

Right-to-Farm Laws: Dispossession of Community in Rural America

by

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ABSTRACT

Practices of industrialization are changing rural landscapes despite oppositional efforts of community members. This thesis explores the themes of power and loss in rural areas impacted by industrial agriculture and how policy is used as a gateway for industrial forms of agriculture in rural places. I bring together community and dispossession through a case-study of Concentrated Animal Feeding Operations (CAFO) in Missouri and argue that dimensions of community could be better incorporated into the accumulation by dispossession literature. I use interviews and participant observations to analyze major themes of loss experienced by rural Missourians who live near proposed or existing CAFOs. The study pinpoints ties to ecological health, ties to animism, and ties to people as community dimensions of dispossession experienced by rural Missourians due to the presence of CAFOs. I also conduct a national analysis of nuisance case law in which Right-to-Farm laws were employed as a defense for agricultural operations. An original typology defining parties of plaintiff and defendant is offered to understand who prevails in court using a Right-to-Farm defense. I offer policy change suggestions that can enable Right-to-Farm laws to effectively protect small and medium sized farmers from nuisance suits while providing rural residents provisions to hold industrial operations accountable.

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List of Abbreviations

ABD	Accumulation by Dispossession
AFO	Animal Feeding Operation
CAFO	Concentrated Animal Feeding Operation
DNR	Department of Natural Resources
EPA	Environmental Protection Agency
LLC	Limited Liability Corporation
RTF	Right-to-Farm
RTFL	Right-to-Farm Law
USDA	United States Department of Agriculture

Dispossession of Community: Industrial Animal Production in Rural Missouri

INTRODUCTION

This study connects dispossession and community in order to better illuminate the experiences of rural people who live near an industrial livestock operation. David Harvey's concept of 'accumulation by dispossession' explains the often predatory processes of turning a previously non-profitable resource into a profitable use. Scholars mainly use the concept to understand land-grabs, often in international periphery contexts, with attention to property centered or monetary losses. Accumulation by dispossession for peripheries within the core remains less understood, with forms of dispossession not easily titled economic less accounted for. I argue that by incorporating theories of community, the concept of dispossession can be deeply enriched to include cultural aspects of loss. I also draw upon theories within anthropology regarding affect that help me pinpoint the loss of ties to community experienced by rural people who live near industrial agricultural operations.

This study explores extractive processes associated with industrial animal production through a focus on Concentrated Animal Feeding Operations (CAFOs) in the rural United States. I focus on Missouri, one of the germinal sites of extractive processes related to industrial agriculture. Namely, Missouri is only one of two states that treats farming as a constitutional right, and as a result, makes other rights increasingly secondary to industrial agriculture. I utilize open-ended interviews with people of regulatory, legal, and community positions to understand the dynamics of dispossession in the context of industrial livestock production. I find that unique forms of dispossession unfold for those who live proximate to CAFOs, what I understand through a framework of ties in accordance with ecological health, animism, and people. Finally, this paper argues for further exploration of non-economic forms of dispossession as a means of

bringing the experiences of rural people living near industrial agricultural operations into the critical analysis of capitalism.

LITERATURE REVIEW

Community and Economic Dimensions of Dispossession

The concept of dispossession is incredibly useful for exposing some of the ill-effects of capitalism but the way it has been traditionally applied limits what kinds of things can be included in the discussion. Critics of capitalism believe that an economic system centered around market forces brings about social and environmental injustices. Ironically, research on experiences of loss as a consequence of capitalist actions focuses on property rights, such as the loss of land. Concentrating on property when discussing loss reifies the practice of market-centering that researchers critique in capitalism. Historically, dispossession research excluded forms of loss not typically described as economic, such as cultural, social, and spiritual losses. Dispossession powerfully enlivens the original Marxian spirit in its critique of capitalism and the impact on the poor or working class in dialogue with globalization. Including non-economic forms of loss under the umbrella enables a better understanding of those experiences as they relate to the reproduction of capitalist conditions. The theory of dispossession can look to literature on community and anthropological studies of ties to place to explain non-economic forms of dispossession experienced by individuals still on their land in “core” regions.

When researchers focus primarily on the economic consequences of the capitalist system, they overlook other inequalities caused by capitalism. This can be seen in the dispossession literature. David Harvey introduced the concept of ‘accumulation by dispossession’(ABD) as an extension of Marx’s term ‘primitive accumulation’. As Marx describes it, primitive accumulation consists of the (often violent) processes that created the conditions for wage-labor and initial

accumulation (Marx 1867). Harvey's issue with this depiction of primitive accumulation is Marx's tendency to designate it to the 'prehistory' of capitalism. Harvey suggests that "something akin to primitive accumulation is alive and well within the dynamics of contemporary capitalism and ... its existence may well be fundamental to the survival of capitalism" (2010: 308). According to Harvey, contemporary forms of primitive accumulation, which he calls accumulation by dispossession, are the neoliberal practices that serve as spatio-temporal 'fixes' to the crises of overaccumulation that are inevitable within capitalism (2007). Harvey's examples of forms of 'accumulation by dispossession' are the same economic-types that Marx originally presented for primitive capital:

"These include the commodification and privatization of land and the forceful expulsion of peasant populations; conversion of various forms of property rights – common, collective, state, etc. – into exclusive private property rights; suppression of rights to the commons; commodification of labour power and the suppression of alternative, indigenous, forms of production and consumption; colonial, neo-colonial and imperial process of appropriation of assets, including natural resources; monetization of exchange and taxation, particularly of land; slave trade; and usury, the national debt and ultimately the credit system" (2010: 310).

ABD has historically been seen as an economic phenomenon and despite the fact that 'economy' has not always been synonymous with the market or material resources, property rights relations are traditionally the dominant arena for observing dispossession. Although the economy is now associated with the market, the word originated from a Greek term that was closer to social or familial relations: *oikonomia* meaning 'household management'. 'Economy' was once used to describe relations within the home but is not commonly used that way anymore. The anthropologist David Graeber acknowledges that though today, we think of the word 'economy' as a realm of interactions concerned with the creation and exchange of material possessions, there is also what he terms 'human economies' in which the concern is the exchange

of and creation of social relations (2012). ABD literature supports the shift from a ‘household management’ definition of economy to one of a purely materialistic character by focusing the discussion around land. One of the earliest scholars to apply ABD, David Levien (2013) used Polanyi’s concept of ‘fictitious commodities’ to explain the loss of rights to land, or “land grabs”, in India. Following his example, property rights related to land especially in under-developed countries, became the primary subject for ABD studies and forms of loss not commonly thought of as economic were not brought into the discussion (Amanor 2012; Bin 2018; Cáceres 2015).

While the concept of ABD is traditionally applied in the context of property rights, contemporary scholars propose a variety of ways to expand the discussion, although none have fully considered dimensions of community. For instance, Gardner (2018) exposes a practical gap in the traditional definition of ABD by showing its inability to explain struggles for political power in Bangladesh where access to work is often more pressing than access to land . Some authors have offered their own language to improve the understanding of the concept, such as *entrepreneurial exploitation* to explain the role of credit in reducing bargaining power of small-scale farmers (Borlú 2015) and *redistributive dispossession* to account for the dispossessions of land that do not create conditions for expansion of capital, but merely redistribute resources (Bin 2018). Other studies focused on non-economic consequences associated with the dispossession of land such as human rights violations, lack of access to food and water, and damage to family relationships (Pietilainen and Otero 2019; Zhang 2019). These works pushed the boundaries of ABD, but the discussion still focuses on property rights, and neglects forms that are not commonly thought of as economic.

Specific analyses of property rights begin to hint at how dispossession expands beyond narrow economic parameters. Property rights typically encompass the right to ownership, exclusion, to transfer or sell the property, and to use it how the owner wants (Blomley 2005). Property, however, is not just about the *right* to benefit from or have an experience with something, but also encompasses the *ability* to benefit from or have an experience with something – adding a layer of access to the concept of possession (Ribot and Peluso 2003). In capitalism, the most important ‘bundle of rights’ associated with property tends to be the means to use the property in an economically productive way to make a living but there also exists the right to simply enjoy life on one’s property as well, something that requires access to a clean environment (Ashwood, Diamond, and Walker 2019). Bell (2017) talks about possession being connected not just to things, but places and experiences of belonging and attachment. His version of the word possession is two-directional: “I belong to the place and the object, and the place and the object belongs to me...possession is possession” (Bell 2017: 124). Thinking of dispossession in this way allows us to include non-traditional forms of economic losses in our discussions of the consequences of capitalism.

Furthermore, the context of discussion has remained limited to countries in the “periphery” of the economic system, leaving out rural exploitation in places like the U.S. This has prevented the conversation about loss from encompassing members of the “core” economic zones who still remain on their land. These people experience non-economic as well as economic forms of loss although the forms of loss related to culture, society, or spirituality have yet to be labelled as a form of dispossession. Past studies explaining dispossession in the context of neoliberal agricultural practices took place primarily in countries on the economic “periphery” such as Argentina and those in West Africa (Cáceres 2015; Amanor 2012). Exposure to

industrial risks in “periphery” regions of the world like under-developed countries are a result and continuation of imperialistic and racist ideology. The idea that Anglican genes were superior to those of other races and the hunger for industrial progress fueled the practice of out-sourcing dangerous resource-extraction processes to colonies in the past and continues to drive modern-day dispossessions of indigenous people by powerful trans-national corporations. However, exploring experiences of loss even within places like the United States is important, as cultural anthropologist Deborah Davis Jackson (2011: 242) articulates: “Investigating the impacts of uninvited environmental change among those for whom disempowerment and vulnerability are new experiences can encourage more dynamic explorations of conjoined environmental/social/political systems.”

Rural places in the United States are increasingly becoming dumping grounds for risky industrial operations from landfills to nuclear power plants, to concentrated livestock facilities. Even though the United States is a world economic leader, rural areas in the U.S. can be thought of as “peripheries within the core” since the State prioritizes profit and industrial growth over ecology and people not only in other countries but also in its very own home. As Ashwood (2018: 10) puts it in describing the impacts of nuclear energy facilities on white southerners, “profit now subjects to utilitarian sacrifice those once immune to it.”

Industrial animal production exemplifies peripheral forms of production within core economic nations. Animal Feeding Operations, or AFOs, raise animals in confined conditions on small amounts of land. Rather than grazing, animals eat largely grain diets in buildings. A CAFO, or concentrated animal feeding operation, is any AFO that discharges manure and/or wastewater into a waterway and is regulated by the EPA under the Clean Water Act (EPA 2020). CAFOs are controversial in rural areas due to the human and environmental health risks

associated with the disposal of the vast amount of animal waste produced on site (Von Essen and Auvermann 2005; Bonanno and Constance 2006; Henson and Bailey 2009). CAFO owners typically make a deal with neighboring landowners to use their cropland for land application of the waste. Application to frozen ground, before a heavy rain, or overapplication threatens nutrient runoff to surface water or leaching to groundwater. Contamination of surface water sources can lead to eutrophication, causing algal blooms and inhabitable aquatic ecosystems. Groundwater can be contaminated with nitrates, which are especially dangerous for infants and the elderly. Since most rural communities rely on wells for household water uses, groundwater contamination is a serious concern in rural areas. Additionally, CAFOs produce high volumes of concentrated air emissions. The decomposition of animal manure releases ammonia, hydrogen sulfide, and methane while the movement of animals in a small area releases particulate matter. These emissions can lead to respiratory illnesses such as chronic lung disease, olfactory neuron loss, chronic bronchitis and death (Hribar 2010).

Communities living near CAFOs are gaining public attention for their oppositional efforts. For example, in 2018 a North Carolina jury awarded over \$25 million to a group of neighbors, primarily African American, who sued Smithfield Foods, the nation's largest pork company, over air pollution (Blythe 2018). In places like Missouri, community-based groups gained media attention for their political involvement in protesting CAFOs, citing health concerns and the changes in community as their main reasons for opposition to the operations. Since the monumental case in North Carolina, many state legislatures established a cap on or eliminated punitive damages recoverable in court (Douglas 2019). Basically, the only damages that can be recovered after these changes are those related to property damage. This de-

legitimizes the other losses that community members experience by living near a CAFO. Neither the court system nor the dispossession literature has prioritized non-monetary forms of loss.

Scholars have yet to fully explore non-economic forms of dispossession such as loss of cultural, spiritual, or social aspects of life. This limits the extent to which the experiences of loss for rural Americans living near industrial livestock operations can be brought into a critical conversations of capitalism. To remedy this challenge, I combine the dispossession and community literatures to consider possession as a question of affect, not just relations of property. I incorporate anthropological literature about affect in order to relate experiences of loss due to environmental change and industry to *ties* that make up people's definition of community that have yet to be brought into the discussion on dispossession.

Affect and Ties

An experience that has yet to be substantially documented in ABD literature is the *expectancy* of loss. The fear of losing something and no capacity to prevent the impending trauma can potentially be as jarring as the lived experience of loss. Fear translates into tangible loss of security, which consists of the safety and assurance once taken for granted. Those who fear loss have transitioned to a state of expectancy and dread. They feel their futures are no longer in their control – in essence, they've lost their right to determine their own destiny. This can be seen of as another form of loss - loss of the notion of *ontological security*. Ontological security allows individuals to be confident in the social and material environments in which their identities are tied up and to trust their surroundings are reliable (Giddens 1990). When people feel like they cannot trust their surroundings, or that they have lost power and control over their own environments and lives, it creates an anxiety which indicates a loss of security in what is known about one's surroundings and what is known about self.

The threat or even the perceived threat to the quality of air and/or water is one such transformation of ties that indicates a loss of security in one's ability to provide for their own health and wellbeing. The physical symptoms associated with living near a concentrated livestock operation, such as nausea and respiratory issues, lead to higher levels of psychological distress, particularly lower perceptions of control (Bullers 2005). Ulrich Beck (1992) describes how the perceived threat of technological hazards highlights power struggles in society (1992). In Anna Willow's (2014) study documenting the experiences of Ohio residents living near shale energy developments, one of the main concerns among participants was the change in water and air quality, exacerbated by the lack of information. Similarly, the lack of access to information regarding the exact number of animals on the facility, the amount of waste produced, or the specifics of the waste management plan such as where the spreading with occur and when create a connection of instability and insecurity related to air and water quality (Ashwood et al. 2014).

Smell can itself be a sense of loss, so writes cultural anthropologist Deborah Davis Jackson (2011): "through the process of ordinary breathing, an external substance is brought in with the breath and incorporated into the body not only in a physical sense but also in a phenomenological (experiential) sense as well... a connection that when the objects in question are known to be toxic substances, can evoke strong anxiety and deep despair." Jackson's (2011) work with a First Nation's tribe in Canada's "Chemical Valley" shows how the natural senses, such as sense of smell are used to create connections and meanings of places and how the introduction of industry and toxic smells can transform positive relationships with place to negative ones of alienation.

Sensual responses are not always backed by official evaluations. The task of calculating risk, and the subsequent power to organize society in response, falls to "experts" wielding the

tools of science. The irony is that the very risks that science is trusted to identify and amend are the offspring of science (Cassuto 2009). Without a 'scientific' basis, where the scientific methods are chosen based on an empiricist and positivist epistemology, to validate community members' claims of risk, critics can portray activists as untrustworthy for being too emotional: "No matter how forcefully people argue that anyone with common sense can see that they are in danger...science is still the most prestigious form of knowledge in modern societies and the health field public policies not justified by scientific findings are easily ridiculed" (Tesh 2000: 110). Just as the predominant paradigm of science doesn't include community in risk assessment, the predominant approach to dispossession has not included community either, reifying normative scientific techniques that bolster the capitalistic system.

Spiritual ties, alongside sensual ones, shape the experience of dispossession.

Anthropological studies can help make sense of the sense of loss associated with spiritual ties to place. Place, after all, is understood as

"the emotional bonds that people form...the strongly felt values, meanings, and symbols that are hard to identify (and hard to quantify); the set of place meanings that are actively and continuously constructed and reconstructed within individual minds, shared cultures, and social practices; and the awareness of the cultural, historical, and spatial context within which meanings, values, and social interactions are formed" (Williams and Stewart 1998: 19).

Connections to place can be understood by listening to the stories, beliefs, songs, and ideas associated with the place (Basso 1996). A connection to place, according to Basso (1996), is a way for the individual and the collective to understand their place in history and in the present community. As individuals and groups act on and within a place, meaning of a place is

created and simultaneously, identity of self is formed (Kirsch 2006). Loss of connections to place are unique in the context of industrial agriculture because most of the people experiencing this are still living in their ‘place’ yet feel a disconnection from it or at least the meaning that it had come to hold for them. Glenn Albrecht (2006) calls this *solastalgia* – from the words solace, meaning to find comfort, and nostalgia, when one is separated from and missing home.

Individuals experiencing solastalgia are in their homes but have been exposed to such environmental change that they experience distress similar to being displaced. This type of dispossession occurs within the indigenous populations in New Guinea, whose environment was rendered unrecognizable due to the introduction of a mining operation. In this case, negative ties to the landscape were associated with the reminder of loss of culture, history, and ways of life (Kirsch 2006). This type of connection to place that ties people to their ancestors or to their own previous life experiences, what Michael Bell (1997) calls the “ghosts” of place, goes beyond the concept of sense of place. It is a form of *animism*. Animism is the attribution of spirit to traditionally non-spirited things. In describing our connection to a place and the people who lived in that place before us, Michael Bell (2017: 123) writes:

“We feel a *presence* there, a presence in the physical of someone who is not physically there – memories and projections of individuals and social relations that this special place conjures up for us. There is something there, there, just as there is in the aliveness of the person. In other words, to experience the ghosts of place is the experience place socially.”

Furthermore, communities of place are more likely to demonstrate more positive ties such as strong fraternal relationships, high levels of intrinsic appreciation for others, and high levels of mutual support than other types of community (Brint 2001). Erikson (1998) refers to these positive ties to people as *communal ties* or:

“a state of mind shared among a particular gathering of people...It is a quiet set of understandings that become absorbed into the atmosphere and are thus a part of the natural

order. And the key to that network of understanding is a constant readiness to look after one's neighbors –or, rather, to know without being asked what needs to be done.”

Kirsch (2006) similarly highlights the history and sense of place, as participants recalled memories of the past related to the changed landscape. He explains that memories are *anchored* to place, giving the place subjective meaning, and that as landscapes where those memories happened change to be unrecognizable by the people who have memories there, the meanings are lost and history itself is lost (2006). The experience of “seeing ghosts” in a place or visualizing the stories of an ancestor or recalling one's own memories on a place brings spirit into the formerly unanimated landscape and these connections can be lost or damaged without the dispossession of land or property. Sometimes this is treated as a subtype, like *communities of place* (Brint 2001). Contemporary studies on communities of place show the continued importance of collective obligations based off of the values, desires, needs, and norms of a community (Arefi 1999).

Another way of thinking about the dispossession of community is the loss of positive ties to the people who make up one's community. Ferdinand Tönnies (1887) described community in two ways: *gemeinschaft* which develops organically out of emotion and natural connections, and *gesellschaft* which develops out of purposefully constructed connections. Tönnies further designated three ways of relating to one another in a community. *Social relations* are based upon commonly held values, norms, and beliefs culminating in a sort of shared consciousness among the people in relation. This form of relating comes with obligations to each other. *Social Samtschaft* is a group that is bound together by a commonality such as race or language. *Social bodies, unions, or corporations* are highly organized ways of relating where everyone has a designated role to play. The positive ties to people in a rural community demonstrates *social relations* with *gemeinschaft* ideals. Within rural communities, we find the type of neighborliness

that has existed long before capitalism. For example within the Christian bible we find the word ‘neighborliness’ used to describe not merely a relation of distance in housing to one another but rather social and moral obligations of justice, mutual aid, love, and generosity to one another. Amidst a capitalist society that pushes the values of ‘one for all’ and ‘survival of the fittest’ we still find these connections depending upon social obligation in our rural areas.

Feelings of fraternalism and mutual support are thought to be exemplary of Tonnies’ *Gemeinschaft* and are thought to contribute to the overall emotional wellbeing and security of members of a community. The higher levels of interpersonal responsibility demonstrated in communities of place has been attributed to the higher instances of face-to-face interaction than in other types of communities (Brint 2001). The entrance of a CAFO that is absentee-owned poses threats to those face-to-face interactions upon which the positive ties to mutual aid and fraternalism are based. Not knowing one’s neighbors and feeling unable to have those face-to-face interactions should a problem arise leads to negative ties to people such as distrust. One can observe the dispossession of community in the form of loss of positive ties to people in the breakdown of social obligations to others and expressions of betrayal.

METHODOLOGY

Rural Missouri serves as an advantageous location for exploring the community forms of dispossession in an area increasingly subjected to industrial hog production. There are several reasons Missouri is exemplary of a “periphery within in the core” region. Almost 30% of the state lives in a rural area, where 17.5% of those rural residents live in poverty. Nationally, only 26% of the population lives in a rural area, with around 15.5% of rural people living in poverty (USDA 2017). As of 2015, Missouri had 633 active permitted CAFOs (Missouri DNR 2015). CAFOs here are defined as operations with more than 2500 swine, 100,000 broilers, 700 dairy

cows, or 1,000 beef cows as regulated by the Clean Water Act. In total, the U.S. has little over 24,000 CAFOs (USDA 2017). If all of the nation's CAFOs were distributed evenly, each state would only host 480 of the operations. Even though Missouri's demographics are very similar to the nation as a whole, it is bearing a much heavier load of the industrial burdens than other parts of the country that benefit from the industry. A second compelling reason to study Missouri is the deep division over agricultural policy. Residents passed a constitutional amendment in 2014 proclaiming a "Right-to-Farm" (RTF) with only 50.12% of the favorable vote. The Missouri Farm Bureau supported the bill. Rural community groups, including farmers, led opposition to the bill because they believed the new protections would enable and protect the growth of CAFOs that threatened their air, water, and communities. Due to the perceived risk of loss, community members have organized into several county-level activist groups.

I collected data via semi-structured interviews, each lasting between an hour and an hour and a half. Thirty individuals participated in interviews. Participants included farmers, rural community members, social activists, interest group leaders, and local politicians. I gained access to my initial participants through the help of contacts associated with a nonprofit called Missouri Rural Crisis Center (MRCC). I had previously attended a conference hosted by MRCC that brought together community activist groups from around the state to strategize against the intrusion of CAFOs. It was at this conference that I first heard some of my participants share their experiences of living near CAFOs. I later reached out to the individuals who had organized the conference to connect me to farmers and community activists. I also reached out to a contact at the University of Missouri who connected me with Martha, a rural resident who helped found a CAFO-opposition group in her community and who is cited in this paper. Martha was the main

gatekeeper to this community. She introduced me to and vouched for me with many of my participants.

After reaching out to the initial gatekeepers, I recruited the rest of my participants with snowball sampling. This strategy is beneficial because it takes advantage of the social networks that participants have that the researcher would not otherwise have access to (Orne and Bell 2015:72). Researchers using the snowball sampling technique should be aware however that their participants are likely to suggest other people who share similar opinions or experiences as themselves. I wanted to ensure that as the researcher I had access to a variety of voices on the issues that were expressed. Therefore, I made sure to interview members of the organizations that opposition community groups cited as responsible for the CAFO situation, such as the Missouri Farm Bureau and the Missouri Department of Natural Resources. In addition, I sought out to interview people who had similar farming backgrounds as most of my participants (independent small to mid-size livestock farmers) who were in favor of the presence of CAFOs. The following table depicts the demographics of my participants, although not all are cited directly in the results:

Table 1. Demographics of Participants in Missouri Case Study

Pseudonym	Organization or Affiliation	Protesting or Advocating for CAFOs
Joseph	Environmental nonprofit staff member	Protesting
Bill	Animal rights nonprofit staff member	Protesting
Consuela	Animal rights nonprofit staff member	Protesting
Earl	Agricultural Lawyer/Farmer	Advocating
Martha	Farmer	Protesting
Mr. Green	Farmer	Protesting
Collin	Farmer	Protesting

Roy	Commodity interest group staff	Advocating
Kelly	Politician	Protesting
Carly	Commodity interest group staff	Advocating
Josh	Farmer	Protesting
Kate	Farmer	Protesting
Barry	Sustainable agricultural nonprofit staff	Protesting
Peter	Farmer	Protesting
Davis	Farmer	Advocating
Cindy	Farmer	Protesting
Lawrence	Farmer	Protesting
Chloe	Farmer	Advocating
Lester	Farmer	Advocating
Rick	Farmer	Protesting
Elizabeth	Missouri Farm Bureau	Advocating
Carter	Missouri Farm Bureau	Advocating
Liam	Missouri Department of Natural Resources	Advocating
Jaden	Rural resident, non-farmer	Protesting
Haley	Farmer	Protesting
Andrew	Farmer	Advocating
Henry	University faculty	Protesting
Michelle	Sustainable agricultural nonprofit staff	Protesting
Mark	Sustainable agricultural nonprofit staff	Protesting

I also completed three days of participant observation. I audio recorded and took notes during interviews and observations. At the end of each day I would journal or while driving to the next interview I would audio-record my thoughts in order to engage in reflexivity, a process that improves validity in qualitative research (Creswell and Poth 2018: 269). Three of my interviews took place over zoom for people who had been engaged in the campaign opposing the RTF constitutional amendment but were not present in Missouri at the time of my study.

I provided an information letter to all participants regarding the purpose of the study and any risks and benefits they might encounter by participating. I digitally recorded the interviews and then transcribed them into text after which the audio files were deleted. I analyzed all interviews using thematic coding in NVivo. I use pseudonyms in place of names to protect the privacy of participants.

RESULTS

This study interviewed participants both opposed to and advocating for CAFOs. The rural community members who knew Martha and my university contact seemed to trust me immediately based on that connection but there were also several things I chose to share about myself which I believe helped me gain trust and comfortability with my participants. Particularly with the rural community members who opposed CAFOs, the fact that I was raised in a small working-class rural town with a large industry presence seemed to make the rural residents more comfortable sharing parts of their stories with me. On the other hand, I also found it helpful to share that I had no previous education or background in agriculture. The farmers were happy to explain all of the terms that seemed common-place to them but which made no sense to me and this not only made them more comfortable with me, it often inspired a new thought related to their experiences with the CAFOs, developing data that I would not have obtained otherwise. In contrast, some members of the commodity interest groups and state agencies seemed incredibly uncomfortable with me after learning that my education is in natural resources and sociology. Many seemed to automatically take a defensive stance despite my efforts to phrase questions in a neutral manner. One participant expressed audible concern that I would depict them as a 'capitalist villain' in my writing.

The following discussion, however, displays only themes of loss as experiences and communicated to me by participants living near an existing or proposed CAFO site. This selection of data has multiple motivations: the wish to amplify the voices of people who express feeling left out of decisions that impact them at both the state, federal, and interest group level; the fact that ‘loss’ or ‘fear of loss’ stood out as one of the most popular themes in the data overall; and the opportunity to frame the oppositional movement to industrial agriculture in a way that is new to rural sociologists. Analysis of interview transcripts from participants who lived near an existing or proposed CAFO revealed three major forms of loss related to community ties. These losses can be illustrated best by the affect, or the emotion associated with the loss of ties. The loss of a positive tie is often in exchange for a new negative tie due to changes in the environment and community brought on by the nearby CAFO. The categories that I offer below make up the three main ways that participants thought about and defined community, and the three main ways that loss exhibited itself in the form of broken ties. While organized into three separate categories and discussed separately, the ties are interconnected. The examples given below should not be assumed to *not* fit into other categories, but for the sake of clear communication, each example given below is organized by the category and type of loss that it represents the most clearly. The three major forms of loss were ties to ecological health, ties to animism, and ties to people.

4.1 Ties to Ecological Health

The first new form of community dispossession that I present is the loss of ties to ecological health. This can be conceptualized as the access to clean air and water, those vital components necessary for the reproduction of both physical life and life in the community and the emotional response accompanied with the loss of those ties. For participants, access to clean

air and water were a part of their property rights, the loss of which represent economic losses. For instance, participants reported dismay at the idea that their property values had dropped, knowing that if they tried to sell they would not be able to because the horrible air quality would not illicit any buyers. They also recognized that the potential for water contamination would require an increased economic burden in the form of healthcare costs for their families and livestock. However, access to clean air and water transcended property/economic rights. People shared emotions related to their ties to the water and air quality and how the changes in the environment would create feelings of betrayal and fear for them.

The ability to retrieve clean air and water for one's self and family were once positive ties that have been broken due to feeling like potential contamination is out of one's control.

“My grandma Louise's house, that well has been there since 1920, one of the oldest wells in the county. We've never had to have that well tested. She lived 97 years born and raised in that house. We had that well tested last year because of that CAFO close to us and we knew that there were materials going down the creek and it was high in nitrates. So we asked the testing company what would do that and they said probably animal contaminants coming in. So we don't have a CAFO, we don't have anything like that close to that deep well so that makes you kind of point a finger directly at the CAFO. And it was bad enough in high enough levels in that farm that they said don't drink the water.” –Mr. Green, Farmer

Here, Mr. Green describes the experience of testing the water in a 100-year old well that supplied water to his grandmother her entire life and finding out that there was a high level of nitrates present. The recommendation to not drink the water resulted in a betrayal of source previously trusted without wavering. Mr. Green believes that the introduction of the CAFO caused the dangerous nitrate levels. While low levels of nitrate occur in soil and groundwater naturally, high levels can be found as a result of agricultural runoff or contamination with animal wastes (WHO 2003). Mr. Green's designation of the CAFO as the lead suspect then is not without scientific backing. The 2017 National Water Quality Report to Congress shows that over

half of the nation's surface water is polluted with some of the probable cause attributed to animal feeding operations (U.S. EPA 2017). Mr. Green's belief that the family well has been contaminated by a CAFO represents a tie that has been broken. The certainty that he and his family have in the ability of the well to provide for their physical needs has been lost. They feel betrayal associated with an ecological system that has beforehand always been a source of life

Clean water is not the only resource that residents have lost or fear loss of access to. The following quote is from a participant who was forced to leave the home that she and her husband built because her close proximity to the CAFO made the air quality unbearable. While most people do not wish to leave their homes or their land, the odor can have such negative effects that many people are forced to leave. Cindy describes her experience before she moved:

Interviewer: "Tell me a little bit about the odor."

Participant: "We were close enough that we would get it and I'd wake up in the middle of the night coughing and sneezing cause we had an un-airconditioned house in the summer time and it was bad but then this new one is so close...and we were out there the other day on the back patio and we started coughing and gagging and we ended up leaving and going five miles down to another town to get something to drink because we could taste it. It was in our mouths."—Cindy, rural resident neighbor to a CAFO

For Cindy, and many others, the positive ties to clean air has been replaced by the negative ties represented in experiences like this one, of being literally awoken by the odor and its physical symptoms, of feeling it in their mouths, feeling helpless, like one has to flee to feel better. The noticeability of the smell can be lost due to overexposure – a condition known by some as odor fatigue, but the physical effects are still obvious to those who live with them. One neighbor describes his condition as follows:

"From my farm you can go a 3 miles radius and count 6 [CAFOs]. Hog CAFOs and 1 dairy so we're right in the middle of it. I've got odor fatigue but that doesn't stop the headaches. If I'm out in it and the wind is in the wrong direction, I will lose my voice by evening [interviewer notes: his voice sounds scratchy now]. Sounds like I have laryngitis, but I don't."—Rick, Farmer

Rick went on to share with me something his recently passed father, who farmed the same land before him, had told him near the end of his life:

“He also said the best thing about living in the country is waking up in the morning and going outside and taking a big ole breath of fresh air. It invigorates you. And he said now I go outside and it stinks.”

Rick’s father is one of many rural people who associate ‘living in the country’ with fresh air. The choice of the word ‘invigorates’ is an example of the positive ties associated with that fresh air. Fresh air is associated with energy, strength, healing, and refreshment. The father says so himself, that tie is now lost and has been replaced by a stink. The relationship to air is now associated with scratchy voices and headaches along with the unpleasant smell.

The concerns for water and air quality also involve a new negative experience of disempowerment, which evolves out of failures to gain policy or regulatory support from the government, due to the State’s value priority towards science and outside experts to determine the riskiness of sources of pollution such as CAFOs. In one county, where a CAFO had gained a permit but not yet begun operating, citizens feared the contamination of their groundwater. Participant after participant cited the ‘karst’ topography as being too fragile to handle the underground waste-storage containments that CAFOS use. In this case, local knowledge that was not taken into account with policy making and permit-issuing was related to location of springs and wells:

“Just a few hundred feet below where the site sits is a spring that we know has run since the early 1800s – they used to water cows and horses and it still shoots a stream out like this out of a pipe. It’s still close to the surface, you dig down ten feet for a manure pit and if those manure pits crack, you know your water table is high anyway, if that cracks it’s just gonna be right there at your water table. And we have lots of springs in our area. Another concern is where they’ve proposed to buy this property, there’s two uncapped wells. One is a hand dug well and one is a drilled well that have not been properly closed. And they’re gonna build the hog barns right on top of that. That concerns me that you’ve got a straw right into your water table. If something leaks and what happens. Once it gets into the ground what are we going to do about that?” –Heather, farmer

When I spoke to a representative of the DNR, he knew about the community's concerns but assured me that all proper assessments of the landscape had been conducted by a certified expert before making the permit:

“Those individuals making those assertions to geology but not being geologists and stamping those things as geologists are concerning to us because in Missouri we have a law that says anybody doing a geologic interpretation that could impact public health must be a registered geologists. That's an aspect of this. We're always trying to make sure the truth is out there. Make sure that it's accurate and factual and scientifically based.” –Liam, DNR

In this situation, the truth and facts are defined by registered scientists and not local knowledge of the landscape. Decisions on how to permit and regulate are then based on truth and facts. A state law even enforces this value of science over local knowledge. By not being a registered geologists, residents are disempowered of the ability to make decisions concerning something they think will impact their health. This negative tie to the environment impacts the image of self by taking away one's control and delegitimizing one's knowledge.

As can be seen, the loss of access to clean air and water transcends the economic aspects associated with property rights, although economic aspects such as the loss of property value are important to people. Overwhelmingly, concern was for the positive ties associated with clean air and water that were often taken for granted by participants and recognized as something they valued after it was lost and/or transformed into a negative association. The ties were transformed into feelings of betrayal and fear. Disempowerment also became a major theme among communities after attempting unsuccessfully to get the State to take preventative action.

Ties to Animism

The second form of dispossession that I offer here is the loss of ties to animism. For many people in rural Missouri, they have a historical connection to their land that ties them to the ghosts of place like their ancestors who farmed the land before them and passed the tradition

along. They often grew up helping on the family farm and have memories of generations before them both on their land and in their community. The meanings assigned to these landscapes can be understood in the stories. When talking about their history with agriculture, farmers told stories that explained how their acts of farming on the same land as their ancestors connected them to the people of the past:

“I grew up in agriculture. From the age of seven or eight my brother and I helped my grandfather with hogs and working the farm. We had our own custom hay bailing business. We were entrenched in agriculture from a very young age. My grandfather actually started the agriculture program for the community college. He was the first person to offer crop insurance out of his house...” –Lawrence, farmer

“I’ve been involved in agriculture for most of my life...I grew up on a diversified farm...we had about 600 acres and we had cows and hogs and crops and did hay. I lived on the farm and worked on the farm with my folks for 18 years, got married, was away for about 2 years and came back...when my parents passed away the land split between me and my two brothers.” –Heather, farmer

Furthermore, there are positive ties that animate a place and connect people to their own histories, serving as stimulants for memories and ways of making meaning of their lives and understanding their own identity. To illustrate, one afternoon, I went on a drive with a few neighbors who wanted to show me where the CAFOs were in their community. As we drove around the county, they pointed out landmarks to me – the old schoolhouse, whose land this is and whose land that is, the church where they grew up attending, the community graveyard—and as we passed, they shared with me stories from their lives and their grandparents lives. At one point, we stopped at a spot on a dirt road where a small bridge over a creek had collapsed, forcing the road to dead end. Beyond the creek, I could see where the road would continue, and Mr. Green tells me that the other side of the road ends near the schoolhouse. It was one of the first official roads in the county. The bus had used this road for years, he continues, and once when he was a child, a row-crop farmer had attempted to get the road closed to public traffic so

that he could run his irrigator machines across from one field to the other, and his grandfather, recognizing the benefit of the road to the school buses, actively opposed the attempt until the farmer gave up. Flash forward to present day. A few years ago, a CAFO was built on the other side of the road from the washed-out bridge. The waste-applicator that the CAFO hired rerouted the stream flow of the creek to such an extent that it crippled the old bridge. The owner of the CAFO persuaded the county commissioners to declare the road undrivable rather than attempt to repair the bridge. Mr. Green and his neighbors think the CAFO owner and operators destroyed the road purposefully in order to ensure they would have privacy on a public road. The ties to place that connected Mr. Green to his grandfather are now associated with feelings of loss and disconnection due to the activities of the CAFO.

Another participant who lived near a proposed CAFO shared with me the story of how she and her husband had spent their lives working to pay off their farmhouse with the hopes of spending their retirement living in the country and the hopes to be able to provide a home for their children if they wanted it. Now that a CAFO was opening near her property, she didn't know what they were supposed to do. This had been their plan. Another neighbor of the same proposed CAFO told me that he and his wife had just built their home on property that had been passed down through multiple generations, but that his property value had already dropped drastically because of the proximity to the CAFO. Another woman described her decision to leave the home and farm that her husband and she bought right out of college:

“It was a hard decision but it's been at us for a while and after fighting this thing for five years...when we lost it and they started building, we just said, “we'll have to leave because there's nothing more we can do.” At that point, we can't put money into a house and fix it up...when we knew that the property value had been wiped out.” –Cindy, farmer

People are connected to landscape, through their memories and the memories passed down to them through story. They possess an emotional attachment to the roads, fields, homes, and streams that make up the geography of this place and also spiritual ties to the ‘ghosts’ of their ancestors and the memories of growing up here. Even for the people who did not grow up in the county, they also had a spiritual connection to the place, evident in the memories of moving here with their spouses, building a home, starting a farm, making friends with the neighbors, raising their children and all the other memories that come with building one’s life somewhere. The positive emotions like pride that are associated with their ties to place are increasingly mixed with negative emotions, implying that the positive ties to place and the animism associated with it have been damaged or altogether lost.

Ties to People

The last new form of dispossession that I offer here is the loss of positive ties to people. In this study, community members specifically voiced their concerns for the loss of the positive relationships they associated with their neighbors. Traditionally, participants described what it means to be a good neighbor as having social and moral obligations to each other. This description aligns with Tonnie’s descriptions of *gemeinschaft* and *social relations* (1887) as well as the subtype of communities of place (Brint 2001). Since the entrance of CAFOs in their communities, participants have seen a change in the relations between people where fear and intimidation is used to keep neighbors at a distance. In the following quote, Martha describes the change in neighbor-relations that she has seen in her community since the opening of the CAFO:

“You can see how things have changed in a negative way. We didn’t put our equipment up till our neighbor put their equipment up. If somebody needed help everybody jumped in. Neighbors took care of neighbors. Now you’ve got neighbors stalking neighbors. That makes no sense. If there was a light on in the barn and it was late at night and you happened to drive by, you knew there was something going on in that barn that needed help.” –Martha, rural neighbor of a CAFO

Let me give an example of the ‘stalking’ that Martha mentioned. One day a few of my participants drove me to see the CAFOs in their county up close. We were on a county road and had just turned around in front of one CAFO when a truck pulled out from the CAFOs property, cutting us off. The truck veered sharply, barely missing our vehicle, then proceeded to follow us the rest of way back to the participant’s home. At this point, the truck turned around and headed back towards the CAFO. One of the participants present on this trip commented:

“Every time you come down this road, you get escorted in and escorted out...They’ll take pictures of your license plate and turn it in to the sheriff.” – Mr. Green, farmer.

This atmosphere of fear and intimidation is eroding connections between neighbors.

Collin describes how his neighbors who are working at the CAFO act differently around him and how he feels like a distance has formed between the neighbors who work for the CAFO and the neighbors who oppose the CAFO’s presence:

“Cause whenever you see the [CAFO operators], they look like they’re ready to kill you. We’ve been told many times that their truck drivers are all carrying pistols, because they’ve been told that we’re gonna bomb em in the middle of the night or cut their hoses on their hydraulic lines or break in and steal their...I don’t know. We’re not. But they’ve been told that by the powers of change. To be careful because your neighbors hate you now. And we don’t but we don’t know how to reach out to them, and they don’t know how to reach out to us.” –Collin, rural neighbor to a CAFO

The former positive ties that were based on mutual helpfulness, obligation, and fraternal relationships have been replaced with negative ties between CAFO operators and other residents of the community. These negative ties go against the meaning that original community members assign to neighborliness and community.

“These CAFOs are not your neighbors. They are not the family farmers like what we grew up with. I’m a traditional fourth-generational family farmer. So, when they say they’re family farmers, they’re 110% against everything I stand for. We were taught to be stewards of the soil, to try to help the whole community, not just our family. We take care of the soil, the water, the animals in unison. That CAFO is doing one thing and one thing only: it’s making decisions for money and if it hurts the community so be it. That is not

what the traditional family farmer does. He farms in ways that helps others, not that controls or hurts others.” –Mr. Green, farmer

These changes in the community not only degrade people’s personal relationships with each other, they also corrode the ability of community members to work together. Henry has seen this happen in many communities after a CAFO enters. He describes it below:

“When you’re trying to get people together to pass a school bond or you’re trying to deal with an issue and you’ve got people on different sides of the CAFO issue that are involved in these different civil engagements then they lose the ability to function because they create a sense of distrust or disrespect because they’re either on one side or the other of the CAFO issue.” –Henry, retired Agricultural Economics professor

The most powerful quote about the change in neighbor-relations came from Rick, whose father’s last years were spent living and farming while surrounded by multiple CAFOs.

“It’s all about money. There’s no respect anymore. My dad just passed away. He said on his deathbed, there’s no fun in farming anymore. We don’t have any neighbors. He missed neighbors driving by slow waving at him and everything and now they go by 90 mph and don’t even look at you.” –Rick, Farmer

The former positive ties to people in the community were expressed alongside fraternal affects but with the entrance of CAFOs, participants noticed a crumbling of these positive neighborly ties and associate the new ways of relating to one another with fear, intimidation, and betrayal. Ending on a note of hope, however, I also found that in opposition to CAFOs, new communities were formed. Relationships developed between neighbors that did not exist before due to their mutual love for their land and desire to protect the community from negative changes that could result from proximity to a CAFO. The opposition created reasons for gathering, strengthened shared values, and created memories that will no doubt join the stories passed down from generation to generation.

CONCLUSION

Accumulation by Dispossession literature has thus far focused primarily on relationships to property and how the loss of one economic relationship is transformed into another. By describing dispossession with only economic examples, we do injustice to the multi-dimensional experiences of dispossession. In our current political system, the impacts of capitalism on state-centered rights to property and profit have taken dominance over the impacts of capitalism on associations people have with their communities. By focusing on state-centric rights, previous literature on dispossession has missed the chance to connect the implications of dispossession to the lived experiences of loss related to community that are non-economic or beyond economics. Furthermore, excluding emotional or spiritual ties from the discussion limits our understanding of why rural people are upset with the state. When critics of capitalism refuse to consider the cultural, social, or spiritual forms of dispossession or injustice at the hands of capitalism – when we solely focus on economic injustices – we do no better than the system we criticize and we provide a disservice to ourselves and our participants. That is why in this discussion, I presented three forms of loss related to community as a way to bridge the literatures of dispossession and community and begin the work of including non-economic forms of dispossession into the critique of capitalism. The dispossession of community, as a means to wealth accumulation for the industrial livestock industry, is here conceptualized as the loss of community ties. Affect is used by participants to explain the dissolved or tarnished relationships, illustrating the loss of ties. I've suggested three new forms of dispossession relating to the loss of positive ties associated with community. These additions were conceptualized as the loss of positive ties to ecological health; animism of place; and people.

The first form of dispossession that I presented here was the loss of positive ties to ecological health. The main concerns were related to the access to clean air and water. Access to

clean air and water are a part of property rights in the minds of rural Missourians, supporting the theoretical connection made by Ashwood *et al.* (2019). However, the loss of this access transcends the economic realm in which property rights occupies. It also includes the forms of loss associated with emotional connections to clean air and water. Positive ties associated with the ability to create and sustain life are replaced with negative ties associated with sickness and betrayal. Disempowerment also emerged as a major theme, as people expressed frustration with their inability to influence State action to prevent pollution. These experiences characterize the value of science over local knowledge in modern society's policy making arenas, leaving communities feeling vulnerable.

The second form of dispossession that I presented was the loss of positive ties to animism. People are connected to their landscapes by the knowledge of the family that lived there before them and the memories they made growing up there, or they felt bound to the area by their choice to move there, raise a family, or retire. Positive ties related to the stories and memories of a place gave meaning, and life, to the otherwise inanimate landscape and helped people understand their own identity. Some people were forced to leave while others had to stay and watch their landscapes change in ways they did not understand or recognize. The positive ties were replaced by a negative association with place, where people are not able to build the life they have chosen or live in the type of surroundings in which they desire.

Lastly, I presented loss of positive ties to people, in the sense that the presence of CAFOs eroded the social and moral obligations of the rural community. This resembles the erosion of the idea of *gemeinschaft* that Tönnies describes (1955). There was once a positive tie to neighbors based on the idea of what it means to be a "good neighbor". The change in dynamics between neighbors has been attributed to the entrance of the CAFO. This loss in neighborly ties permeates

both the social and cultural realms. New negative ties to CAFO owners and operators developed based on feelings of betrayal, threat, and distrust. As ecological health, animism, and people are crucial tenants that work as a definition of community for rural Missourians, the loss of the positive ties associated with these concepts serves to create *ontological insecurity* where people feel untethered, unconnected, lost, betrayed, and afraid in the places that they call home.

This is not the full extent of the story though. The dissolution of these community ties signaled by affect have encouraged new relationships between people based on a common vision of regaining local control over air and water quality and to restoring the *Gemeinschaft* picture of community. In Missouri and all over the country local groups have formed to oppose CAFOs as well as other forms of harmful industrial operations. These groups have brought people who may not have ever interacted before to combine their skills and knowledge to work together. New social networks between local groups and national organizations can equip rural people with the resources and information needed to mobilize against CAFOs and make changes in their communities.

Although ABD is a vital concept for understanding the consequences of capitalism on the poor and vulnerable, the data from this paper exposes a hole in the traditional way of thinking about ABD where economic losses for some are converted into economic gain for others. The relationships encompassed in community ties presented here are more difficult to visualize as being transformed into an economic opportunity, as there is not yet a monetary conversion for them. Yet the loss of the ties that make up the rural way of life are attributed by those experiencing them to the process of accumulation via the operation of CAFOs. Furthermore, under the traditional way of thinking about ABD, the thing that is lost by one actor is obtained by another. If one use a piece of land and it is seized by a more powerful actor, the former no longer

has the ability to benefit from that piece of land, but the more powerful actor does. This is not the case with the dispossession of community. The powerful actor does not gain the ties to community that are lost to rural people. Furthermore, the economic relations are undergirded by the trust that one has a *choice* to engage in the economic transaction. Affect, particularly the sensations of fear and betrayal, illuminate that dispossession is also an indication that what was once a choice has been transformed into a non-choice. Rethinking the concepts of dispossession allows us to understand that ABD is not as straightforward of a process as it has historically been depicted.

Another reason to rethink the concept of dispossession is to validate the experiences of loss based on local knowledge of community members. There is a common narrative among people who support industrial livestock operations that discredits the concerns community members have towards CAFOs as ‘non-scientific’ or ‘made up’. In this respect, communities impacted by CAFOs are connected to other communities fighting different sources of pollution. In both cases, the local knowledge of community members is almost always disregarded by the State in exchange for scientific risk assessments made by outside experts. In both instances, policy to regulate the source of pollution is based off of experimental or proxy data that does not indicate the health effects that community members who live with those effects see to be so obvious.

Rethinking dispossession is not only applicable to studies in rural areas. Interestingly, David Harvey (2003) talks about sense of place in urban environments as a ‘right to the city’ in which urban dwellers have a right to not only live in the city but to change the city to meet the desire of their hearts. Harvey’s idea of a ‘right to the city’ isn’t based on a codebook or a legal decision, as ‘rights’ are normally conceptualized, but rather on a ‘desire of the heart’. The

tradition of discussing rights in a way that's oriented around the state has completely missed certain rights that don't involve the state at all. These rights tie back to the alternative non-economic conceptualization of possession that I presented before. The 'right to the city' is a right to self-actualize, just as would be a hypothetical 'right to the country'. With any of the forms of dispossession presented here, whether we call them rights or possessions, it matters only that we recognize that they can exist even without the state recognizing them. This isn't some radical idea. Many of the codified rights that we have today are only codified *after* individuals or groups recognized that they had *lost* them. In 1948, the United Nations adopted the Universal Declaration of Human Rights declaring "all human beings are born free and equal in dignity and rights" but it would be ludicrous to say those rights did not exist beforehand, although they were at many times denied. In summary, a right exists with or without State recognition.

Dispossession of non-State recognized rights is still dispossession.

The results of this study implicate that the concept of dispossession, historically applied to economic losses in "peripheral" zones or under-developed countries, can also be used to explain non-economic experiences of loss experienced by non-displaced peoples in "core" regions of the world. I implore further studies to continue the work of connecting the concept of dispossession to the non-economic realms in order to better bring the experiences of loss by rural Americans impacted by industrial agricultural operations into the scope of critiquing capitalism. I am sure that dispossession can take many other forms that were not explored in this paper. Additionally, this line of inquiry can also be explored with communities fighting different sources of industrial pollution. Furthermore, dispossession literature lacks exploration of affects, such as positive and negative ties, which were explored here. I encourage more sociologists to explore how affect literature on loss can shed light on the impacts of industrialization.

Agricultural Exceptionalism in the Legal Race to Industrialization: The Fine Line Between Corporations and Landowners

INTRODUCTION

This study examines the process of agricultural industrialization in rural areas through the lens of policy to understand the role of the state. Much of the discussion of the industrialization of agriculture focuses on the impact that the scale of farming operations has on the socioeconomic wellbeing of rural communities. Some scholars conceptualize these impacts as a product of capitalism, where the market dictates what accumulates the most as the most efficient. Rural sociologists have afforded limited attention to policy, studying mostly anti-corporate farming laws and farm subsidies. However, scholars have afforded less attention to the state's role in privileging certain types of property rights, arguably the central tool of capitalism, and further, one of the most important cultural, political, and economic norms in the rural U.S.

We study Right-to-Farm Laws (RTFLs), arguably the main legislative mechanism reconstituting rural property rights in the U.S. today. The phrase Right-to-Farm captures statutes that exist in all 50 U.S. states. Supporters claim such statutes protect all farming operations, but particularly family farms, from nuisance suits leveled by sue-happy suburbanite neighbors who complain about odor, for example. Critics, though, disagree. In North Carolina, neighbors sued a subsidiary of Smithfield Foods for reduced quality of life and damaged air quality resulting from a hog operation and were initially awarded over \$500 million in damages, later reduced to \$98 million (Yeoman 2020). However, no national study has systematically explored who or what benefits from Right-to-Farm laws, and why. Building on a recent first of its kind national analysis of the statutes (Ashwood, Diamond, and Walker 2019), this paper uses qualitative and quantitative methods to perform a national analysis of 2018 Right-to-Farm Statues, the court

cases that have used RTFLs as a defense in court, and state specific sociodemographic and agricultural census data that helps explain differences between states.

In order to understand how RTF laws contribute to power dynamics associated with industrialization and globalization in rural areas, this study explores who RTF laws have successfully protected from nuisance lawsuits using an original typology to understand the parties of plaintiff and defendant. Secondly, the paper compares the major themes from the RTFLs that have helped industrial corporate operations prevail in court to RTFLS that have helped independent farmers prevail. Then the paper looks at socioeconomic factors related to the rural areas and farming demographics of the states where industrial corporate operations prevail versus where independent farmers prevail using RTFLs. Lastly, the paper offers suggestions for how to amend the language of a RTF law to achieve their original stated purpose, to protect independent farmers from becoming a nuisance due to urban sprawl, while allowing rural residents to hold industrial operations accountable in court.

This study finds that Right-to-Farm Laws largely benefit landowners, industrial livestock operations, and incorporated partnerships. When industrial livestock operations are parties in court, they are most often associated with a corporation. When landowners are parties in court, they are most often associated with family ties to agriculture. Furthermore, the analysis shows that Right-to-Farm laws allow parties who can label themselves as ‘agriculture’ to claim an exception to local regulation, reducing the democratic power of rural people. The paper further explores the specific statutes that appear to enable these types of operations, namely allowing operations to exist for only a year and then having immunity from nuisance suits and curtailing local capacity to zone out unwanted operations.

LITERATURE REVIEW

Industrial Agriculture

Originally, agricultural sectors were invested in solely to keep industrialization alive by ensuring a steady and low-priced food supply. Farm families performed much of the day to day labor themselves and with the help of animals or hired hands (Fitzgerald 2010). Industrialization was driven by the introduction of new and innovating technology that transformed the way people did everything, but especially the way things were produced. According to Polanyi (1944), the introduction of these new technologies was made possible by the desire for wealth accumulation, increasing demand in products, and an abundance in raw materials such as land and labor. Eventually, agriculture began to be viewed as a mechanism to achieve economic growth in a nation. With the introduction of technology such as the cotton gin and then a serviceable tractor farms began using more and more machinery and participating in industrial behavior (Fitzgerald 2010). After the post-WWII farm crisis, economists suggested that farmers start treating their farming operations like a business, specifically that they model their operations after a factory. The main elements of a successful factory were large scale production, specialized machines, standardization, and a mandatory standard of “efficiency”. These elements guaranteed a predictable profit for investors. They also allow what used to be a complicated job only attainable by a skilled artisan to be broken down into many small simple jobs that could be done by anyone, undermining the power of the artisan and giving that power to the factory operator or owner. Meanwhile farms at the time were seen as inefficient, chaotic, and wasteful. Investors in farmland saw a need to transform agricultural operations into something simple, standardized, and “efficient” that guaranteed a profit and took the decision-making power out of the hands of the farm laborers (Fitzgerald 2010).

Corporations particularly gained in the decline of small scale farming and the transition to more debt ridden and investment based agriculture. Scholars of industrial agriculture attribute this power dynamic to the liberalization of food markets, easy access to credit, and federal policies that favored high-production levels (Lyson and Raymer 2000; Van der Ploeg 2010). These changes alongside a growing global demand for high-quality products allowed corporations the decision-making power of operating from the top of vertically integrated models of production where they demanded standardized products (Lyson 2005). As demand for commodities grew with global economic growth, farms trended towards larger size and more industrialized to not only keep up with demand but be able to finance their operations. (Binswanger, Deininger, and Feder 1993). This completely restructured American agriculture by subjecting it to the market forces, and clearly defining agriculture as a sector of the capitalist economy. Farmers became consumers of industrial products like chemical and mechanical inputs rather than employing previous methods of internally generated inputs (Friedmann and McMichael 1989). Under vertical integration, the livestock industry shifted from small, family run farms to multiple dispersed, but centrally-owned and managed facilities all part of a larger limited liability corporation (LLC) (Smart 2016).

Unsurprisingly, research claims that the number of traditional “family farmers” is declining (Buttel and LaRamee 1991). However, the term “family farm” is used in a variety of contexts, often without a clear definition, which can lead to some conceptual generalizations and misconceptions about the state of agriculture in the nation. In the 2014 Family Farm Report, the USDA described “family farms” as “any farm where the majority of the business is owned by the operator and relatives of the operator”, claiming that 97% of U.S. farms are family farms (Hoppe 2014). There seems to be a consensus among authors that what differentiates a family farm is the

reliance upon family labor (Hill 1993; Garner and O Campos 2014; Djurfeldt 2008). However, sociologists have also proposed that family farms are unique in their intimate ties to the rural community and the way that goals are set and carried out strictly by families potentially over several generations (Garner and O Campos 2014; Chua, Chrisman, and Sharma 1999). Structural changes in agriculture and a strong push for increases in production have contributed to the trend of much larger farms and more and more financial obstacles for less competitive family-based operations. For instance, about 90% of household income for farm families comes from off-farm sources (Sommer et al. 1998). Over the past fifty years, scale, hired labor, use of vertical integration and contract farming have all increased while the total number of farms decreased. (Lobao 1990; Heffernan 1999; Lobao and Meyer 2001; Lyson, Torres, and Welsh 2001; Martinez 2002). According to the 2017 Census of Agriculture, 58% of U.S. farmland is larger than 2,000 acres and concentrated in only 4% of farm operations and hired labor expenses have increased by 11% since 2007. These changes in agriculture are all results of and mechanisms of industrialization.

Most of the research on industrial agriculture in rural areas is based around the negative impacts to rural communities. Walter Goldschmidt (1978) suggested that communities dominated by large corporations have a lower quality of life for their residents than communities with many small-to-medium sized businesses or farms. He attributed these differences to two factors: 1) who owns the productive assets of the community and similarly the ability of residents to own and work their own operations which gives them economic independence, and 2) the concentration of political power, which when dispersed widely across the community allows residents to engage in democratic action and retain local decision-making powers (Goldschmidt 1978). More recent scholars have contributed to this discussion by confirming the

negative associations between farm-size and community well-being (Lobao *et al.* 1993; Durrenberger and Thu 1996; Albrecht 1998; Lyson and Welsh 2005). Industrial livestock agriculture in rural areas has been linked to poverty, income inequality, a decline in population, increase in civil suits, stress, the deterioration of neighborly relations, and decline in the quality of local governance (for a full review see Lobao and Stofferahn 2008).

To holistically understand the processes of industrialization in rural places, a structural analysis of policies and state institutions can help illuminate how and why corporate industrial agriculture has gained such a foothold. Lyson and Welsh (2005) study anti-corporate farming laws, a policy similar to RTFLs in that they impact both rural communities and corporate agriculture, which effectively limit the ability of corporations to own agricultural land (Welsh, Carpentier, and Hubbell 2001) Other scholars have studied the effect of collective bargaining protections for farming cooperatives as well as how the structure of limited liability corporations allows certain protections to corporations that individual persons cannot achieve (Grow, Lyson, and Welsh 2003; Levins 2005; Ashwood, Diamond, and Thu 2014). And others have examined the state's role in determining risk and creating regulation for Concentrated Animal Feeding Operations and other forms of industrial agriculture (Burmeister 2002; Cassuto 2009).

Concentrated Animal Feeding Operation, or CAFOs, emblemize the most egregious outcomes of industrial agriculture, as they bring together the problems of farmers loss of sovereignty, public health risks of zoonic diseases, inhumane treatment of animals, environmental injustice, and loss of democratic self-governance (Henson and Bailey 2009; Bonanno and Constance 2006; Von Essen and Auvermann 2005; Williams 2006). The potential for poor management of the vast amounts of animal waste produced on CAFO sites poses risks to the contamination of ground and surface water, which can affect both ecosystems and public

health. Excess land application can lead to nutrient runoff, the eutrophication of surface waters, and the contamination of public well water sources (Pew Commission 2008). In addition, communities surrounding CAFOs are also exposed to large amounts of gaseous pollutants such as ammonia, methane, and particulate matter which can lead to various respiratory illnesses (Hribar 2010). Living near CAFOs has also been linked to psychological distress (Bullers 2005; Schiffman, Miller, Suggs, and Graham 1995).

The state's role in enabling the proliferation of CAFOs and other forms of largely corporate agriculture is complex and expands beyond agriculture. The American government has long allowed private interests to profit from industrialization so long as it could be argued they were filling a 'public need', which becomes confused with the accumulation of wealth (Ashwood 2018). Dryzek (2000: 94) points out that in capitalist systems it is markets, not public opinion, which influence policy decisions because any policy contradictory to business interests "must be vetoed, no matter how popular." Polanyi (1944) discusses that the State plays a vital role in keeping capitalism alive, by ensuring that the raw materials, such as land and labor, needed for capital accumulation stay in abundance, despite the consequences to people that may come of this devotion. Ashwood (2018: 34) calls this governance model a "For-Profit Democracy" in which the tenants of democracy that exist outside the market, such as community and culture, are sacrificed if necessary for the pursuit of profit. Rather than utilizing local knowledge to make decisions for and by the people the decisions directly impact, 'expert' bureaucrats are entrusted to make decisions based on utilitarian principles. Weber (1994) defined this organization of society as a bureaucracy, in which goal-oriented organizations fueled by rational principles of efficiency create an "iron cage" trapping individuals in systems based upon efficiency. According to Wendell Berry (1977), agriculture has become a bureaucracy in itself with

technological advances related to the values of productivity and efficiency taught to farmers as necessary in order to fill the American responsibility to “Feed the World”.

Taken this broader context into account, the State plays a crucial role in the industrialization and corporatization of agriculture. Most commonly traced to the time of Earl Butz’s famous ultimatum, “Get Big or Get Out!” policies and practices have been orchestrated in order to liberalize the market, open up access to sources of credit, and favor means of production with the highest production capabilities (Lyson and Raymer 2000). Furthermore, the State achieves capital accumulation and food security for a few while compromising the ability of others to achieve the same (McMichael 2006). In this way the agricultural sector has enabled corporate, multi-national organizations to capitalize and gain power in decision-making arenas while the financial and organization hurdles to keeping an independent, diversified, family farm are ever growing.

Right-to-Farm Laws

Right-to-Farm Laws (RTFLs) appeared at least initially to try to stop problematic trends that subjected farmers to increasingly expansive urban sprawl and the inconsiderate needs and wants of a non-rural population (Lapping and Leutwiler 1987; Lisansky 1986; Reinert 1998). The language of RTFLs vary by state in the terms they use to define a farming operation and the additional requirements they ask of farmers in order to be protected under the statute. For instance, 46% of statutes grant a farming operation immunity from nuisance claims if it has been in operation for one year or more, while 16% of statutes grant immunity if the operation existed before the plaintiff moved to the area (Ashwood, Diamond, and Walker 2019). RTFLs began to appear in the 1980s as a codification of the “coming to the nuisance” idea and were originally praised for protecting family farmers from urban expansion (Lapping and Leutwiler 1987;

Reinert 1998). However, legal scholars largely moved in a distinct direction since the late 1980s, writing that RTFLs benefit large industrial operations more than small farmers with rural residents, rather than suburban newcomers, as the main plaintiffs in nuisance lawsuits (Hamilton 1998). Scholars have found that the typical defendants in agricultural nuisance cases are livestock operators and the typical plaintiffs were rural residents and that the language in RTFLs tend to favor larger operations (Reinert 1998; Beidel 2005). For instance, in Michigan, the RTFL includes ‘voluntary regulations’ that grant the farmer absolute immunity, but the regulations are so costly that only farms with large amounts of capital can afford to implement these changes (DeLind 1995). The propensity to favor larger operations has led some in the legal community to judge RTFLs as ineffective (Hamilton 1998).

Still, there has yet to be a comprehensive national analysis of who benefits from these laws in cases filed. As such, we have a limited understanding of how a policy that purports to protect family farms to the benefit of rural communities actually plays out. Recently the laws have gained publicity in the media due to community members calling into question the power of the State to privilege certain property rights over others. In the market economy property rights are about privatization: who owns the land, but in the age of industrial agriculture property rights are more complex, including not only who owns the land but who is able to use it (Ashwood *et al.* 2019). This is a question of access, which differs from property in that property is a “right” and access is an “ability” (Ribot and Peluso 2003). For example, a landowner may have the right to use his/her property but be unable to do so in the manner they wish because of the smell from the neighboring industrial hog-farm. Still property and access are concepts about so much more than a legally owned resource. They extend to the rights and access to clean air and water

(Ashwood *et al.* 2019). RTFLs are believed by some in the legal community to limit the environmental rights and access of rural people (Hamilton 1998).

Thirty years after the first RTFL was passed, all 50 U.S. States have a version of the Right to Farm law and we found over 170 electronically available lawsuits utilizing RTF defense for an agricultural operation. To date, a national analysis of case law utilizing RTFLs has yet to be completed, leaving largely unknown whether RTFLs are protecting larger operations or intergenerational smaller farmers. Relatedly, there is little understanding of the key RTFLs language used in cases and suits. This paper provides the first of such analyses, demonstrating the ability for industry to benefit from the Right-to-Farm defense as well as the nuance in the way the laws are being used across the nation.

METHODS

This study is part of an overarching national analysis of RTFLs and related case law. Conducting the analysis at a national scope allowed for tracking state-level characteristics like region and rural poverty for trends between prevailing defendants and state attributes. Building on the previous work of Ashwood *et al.* (2019), a five-member, interdisciplinary research team gathered 2018 RTFLs, as well as the language from when they were originally proposed – typically in the 1980s. In total, we analyzed 100 RTFL files. Next, we analyzed the case law where RTFLs are used to defend an agricultural operation in court. We gathered 170 case law summaries that used RTFLs as a defense for an agricultural operation. We chose to only include case law that had an in-depth discussion of the state’s RTFL and exclude cases where the RTFL was only mentioned in a footnote or another form of mere mention.

All of the data was qualitatively coded within the NVivo software program. Together, the team created a codebook by open-coding separately and discussing emerging themes. Once a

codebook was agreed upon, we divided the states among the five of us, occasionally common coding one file to check our inter-coder reliability. Towards the end of our project our Kappa Score was at 94%. Our codebook consisted of 177 codes. In legal practice, the most subtle differences in the wording of a phrase can have monumental implications on a judge's interpretation. Therefore, we coded for subtle differences in statutory language, resulting in the extensive codebook. We coded statutes and case law, with some codes that could be applied to both types of documents and some codes that only applied to one type of document. For each case law, we tracked several attributes, including "plaintiff type" and "defendant type" based on a typology we developed.

We created the party typology similarly to how we developed our codebook: by first reading case law files and characterizing party members individually and then discussing our analysis and making a final decision together. Together we would decide if a new type should be added to our list or if two or more types were similar enough to be consolidated. After several rounds of discussing and editing, we finally reached a point of saturation with our party types where for multiple meetings we didn't feel the need to add a new category. Therefore, we solidified our list and were able to start a division of labor in coding for party type. We did not pull from an already existing list to develop our typology but instead let it develop from the data. We did draw from legal terms for ownership models that were distinctly stated as such in the data. We also chose to not include 'family farm' as a type because 'family farm' does not have a universally accepted definition nor is it distinctly defined by the USDA. Instead we have a number of party types that resonate with some common descriptors of family farm, such as 'Agricultural Family Ties', 'Homeowner', and 'Sole Proprietorship'. In some cases, there were multiple types of defendants or plaintiffs which we recorded by having multiple attributes for

defendant and plaintiff types (i.e. ‘Defendant type 1’ and ‘Defendant type 2’ etc.). There were also cases in which one defendant or plaintiff could fit into multiple categories, which was accounted for in the same manner. See Appendix A for a full breakdown of the defendant/plaintiff typology we developed.

After the coding process finished, I used queries in NVivo to determine which party types prevailed. In this paper, when the word ‘prevail’ is used, it means a party has obtained a judge’s disposition (ruling) in their favor. I first compiled the descriptive statistics for the attributes ‘plaintiff’ and ‘defendant’ types to understand the characteristics of the parties participating most often in case law that utilized RTFLs. I then determined those cases in which each party type prevailed and recorded this as a percentage of the total number of case law in which each party type was involved. These percentages would never add up to 100% because the plaintiff and defendant types were often co-attributed with a second or third party type.

I searched for the descriptive statistics to understand which party types are most often co-attributed together. Beyond that, I explored which party types are co-attributed together and prevail. I reported the top 5 co-attributed party types in all cases and in cases that prevail for defendants or plaintiffs respectively. The rest of my analysis focused on the two most common combinations of party types. I identified the cases in which the parties prevailed in each combination type and then reported the states those cases occurred in. I then identified the most common coding applied to the RTFLs in each grouping of states and which codes occurred more often in one group than the other. Lastly, I report the averages of certain socioeconomic factors for each grouping of states, such as percent farm dependency, percent rurality, percent rural poverty, percent rural racial minority, average farm value, and percentage of farm size by income. This is to contextualize the way RTFLs are being used within the social conditions of

the rural people who utilize or are impacted by the operations that utilize them. For a full breakdown of these state socioeconomic factors with definitions and sources of information, see Appendix B. In addition to socioeconomic factors, I reported the number of cases and cases prevailed in for the two party combination groups by the region of the state the case was in. Finally, I used data about farm size by inventory and the number of farms in each state with inventory sizes that can be defined as ‘small’, ‘medium’, and ‘large’ to determine the percentage of states in each party combination group fell within the top ten U.S. states for ‘small’ or ‘large’ farms. I report this by livestock type and the percentage of states that are within the top ten for any type of large or small farm.

RESULTS

Descriptive statistics of all 170 Right-to-Farm case law utilizing the party typology reveals what types of descriptors most commonly apply to those people or entities who prevail utilizing Right-to-Farm laws in court. I present findings of the most common party types in RTF case law in general and the party types that prevail the most (see Figures 1, 2, and 3). I also present party types that prevail the most often when in association with another party type (see Figures 4 and 5). Lastly, I show the results of a comparison between two of these prevailing associations. Specifically, I display the differences between language of RTFLs, socioeconomic, and agricultural data of the states where these two different party type associations prevail (see Tables 2, 3, 4 and Figures 6, 7, 8).

Agricultural Family Ties is the party type that prevailed in the greatest percentage of cases they were involved in. Agricultural Family Ties (AFT) was applied to parties in cases where the case law file describes an agricultural operation having a broad connection to family. AFT prevails in a higher percentage of their cases than any other party type. While AFT does

encompass forms of farming that rely solely or mostly on family labor and family decision-making, the typology is not limited to these factors, and may include industrial or vertically-integrated forms of agriculture that can claim a connection to the family. For this reason, Agricultural Family Ties alone should not be assumed to represent the family farm ideal. Instead, one can examine which other party types Agricultural Family Ties is coupled with in a case law to get a clearer picture of whether the party in that case is more descriptive of a model family farm or of an industrialized operation contracting with a corporation. If Agricultural Family Ties prevail when they are not associated with CAFOs or Corporations this indicates that RTFLs are effective at protecting operations where family members make on-farm decisions. This is discussed more in-depth later on.

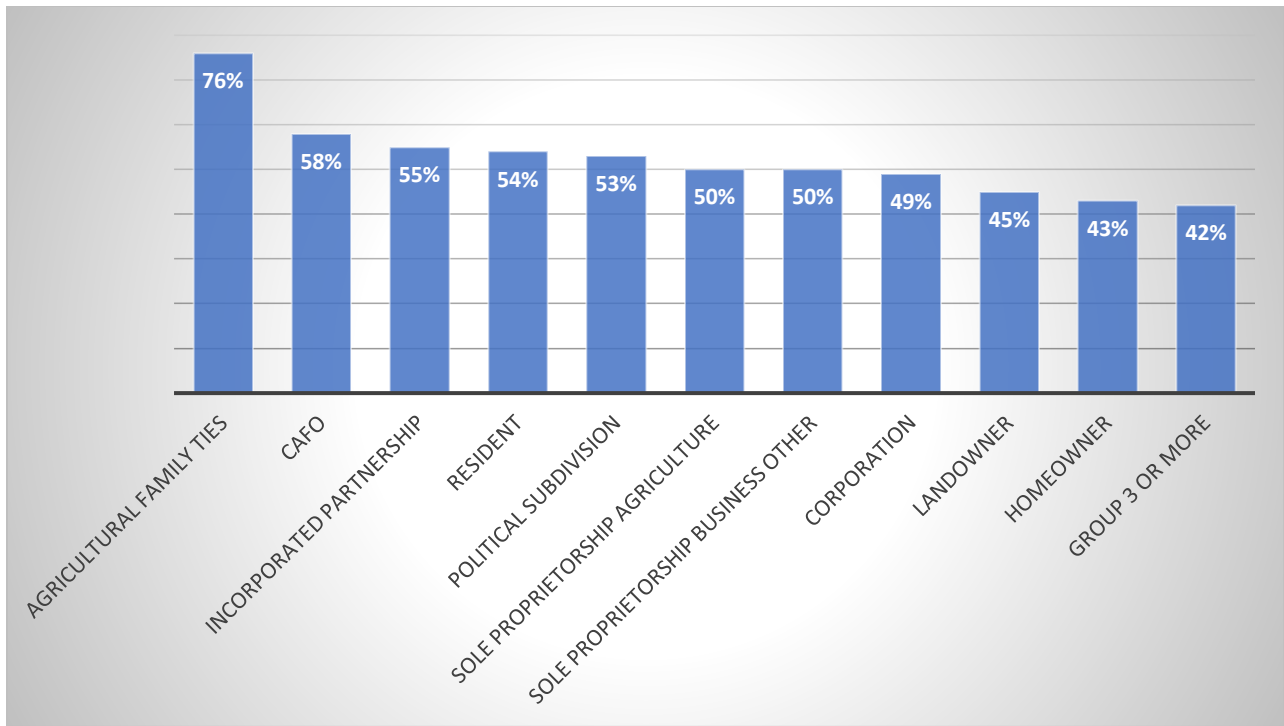


Figure 1. Percentage of Cases Won by Party Type in Right-to-Farm Case Law

CAFOs successfully utilize RTFLs in court the second-most often, prevailing in 58% of the cases they are involved in. Concentrated Animal Feeding Operations (CAFOs) are only

attributed to parties when the case law distinctly described the operation as so or when it could be inferred from the description of the operation. Because of this strict designation, there may be cases involving CAFOs that are not labeled as so. Considering the environmental and public health risks associated with CAFOs as well as the controversy in rural areas, the ability for CAFOs to prevail using a RTFL is significant. RTFLs are utilized to protect CAFOs in court signifying that Right-to-Farm can act as an open-door for industry and the associated consequences in rural areas.

Incorporated Partnerships prevail in the third greatest percentage of the cases they're involved in. This type describes a party where two or more individuals own any business with a corporate structure. Incorporation offers the legal benefit of protecting personal assets from lawsuits. There are several levels of liability protection for incorporated partnerships which were not designated in our analysis. Incorporated partnerships win over half of their cases, although they're involved in less than 10% of all RTF cases. The ability of incorporated partnerships to prevail so often suggests that the RTFLs may be benefitting investors from accountability to the neighbors that their operations impact more than they are benefitting rural communities from urban sprawl.

Another ownership model that was used in the typology is sole proprietorship. Sole Proprietorships are operations where a single individual is listed as the owner. Sole Proprietorships do not have the same liability protections as incorporated operations, meaning that individuals are responsible for all legal liability of the business. In our analysis we coded for two types of sole proprietorships: sole proprietorship *agricultural* and sole proprietorship *business other*. Sole Proprietorship Agricultural describes scenarios with a single farmer or farm operator running a farm business without a formal legal entity. This was also used for married

couples running a farm business together. These operations win about half of their cases. This is considered alongside the effectiveness of RTFLs for other ownership models such as Incorporated Partnership and Corporation (discussed later) show that RTFLs have varying impacts for farming operations depending on the legal structure. Sole Proprietorship Business Other refers to any non-agricultural operation legally structured as a sole proprietorship, such as day-care facilities or summer camps. This party type was involved in RTFLs very rarely but prevailed in half of their cases. Their ability to prevail shows that non-agricultural forms of business have the ability to protect themselves from the activities on a nearby farm that threaten the profit of said business if the farm does not meet certain conditions of the RTFL.

Scholars and legislators alike in the 1980s justified RTFLs by saying that farms were at risk of being sued by suburban newcomers. Our data reveals a more nuanced story where the rural community takes up a large amount of space in RTF suits, taking both the roles of defendant and plaintiff. We portray this phenomenon through the presence of party types such as resident, homeowner, groups of three or more, landowner, and political subdivision. Residents win over half of the cases they're involved in. The type 'resident' was created to encompass parties that rent land and/or home or for whom the case law file did not specify ownership. It represents people who live near the operation. A prevailing Resident can signify one of two things that is beneficial for rural communities. First, the RTFL can be living up to the legacy of protecting previously established farming operations from newcomers who aren't familiar with the farming lifestyle. Secondly, a Resident could be the one bringing the case and successfully using the RTFL to defend their community from the negative impacts of a new operation that acts in negligence. Residents often win cases when in association with homeowners, groups of three or more, and landowners.

The type 'homeowner' was applied only to parties where the case law distinctly stated ownership of home. It does not apply to renters. Homeowners are involved in a quarter of all case law and prevail in less than half of their cases. However, when they do prevail they are often plaintiffs and associated with residents or landowners. This supports other findings of this study that the RTFLs can be used to protect rural communities against unwanted agricultural activity if the operation does not meet the conditions of the RTFL and if the individual(s) bringing the suit has diverse relationships to the community such as being a homeowner *and* a resident/landowner.

Groups of three or more designates cases with at least three separate members on one side of the case, such as Basor vs. Rocha in which there were 5 plaintiffs: an agricultural landowner, an investor in the land, and 3 family members of the investor. The plaintiffs sued a neighboring landowner for surface water runoff that they claimed was damaging their property (2004). Forty-five cases and 26% of all case law had at least one party with three or more members. When this type did prevail, they were most often associated with a Corporation (addressed later) as a defendant or a Resident as a plaintiff.

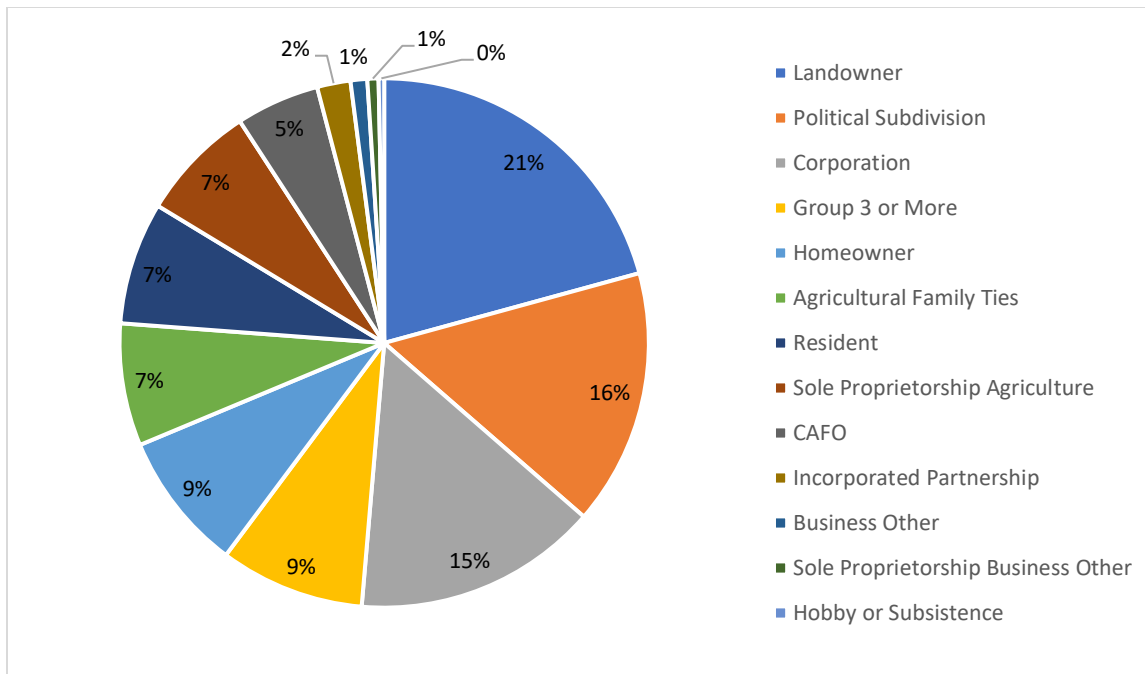


Figure 2. Percentage of All Right-to-Farm Cases by Party Type

Landowners are the most common party type in RTF cases overall. This party type was attributed to those for whom the case law distinctly stated ownership of land. It does not apply to renters. On their own, landowners are not very successful at winning cases, but when in association with other types, they rank among the party type associations to prevail the most. When they prevail as defendants, they are most often associated with either Agricultural Family Ties or Corporations. When they prevail as plaintiffs, they are most often associated with Homeowners, Residents, or Agricultural Family Ties. This implies that RTFLs will be more beneficial to landowners when they are tied to a family related farming operation, a corporation, are homeowners or live in the community. The prevalence of Landowners in RTFLs supports the literature that centers the RTF on property rights – those of the defendant or the plaintiff.

Still, our results reveal that the significance of RTFLs extend beyond relations of property. Political Subdivisions also play a major role, a category that includes a governmental entity at the local level such as county commissioners, townships, or villages. A prevailing

Political Subdivision is crucial for continued democratic control in localities. Political Subdivisions nearly always represent the local community. A win for a political subdivision signifies the use of RTFLs to defend local decision-making. For example, in *Bice vs. City of Rexford* (2018) the city of Rexford, Kansas passed an ordinance outlawing farm animals in the city limits and filed a notice to Tony and Lisa Bice that they had violated the ordinance by keeping horses in the city limits. However, the Bice's had kept horses for commercial purposes before the ordinance was passed and claimed the RTFL excluded them from following the ordinance. Here, the city attempted to hold an agricultural operation accountable to a local ordinance passed after the RTFL and the agricultural operation used the RTFL to exclude their operation from the regulations of local ordinances. In another case involving political subdivisions, the City of Benton, Washington filed a nuisance suit against the owners of an orchard due to the excess irrigation water that was being discharged and drained onto city property (*City of Benton City vs. Adrian* 1988). In this scenario, the city attempted to prevent operations on the farm from polluting or degrading other properties nearby the farming operation. Political Subdivisions are the second most popular party type involved in RTF case law and win over half of their cases, showing how partnering with a governmental entity can help rural communities achieve a favorable outcome against industrial operations.

Corporations are the third most popular party type overall. They win just under half of the cases they're involved in. A corporation is a very complicated form of ownership and operation that is legally recognized as an individual. This prevents investors from financial liability. When they prevail in court, they are often associated with CAFOs, Agricultural Family Ties, Landowners, and Groups of three or more. In *Norman vs. Prestage Farms, Inc.* (2007) a community of landowners sued Prestage Farms for the offensive odors coming from one of their

contract farms in Mississippi. Prestage Farms, headquartered out of Clinton, North Carolina, is the 6th largest pork producing company in the U.S. In 2018, the company produced a total of 182,300 sows, or female reproductive hogs (Freese 2018). This case exemplifies how when communities try to remedy local offenses resulting from the practices of livestock operations contracted with out-of-state companies, those companies can attempt to use the RTFL for protection. The corporation involved may also be the party bringing the case. For example, in *Mayes vs. Tabor*, the owners of an incorporated summer camp sued the neighboring hog farmers for odors emanating onto the property of the summer camp (1985). The finding that Corporations are one of the most common parties involved in RTF court cases requires a reconsideration of early ideas about RTFLs protecting small independent farmers who couldn't afford to stay in business after paying the legal fees of a nuisance lawsuit. While incorporation does not immediately signify wealth, recent literature on the ownership arrangements and liability protections afforded to incorporated operations beg us to consider whether RTFLs are protections for farmers or protections for investors. It is significant to note that Corporations are involved in RTF court cases more often than Sole Proprietorship Agricultural (SPA) operations, which implies that RTFLs may be more beneficial or more applicable to farms operated at a more highly industrialized setting with complicated ownership and funding arrangements than for small independent farmers. ¹

¹ There were two party types that we coded for that did not prevail in any of their cases. The first of these is business other. Business Other represents businesses that are not agricultural in nature and do not qualify as a sole proprietorship, incorporate partnership, or corporation. This type very rarely appeared in the data and never prevailed in court. Their implications for rural people are very minimal. If anything this shows that non-agricultural businesses may attempt to use the RTF defense but will fail unless specifically outlined by the statute as included under the RTF protection. The second of these is Hobby or Subsistence Operations. This type was applied to agricultural operations that do not meet the requirements for commercial agriculture. RTFLs generally specify their protections to commercial operations, however hobby farmers, or those who grow just to feed their families may try to resist local ordinances especially zoning laws related to livestock restrictions using the RTF defense. This has yet to be successful for anyone.

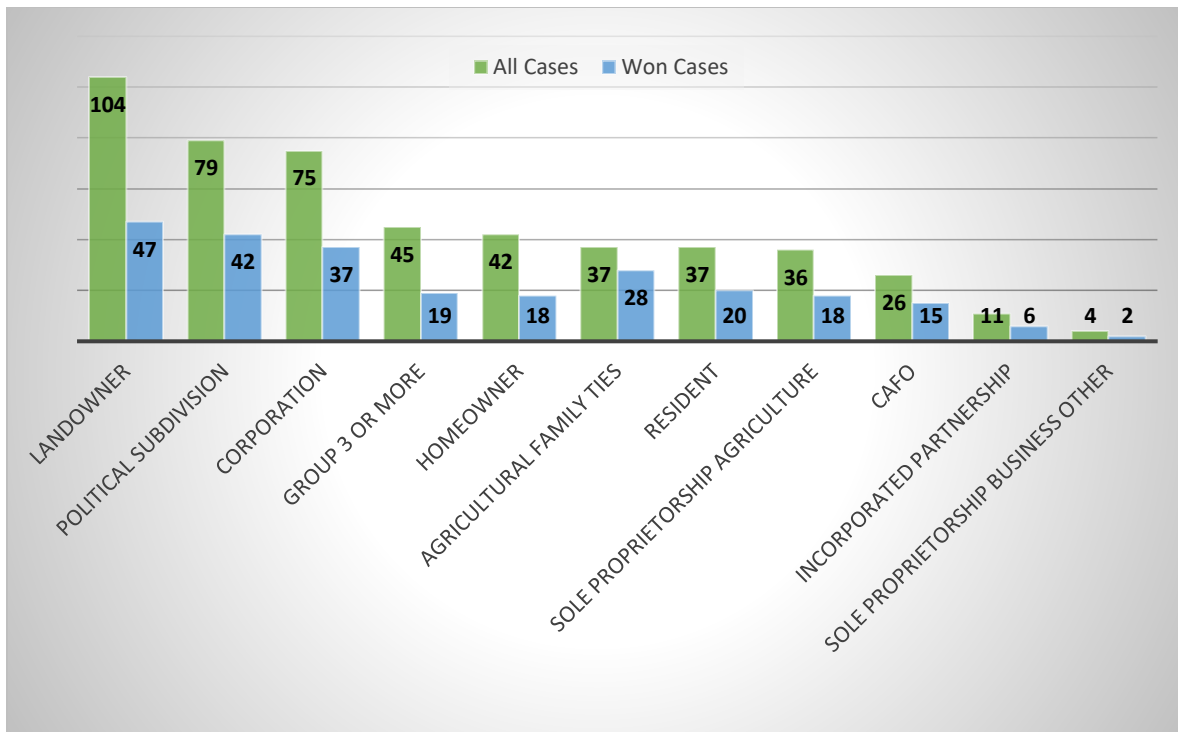


Figure 3. Total Right-to-Farm Cases and Cases Won by Party Type

Associated Party Types in Won Case Law

This section pertains to those situations whenever the party of defendant or plaintiff is either a) one entity that meets the definition of two or more party types or b) multiple entities that meet the definitions of two or more party types. For example, our defendant may be a person who owns their land and raises hogs under the CAFO model. This one entity would be associated with both the Landowner and CAFO party types. Another example would be if that same person contracted with a corporation such as Pipestone, LLC and Pipestone was included in the list of defendants. In this case, the party types would Landowner, CAFO, and Corporation. The following discussion explores the most common party type associations in cases where the party types won using the RTFL.

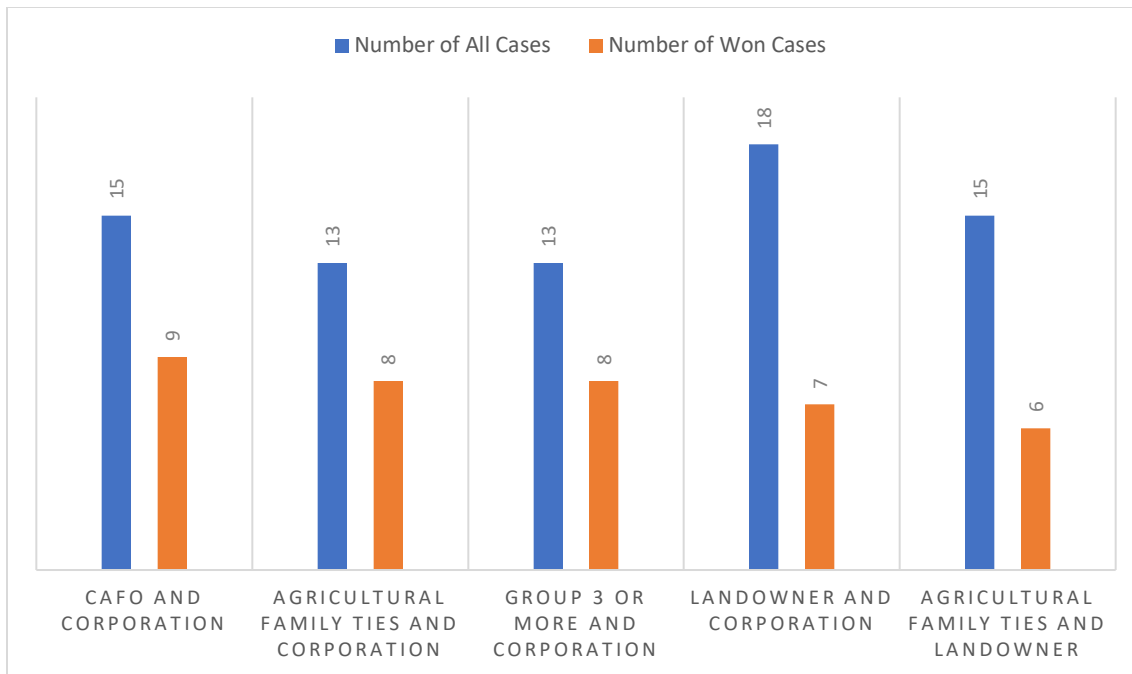


Figure 4. Most Common Defendant Party Type Associations in Right-to-Farm Case Law

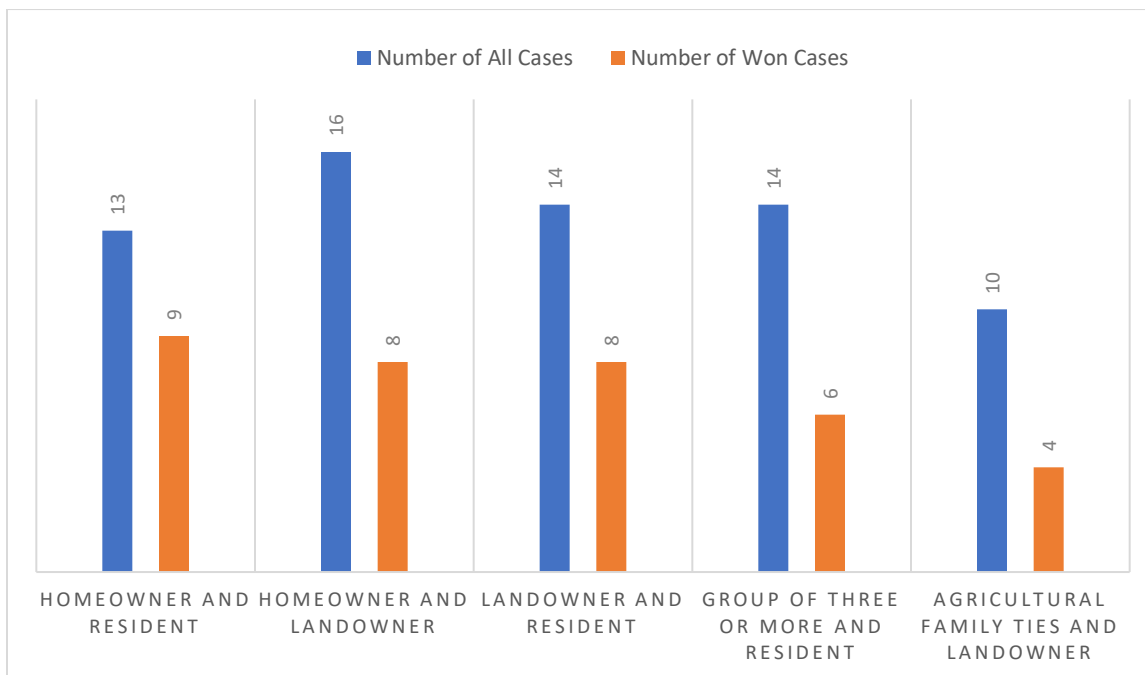


Figure 5. Most Common Plaintiff Party Type Associations in Right-to-Farm Case Law

Looking beyond individual party types and the related successes in court to understand which defendant or plaintiff types are typically involved in cases together and how often those

couplings prevail in court can provide a more nuanced understanding of how the RTFL is utilized and for the benefit of who. The above figures show the top five most common combinations found within RTF case law for defendants and plaintiffs, respectively. Looking primarily at types that were defendants, Corporations were co-attributed with another type in 4 of the top 5 pairs. In comparison, Agriculture Family Ties and Landowner were both individually co-attributed within 2 of the top 5 pairs. Additionally, Corporations are present in four of the top five prevailing combinations of defendants. Agricultural Family Ties and Landowner are each present in 2 of the top 5 prevailing combinations. Residents and Landowners are each within the top three of the top 5 plaintiff combinations that prevail. Homeowners are in 2 of the top 5 plaintiff combinations that prevail.

The defendant combination ‘CAFO and Corporation’ prevails the most in courts. An example of this association can be found in *Pasco County vs. Tampa Farm Service, Inc. (1991)*, where a Florida Farming Corporation was sued for the violation of a county waste disposal ordinance after it changed its process for using chicken manure for fertilizer which created additional odors. Tampa Farms successfully argued that this change was not excessive, met generally acceptable practices of a farming operation, and therefore met the conditions to be protected under the RTFL. The other most successful groupings of defendant types are: ‘Agricultural Family Ties and Corporation’, ‘Group 3 or More and Corporation’, ‘Landowner and Corporation’, and ‘Agriculture Family Ties and Landowner’. With exception to the latter grouping, Corporations tend to prevail in court when coupled with an operation seen more like the traditional image of farming or a rural area. For instance if a corporation can model itself as a family farm, or partner with a family farm, a large community group, or a landowner they can achieve a verdict in their favor as a defendant.

The plaintiff type combination ‘Homeowner and Resident’ prevails the most in court systems. “Homeowner and Landowner” is the second most popular combination type followed by “Landowner and Resident”, “Group 3 or More and Resident”, and “Agricultural Family Ties and Landowner”. The parties “Homeowner” and “Resident” are the most common types to be combined with another type to result in success for the plaintiff in court. RTFLs provide some room for community members that have more permanent connections to the community to hold agricultural operations accountable for nuisance actions.

Two of the most common combinations of defendant types, ‘Corporations & CAFOs’ and ‘Agricultural Family Ties & Landowners’, are distinct in terms of the practices and ownership arrangements associated with them. These couplings exemplify the debate within the RTF literature about whether RTFLs practically give independent family farms the same level of protection as they do the industrial operations, with ‘Agricultural Family Ties and Landowner’ feasibly representing the independent family farms and ‘CAFO and Corporation’ likely representing the industrial operations.² An example of Agricultural Family Ties and Landowners prevailing is found in *Groat v. Brennan* (2006), the defendant was a landowner who operated an alpaca farm and kept two Great Pyrenees dogs as livestock guard dogs. The neighbor complained of the sound of the dogs barking, but the court using the RTFL ruled that the use of guard dogs is a sound agricultural practice and therefore could not be found as a nuisance. In contrast, *Barrera v. Hondo Creek Cattle Co.* (2004) gives an example of Corporations and CAFOs prevailing. *Hondo Creek Cattle Co.* operates a feedlot in Texas. Neighbors brought the operation to court alleging the flies, dust, and smell created nuisance conditions on their property. The court ruled

² 3 cases that were in both CAFO and Corporation (DTs) and AFT and Landowner couplings:

1. *Wendinger v Forst Farms*, MN 03, Disposition for Plaintiff
2. *Winter v Gourley Premium Pork LLC*, MN 16, Disposition for Plaintiff
3. *ShuttleWorth v Knapke*, OH 03, Disposition for Defendant.

in favor of the cattle feedlot since the one-year time limit to find an operation a nuisance had passed. The prevalence for Corporations to prevail in court alongside CAFOs reveals that RTFLs are being used as a protection for industrial modes of production, the risks of which have no incentive to be mitigated due to the limited liability structure of Corporations. Second of all, Corporations prevail by associating themselves with staples of the rural community such as family farming or landowners, benefitting from the same narrative that farming is special and should be an exception to certain accountability that persuaded rural people to support RTFLs in the first place.

It is compelling to study the differences in the language of the RTFLs in states from the two different groups in order to understand the nuanced implications of the laws. Just as the language of RTFLs varies, the types of activities specifically protected by the law and the conditions an operation must meet in order to fall within the protections of the statute varies. Below, Table 2 outlines the states where each party type association prevails using the RTFL in court and Table 3 displays a comparison of the codes more prevalent in the statutes from each group of states.

Table 2. State Comparison by Prevailing Defendant Type in Right-to-Farm Case Law

CAFO and Corporation	Agricultural Family Ties and Landowner
Florida	California
Indiana	Minnesota
Missouri	Montana
<i>Ohio</i>	New York
Pennsylvania	<i>Ohio</i>
<i>Texas</i>	<i>Texas</i>

Note: States indicated with italics are where both party types prevail.

Table 3. Statutory Language Comparison by Prevailing Defendant Type in Right-to-Farm Case Law

CAFO and Corporation	Agricultural Family Ties and Landowner
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1 year immunity	3 year immunity
Immunity if boundaries or size of operation changes	2 year immunity
Immunity if not a nuisance at the time operation began	
Machinery as definition	Farmer as definition
	Facility as definition
Superseding local ordinances	
Agricultural exceptionalism	

Conditions Protected

Most RTFLs have a section outlining a list of conditions a farming operation must meet in order to qualify for the statutory protection in court. One of the most common of those conditions is an amount of time the farm needs to have been operating before the nuisance suit was brought. States where the CAFO and Corporation association prevail more often stipulate that the farm needs to have existed for at least one year before the nuisance suit was brought in order to qualify for protection under the RTFL. In comparison, states where Agricultural Family Ties and Landowners prevail are more likely to require a longer period of operating time before the operation can qualify for protection under the RTFL. For example, Minnesota’s RTFL states, “An agricultural operation is not and shall not become a private or public nuisance after two years from its established date of operation as a matter of law...” (2018). Often Right-to-Farm laws will lay out specific activities that are protected. In states where CAFOs and Corporations prevail, the change in boundaries or size of an operation is more prevalent than in states where Agricultural Family Ties and Landowners prevail. For example, in Indiana, the statute declares that an agricultural or industrial operation will not become a nuisance as long as it has operated for at least one year and there is no significant change in conditions. It goes on to outline a list of things that *do not* qualify as a significant change including producing a new type of agricultural product, a change in ownership, or adoption of new technology (2018)

Definition of ‘farming operation’

RTFLs often define what a ‘farming operation’ is in the statute, which can provide clarity in the court. However there are various different ways that farming operations are defined. States where CAFOs and Corporations prevail will more often use the term ‘machinery’ in the definition of farming, while states where Agricultural Family Ties and Landowners prevail will more often use terms like ‘farmer’ and ‘facility’. For example, the California RTFL states:

“For the purposes of this section, the term agricultural activity, operation, or facility, or appurtenances thereof shall include, but not be limited to, the cultivation and tillage of the soil, dairying, the production, cultivation, growing, and harvesting of any agricultural commodity including timber, viticulture, apiculture, or horticulture, the raising of livestock, fur bearing animals, fish, or poultry, and any practices performed by a *farmer* or on a farm as incident to or in conjunction with those farming operations, including preparation for market, delivery to storage or to market, or delivery to carriers for transportation” (2018).

Local Control & Agricultural Exceptionalism

Some RTFLs reference the power of local governments to pass ordinances that regulate agriculture outside of the RTFL itself. CAFOs and Corporations prevail in states with statutes that are more prevalent to outline that local ordinances cannot restrict or regulate agriculture beyond the RTFL or that the RTFL makes future ordinances impacting agriculture null. In this way, the RTFL is understood to supersede local governments. For example, the Florida RTFL reads:

“It is the intent of the Legislature to eliminate duplication of regulatory authority over farm operations as expressed in this subsection. Except as otherwise provided for in this section...and notwithstanding any other provision of law, a local government may not adopt any ordinance, regulation, rule, or policy to prohibit, restrict, regulate, or otherwise limit an activity of a bona fide farm operation on land classified as agricultural land...” (2018).

RTFLs in which CAFOs and Corporations prevail exemplify a theme that this project’s team members labelled *agricultural exceptionalism*, which is the rhetoric and statutory

protections given to agricultural operations that prevent them from being regulated in the same manner as other sectors of the economy. The specific operating conditions that are spelled out in the statutes as excluded from being identified as a nuisance are one example of this theme's presence in RTFLs. Another example is in the rhetoric that RTFLs use to rationalize these statutory exclusions by emphasizing the importance of agriculture to the state economy. For instance, the Pennsylvania RTFL begins like so,

“It is the declared policy of the Commonwealth to conserve and protect and encourage the development and improvement of its agricultural land for the production of food and other agricultural products. When nonagricultural land uses extend into agricultural areas, agricultural operations often become the subject of nuisance suits and ordinances. As a result, agricultural operations are sometimes forced to cease operations. Many others are discouraged from making investments in farm improvements. ***It is the purpose of this act to reduce the loss to the Commonwealth of its agricultural resources by limiting the circumstances under which the agricultural operations may be the subject matter of nuisance suits and ordinances***” (2018).

The code ‘agricultural exceptionalism’ was present in 67% of cases where Agricultural Family Ties and Landowners prevailed and 78% of cases where CAFOs and Corporations prevailed. More generally, the code ‘agricultural exceptionalism’ was used in 54% of all case law and 98% of all case law where the party arguing for it prevailed. This was a crucial finding of our analysis. If a party can claim they are agricultural then they can also claim to be an exception to local ordinances and accountability to their neighbors in court. We’ve already presented several tenets of Right-to-Farm Laws that enable industry and chip away at rural democracy, but the overwhelming presence of agricultural exceptionalism in our data may be the most important element allowing industrialization of agriculture to permeate rural areas leaving communities with little options to stop it. While the code is clearly being used by parties other than industry, it is more often used by CAFOs and Corporations with much more dire consequences for rural areas. When a factory farm is recognized by the State as agriculture and

the State sets a precedent that agriculture is too important to be overseen by local forms of government, rural people lose power.

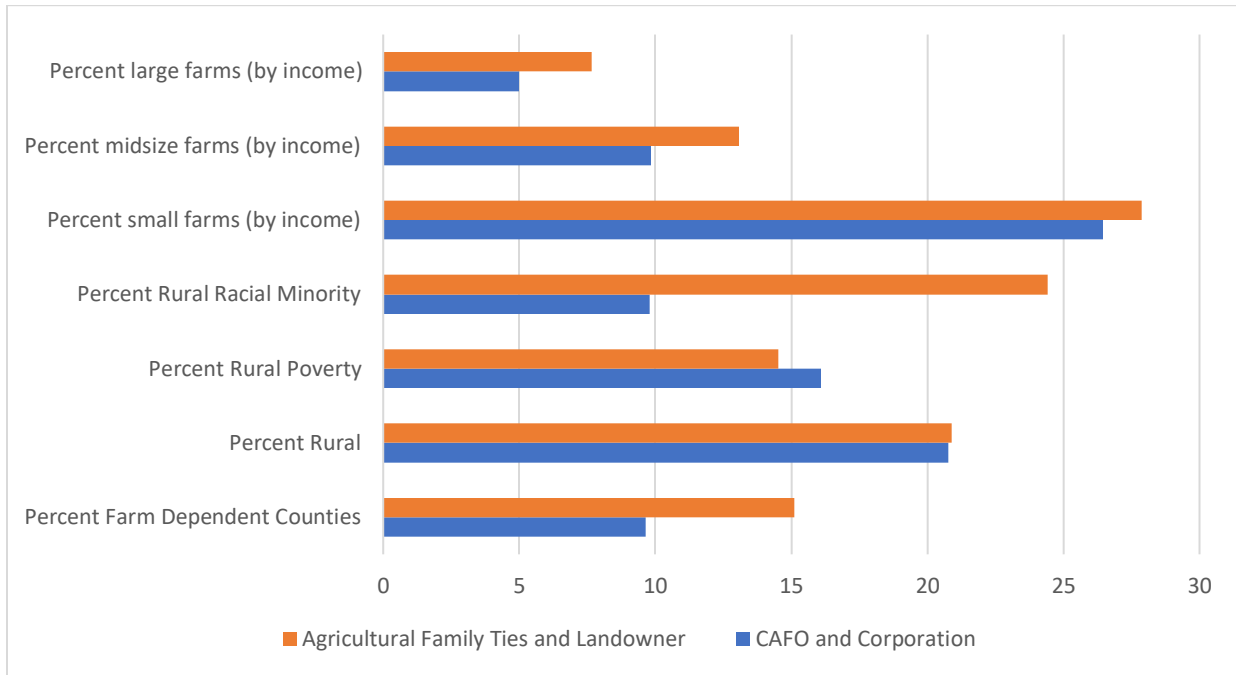


Figure 6. Socioeconomic Comparison of States with Selected Prevailing Defendant Types in Right-to-Farm Case Law

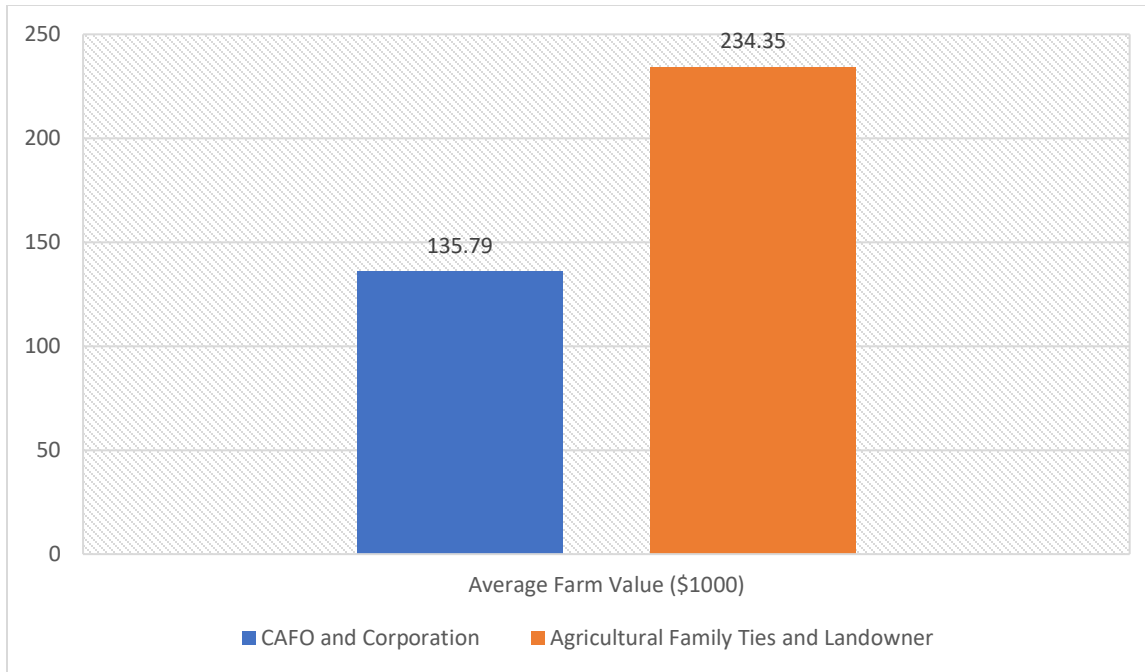


Figure 7. Average Farm Value of States with Selected Prevailing Defendant Types in Right-to-Farm Case Law

In order to better understand the wider sociological context in which these RTFLs exist, several socioeconomic factors about the states and their agricultural sector were examined. Figures 6 and 7 compare the averages of each factor for states where CAFOs and Corporations prevail in court using RTFLs vs. states where Agricultural Family Ties and Landowners prevail. (For more information on how these attributes were found, see Appendix B). The findings of these comparisons are not causation of the language in RTFLs or the results in court but do give greater insight to the socioeconomic aspects of the rural communities that the results of court cases utilizing RTFLs impact.

To begin, Agricultural Family Ties and Landowners win cases in places with higher farm dependency, higher rural racial minority, higher average farm value (\$1000), and a higher percent of midsize and large farms (by income). Additionally, rural communities where Agricultural Family Ties and Landowners prevail have more to lose if they don't fight because

of their higher farm dependency. Corporations & CAFOs win cases in places with higher rural poverty levels and fewer midsize and large farms. They are winning cases in places where their size isn't common, which means that RTFLs opens the gateway for that type of operation to become more common. Places where CAFOs and Corporations prevail have on average less than 10% of rural racial poverty, meaning industry is winning cases in places predominantly white. This brings the experiences of rural white people into the discussion of environmental justice which is primarily focused on minorities.

Table 4. Geographic Region of Selected Defendant Types in Right-to-Farm Case Law

Region	CAFO and Corporation all cases	CAFO and Corporation won cases	Ag Family Ties and Landowner	Ag Family Ties and Landowner Won Cases
Midwest	11	8 (73%)	8	4 (50%)
Northeast	1	1 (100%)	2	1 (50%)
Southwest	1	1 (100%)	1	1 (100%)
Southeast	1	1 (100%)	1	0 (0%)
West	1	0 (0%)	3	2 (67%)

Additionally, comparison was made between the primary regions housing the cases with the two dominating paired defendant types. The majority of these cases are coming out of the Midwest. CAFOs and Corporations win all cases in the Northeast, Southwest, and Southeast and most cases in the Midwest but no cases in the West. Agricultural Family Ties and Landowners win all of the cases they're defendants in in the Southwest, half of the cases they're defendants in in the Midwest, Northeast and West and none of the cases they are defendants in in the Southeast. CAFOs and Corporations win a higher percentage of cases as defendants than Agricultural Family Ties and Landowners in the Midwest, Northeast, and Southeast. In contrary, Agricultural Family Ties and Landowners win a higher percentage of cases than CAFOs and Corporations in the West. They both win the same percentage of cases in the Southwest.

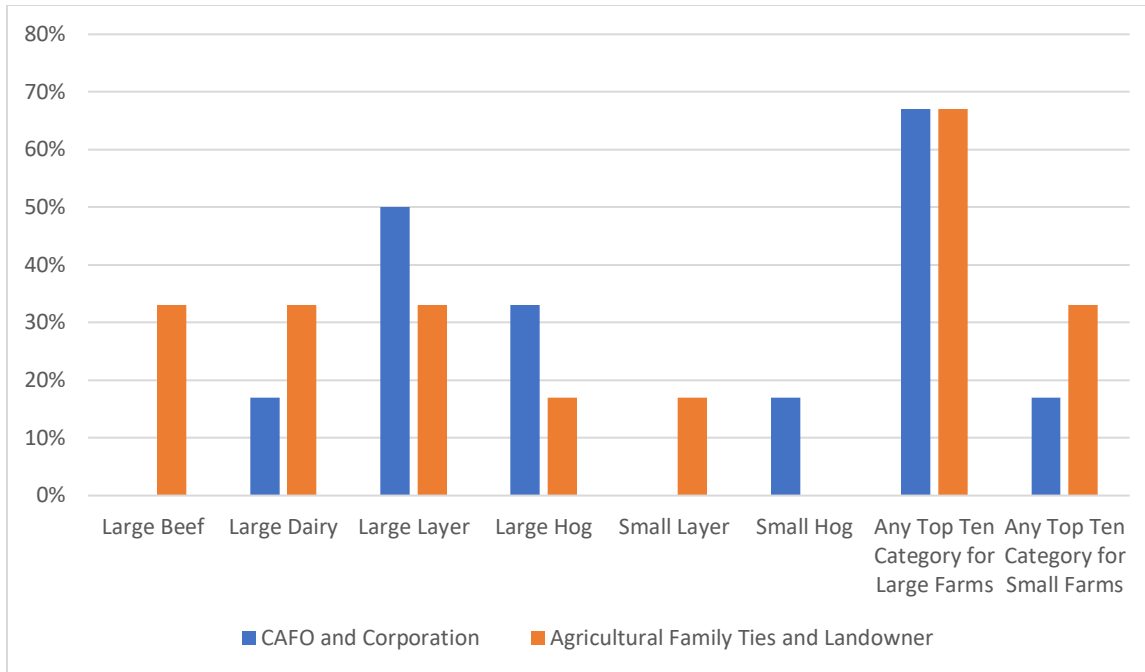


Figure 8. Percentage of States with Selected Prevailing Defendant Types in Right-to-Farm Case Law within Top Ten Nationally for Livestock Inventory

In the last state-wide comparison made between the two groups of dominant defendant type pairings, we looked at what percentage of the states in each grouping fell within the top-ten of all U.S. states for large or small farms defined by number of livestock. For example, Large Beef farms are defined as containing 500 or more heads of cattle, and the ten states with the highest percentage of farms that qualify as Large Beef are Nevada, Wyoming, Montana, South Dakota, Nebraska, Hawaii, North Dakota, Alaska, California, and Idaho. Two of those states are also states where the defendant in a RTF case is the paired CAFOs and Corporations, which means that 22% of all states where CAFOs and Corporations prevail in court are within the list of Top Ten states for overall percentage of Large Beef farms.

More states where CAFOs and Corporations prevail are within the Top Ten for large layer and large hog farms than for states where Agricultural Family Ties and Landowners win where the opposite is true for Large Dairy and Large Beef farms. These results align with the trends of industrial livestock production in that poultry and hog production moved towards the

CAFO model quicker and earlier than cattle production. The demonstrated ability for CAFOs and Corporations to benefit under the law in these places indicates that the State supports and even orchestrates the move towards industrial modes of production. Additionally, CAFOs and Corporations *win* more often in states in the Top Ten of large farms for any livestock category than states in the Top Ten of any small farm category. Agricultural Family Ties and Landowners also win fewer cases in states with the Top ten of any small farm category, but they win more often in small farm states than CAFOs and Corporations. This implicates that in places where industrial forms of agriculture have not yet become as popular, State policies are more likely to protect and endorse farming operations more resembling the traditional family farm with property-related ties to the community.

DISCUSSION AND CONCLUSION

Until recently, Right-to-Farm Laws had not been discussed by rural sociologists. This study is significant in that it adds a court-level analysis to the understanding of the laws and how they differ across the nation. It addresses the name “Right to Farm” and whether the implication behind that name aligns with what the statutes are used for in court. An original typology descriptive of plaintiff and defendant party members was proposed. This typology served as a means to understand who benefits from Right-to-Farm Laws in courts the most. This analysis adds to the understanding of how policy contributes to the rural power dynamics associated with industrialization and globalization.

The major limitation to this study is that by focusing on the 2018 version of the RTF laws, we do not always compare the results of a case law to the language of a RTFL the year the case was filed. Our data may look different if we had done so, however to gather and analyze that many files would have taken more time than was available. It should also be recognized that

not every grievance against an agricultural operation goes to court or goes in the way of nuisance. There are many barriers that keep neighbors from filing nuisance lawsuits or taking legal action at all. This discussion would be greatly enriched by research that explores those barriers to plaintiffs in taking legal action to redress their grievances. Another way that this inquiry could be further explored is through a spatial analysis that compares the concentration of industrial livestock operations to the places where corporations and CAFOs prevail in court.

The results of this study show that Landowners, Political Subdivisions, and Corporations are the most common types of parties in cases that utilize Right-to-Farm Laws. Agricultural Family Ties was the most common party type to prevail in court. Even though the RTFL is evoked in court more for other types of parties, it is the most beneficial to farming operations owned or operated by family members. That doesn't necessarily equate that the RTFL provides the most protections to what the cultural image of a family farm is and does not address how often operations that represent Agricultural Family Ties are also characterized by another category in the typology, like corporations or landowners. CAFOs, and Incorporated Partnerships are the second and third most common *prevailing* party types, respectively.

This study then showed which party types are most often associated together when prevailing in court. While CAFOs and Corporations as defendants prevail in court more than any other combination of party types, Homeowners and Residents associated together as plaintiffs win as many cases as the former defendant types. This suggests that RTFLs are more nuanced than some legal scholars assumed them to be. They do enable rural communities to protect their way of life and at the same time they also allow industry to sustain its presence in rural communities, two moves that seem counter-intuitive.

We further explored this nuance through a comparison of the statutory language and socioeconomic conditions of the states where case law took place between the cases with prevailing results for the two most common associations of defendant-types: 1) CAFOs and Corporations and 2) Agricultural Family Ties and Landowners. These two common couplings of defendant types represent a debate between legal scholars over whether Right-to-Farm Laws really protect all farms the same despite farm size or ownership model. Time of operation required to gain RTF protection stands out as a predominant difference in statutes and who they have been used to protect. Specifically CAFOs and Corporations achieve favorable outcomes when the statute requires only one year of operating time whereas Agricultural Family Ties and Landowners prevail in places with longer operating time requirements.

Additionally, the data revealed that industrial operations are able to connect themselves to the story of agricultural exceptionalism in states where the law defines farming using terms indicative of industrial modes of production. Furthermore, Corporations and CAFOs prevail in places with higher rural poverty rates and weakened power of local governance over agriculture. This is a double-blow because nuisance lawsuits are often the last option rural people employ to fight the risks of living near industrial operations. The people that the industrial operations are externalizing their costs onto are already at a greater financial disadvantage to protect themselves against the health risks associated with industrial agriculture.

Industry is also able to prevail in places where industrial livestock of hogs and poultry is already prevalent. The way the policy is operating to protect, enable, and secure the modes of production that are already prominent in these places indicates the State supports that model of production and consciously or not, supports the unaccountability to affected communities that the corporate model brings with it. Corporations are accountable to their shareholders, not the

communities that surround where their products are made. On the other hand, the states where farm families who own their own land prevail have yet to be dominated by CAFOs and they are much more dependent on agriculture for income. The State, through the language of the RTFL, demonstrates a desire to protect the value that agriculture has and the form of agriculture that has so far dominated and been successful, as the average farm value in these places indicates.

This study has shown that Right to Farm is a story of “yes, and”. These statutes are an example of how state policy can be very nuanced. It also compels us to question words that we think have one universal definition, such as ‘farming’ and how these taken-for-granted cultural images can and are being employed to fuel industrial development. The story of industrial agriculture is one of a State paving the way for the proliferation of rural areas by romancing rural people and farmers with promises of protection against a threat to their way of life. In reality the threat to their way of life is industry disguising itself as one of the farmers. The State creates a rhetoric in farming culture, which can also be found in the Right-to-Farm Laws themselves, that farming is special and vital and therefore should be exempt from regulation or accountability in court. Therein is the fallacy of RTF laws: their intentions (to protect and preserve the rural way of life) and their results (protection for large scale industrial livestock operations that often produce mass amounts of pollution that ultimately change and harm the rural way of life) are contradictory in many places.

Right-to-Farm Laws may not protect industry *more* than the deeply established farms but these results beg us to ask a new question: should RTFLs protect industry and investors *at all*? Or by giving industry the ability to stay in rural communities anywhere, do the laws actually contradict their original advertised purpose everywhere? If lawmakers want to enhance their Right-to-Farm law to better protect family farmers, I suggest two things: 1) increase the amount

of time an operation needs to have been in existence before it is granted immunity under Right-to-Farm; and 2) remove clauses that give agriculture exceptions to local ordinances or other forms of regulation.

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Appendix A: Typology for Defendant and Plaintiff in Right-to-Farm Case Law

Party Type	Definition
Agricultural Family Ties	The party references a broader family aspect in relation to the farming operation
Business Other	Any business, nonagricultural, but not a corporation
CAFO	Concentrated Animal Feeding Operation – only attributed when defined as such in the case or inferred from livestock numbers given in the case
Corporation	A company or group of people authorized to act as a single entity and recognized as such under law
Group 3 or More	At least three party members
Hobby or Subsistence	A noncommercial farming operation
Homeowner	When the case specifies ownership of home
Incorporated Partnership	When two or more individuals own or operate any business with a corporate structure
Landowner	When the case specifies ownership of land
Political Subdivision	County, township, village, etc.
Resident	Includes renter or unspecified ownership
Sole Proprietorship Agricultural	One individual is named as a farmer or agricultural operator
Sole Proprietorship Business Other	One individual is named as any nonagricultural business, but not a corporation

Appendix B: Definitions of State Attributes

Attribute	Definition	Source
Farm Dependency	25% of more of the county's average annual labor and proprietors' earnings were derived from farming, or 16% or more of the jobs in the county were in farming.	2010-2012 Bureau of Economic Analysis Local Area Personal Income and Employment Data; USDA ERS.
Rural	Amount of population not in metropolitan statistical areas	USDA ERS
Rural Poverty	Amount of population not in metropolitan statistical areas and for whom the poverty status is determined, below poverty level.	2017 American Community Survey 1-year estimates and USDA ERS
Rural Racial Minority	For those not in metropolitan statistical area, percent of race other than white alone.	USDA ERS
Average Farm Value (\$1000)	The gross market value of agricultural products sold before taxes and production expenses in 2017.	USDA 2017 Census of Agriculture
Percent Noncommercial Farms (by income)	Farm related income <\$9,999*	USDA 2017 Census of Agriculture
Percent Small Farms (by income)	Farm related income between \$10,000 - \$999,999.	USDA 2017 Census of Agriculture
Percent Midsize Farms (by income)	Farm related income between \$100,000 - \$499,999.	USDA 2017 Census of Agriculture
Percent Large Farms (by income)	Farm related income > \$500,000.	USDA 2017 Census of Agriculture
Large Beef	500 or more heads of beef cattle inventory	USDA 2017 Census of Agriculture
Large Dairy	500 or more heads of dairy cattle inventory	USDA 2017 Census of Agriculture
Large Layer	50,000 or more heads of layers inventory	USDA 2017 Census of Agriculture
Large Hog	1000 or more heads of hogs inventory	USDA 2017 Census of Agriculture
-		USDA 2017 Census of Agriculture
Small Layer	Less than 99 heads of layers inventory	USDA 2017 Census of Agriculture
Small Hog	Less than 24 heads of layers inventory	USDA 2017 Census of Agriculture

-		USDA 2017 Census of Agriculture
States in Top ten of any Large Farm	The top ten states with the highest percentage of large farms in any livestock category	USDA 2017 Census of Agriculture
States in Top ten of any Small Farm	The top ten states with the highest percentage of small farms in any livestock category	USDA 2017 Census of Agriculture

Note: Farm Size by income brackets based off of Amy Guptill and Rick Welsh's categories in *Rural America in a Globalizing World* and amended to account for the way the USDA ERS data is reported.