ecology. New York: The New York Times Book Co., Inc.
- Constance, Douglas H., and Reny Tuinstra
2005 Corporate Chickens and Community Conflict in East Texas: Growers' and Neighbors' Views on the Impacts of the Industrial Broiler Production. *Culture and Agriculture* 27(1):45-60.
- Constance, Douglas H., and Alessandro Bonanno
1999 CAFO Controversy in the Texas Panhandle Region: The Environmental Crisis of Hog Production. *Culture and Agriculture* 21(1):14-26.
- DeLind, Laura B.
2004 Social Consequences of Intensive Swine Production: Some Effects of Community Conflict. *Culture and Agriculture* 26(1&2):80-89.

- Dillman, Don A., and Daryl J. Hobbs, eds.
1982 *Rural Society in the US: Issues for the 1980s*. Boulder, CO: Westview Press.
- Donham, Kelly
1998. The Impact of Industrial Swine Production on Human Health *in* *Pigs, Profits and Rural Communities*. Thu, Kendall M., and E. Paul Durrenberger, eds. Pp. 73-83. New York: SUNY Press.
- Douglas, Mary
1966 *Purity and Danger: An Analysis of the Concepts of Pollution and Taboo*. New York: Routledge.
1992 *Risk and Blame: Essays in Cultural Theory*. New York: Routledge.
- Douglas, Mary and Aaron Wildavsky
1982 *Risk and Culture: An Essay on The Selection of Technical and Environmental Dangers*. Berkeley: University of California Press.
- Dudly, Kathryn Marie
1996 The Problem of Community in Rural America. *Culture and Agriculture* 18(2):47-57.
- Friedland, William H.
1984 Commodity Systems Analysis: An Approach to the Sociology of Agriculture. *In* *Research in Rural Sociology and Development: A Research Annual*. Harry K. Schwarzweller, ed. Pp. 221-235. Greenwich, CT: JAI Press.
- Goldschmidt, Walter
1947 *As You Sow: Three Studies in the Social Consequences of Agribusiness*. Montclair, NJ: Allenheld and Osmun.
- Goodman, David, E. Melanie DuPuis, and Michael K Goodman
2012 *Alternative Food Networks: Knowledge, practice, and politics*. New York: Routledge.
- Greenberg, James B. and Thomas K. Park
1994 Political Ecology. *Journal of Political Ecology* 1(1):1-12.
- Grinnell Herald-Register
2012 May 28 – April 02 2013.
- Hassanein, Neva
1999 *Changing the Way America Farms*. Lincoln NE: University of Nebraska Press.
- Hightower, Jim
1973 *Hard Tomatoes, Hard Times*. Cambridge, MA: Schenkman Publishing Co.
1979 The Case for the Family Farmer *In* *Political Ecology*. Alexander Cockburn and James Ridgeway, eds. Pp. 209-216. New York: New York Times Book Co, Inc.
- Ikerd, John
2013 The Inevitable Economic, Ecological, and Social Consequences of CAFOs. Unpublished presentation, World Society for Animal Protection. Lower Leighton, Wales, UK.
- Iowa Agricultural Committee
2010 Ch. 65 Animal Feeding Operations
<https://www.legis.iowa.gov/DOCS/ACO/IAC/LINC/Chapter.567.65.pdf>, accessed April 13, 2013.
- Iowa Department of Natural Resources

- N.d. Animal Feeding Operations. Iowa Department of Natural Resources.
<http://www.iowadnr.gov/Environment/LandStewardship/AnimalFeedingOperations.aspx>,
 accessed October 24, 2012.
- N.d. Master matrix. IDNR.
<http://www.iowadnr.gov/Portals/idnr/uploads/forms/5428043.pdf>, accessed April 13,
 2013.
- Jackson, Wes
 2002. Farming in Nature's Image *In The Fatal Harvest Reader: The Tragedy of Industrial
 Agriculture*. Andrew Kimbrell, ed. Pp. 65-75 Sausalito, CA: Foundation for Deep
 Ecology with Island Press.
- Kinsolver, Barbara
 2008 *Animal, Vegetable, Miracle*. New York: Harper Perennial.
- Lawrence, John
 2004. Hogs per Farm, Iowa. Iowa State University.
<http://www2.econ.iastate.edu/faculty/lawrence/PorkStat/porkstat.htm>, accessed May 10,
 2013.
- Morrison, Jon.
 1998. The Poultry Industry: A View of the Swine Industry's Future? *in Pigs, Profits and
 Rural Communities*. Thu, Kendall M., and E. Paul Durrenberger, eds. Pp145-155. New
 York: SUNY Press.
- Pollan, Michael
 2009 *Food Rules: An Eater's Manual*. New York: Penguin Books.
 2008 *In Defense of Food: An Eater's Manifesto*. New York: Penguin Press.
 2007 *The Omnivore's Dilemma: A Natural History of Four Meals*. New York: Penguin.
- Prestage Farms, Inc.
 2012. Pig Production. Prestage Farms. <http://www.prestagefarms.com/our-growers/>,
 accessed March 25, 2013.
- Project Vote Smart
 2012. Representative David E. Maxwell's Campaign Finances. Project Vote Smart.
[http://votesmart.org/candidate/campaign-finance/137996/david-
 maxwell#.UY6V0LWd8E](http://votesmart.org/candidate/campaign-finance/137996/david-maxwell#.UY6V0LWd8E), accessed May 10, 2013.
- Robbins, Paul
 2011 *Political Ecology: A Critical Introduction*. Chichester, UK: Blackwell Publishing
 Ltd.
- Schmink, Marianne, and Charles H. Wood
 1992 *Contested Frontiers in Amazonia*. Pp 1- 28. New York: Columbia University Press.
- Stormont, Leana
 2004. Detailed Discussion of Iowa Farming Practices. Animal Legal and Historical
 Center. Michigan State University College of Law.
<http://www.animallaw.info/articles/ddusiowahogfarming.htm>, accessed May 5, 2013.
- Thu, Kendall M.
 2001 Agriculture, the Environment, and Sources of State Ideology and Power. *Culture
 and Agriculture* 23(1):1-7.
- Thu, Kendall M., and E. Paul Durrenberger, eds.
 1997 Signals, Systems, and Environment in Industrial Food Production. *Journal of
 Political Ecology* 4:27-35

- 1998 *Pigs, Profits and Rural Communities*. New York: SUNY Press.
- United States Census Bureau
2012. The 2012 Statistical Abstract. United States Census Bureau
<http://www.census.gov/compendia/statab/cats/agriculture.html>, accessed 25 March, 2013.
- United States Department of Agriculture
2013. Meat Price Spreads. USDA. <http://www.ers.usda.gov/data-products/meat-price-spreads.aspx#.UW9BKNG4FRc>, accessed March 25, 2013.
2000. A Condensed History of American Agriculture. USDA.
<http://www.usda.gov/documents/timeline.pdf>, accessed March 25, 2013.
2000. Agriculture Factbook Ch. 3: American Farms. USDA.
<http://www.usda.gov/factbook/chapter3.pdf>, accessed March 25, 2013.
- Veblen, Thorstein
1979 The Independent Farmer *In* Political Ecology. Alexander Cockburn and James Ridgeway, eds. Pp. 172-179. New York: New York Times Book Co, Inc.
- Vogeler, Ingolf
1981 The Myth of the Family Farm: Agribusiness Dominance in US Agriculture. Boulder, CO: Westview Press.
- Wolf, Eric
1972 Ownership and Political Ecology. *Anthropology Quarterly* 45(3):201-205.
Pathways of Power.