

4-30-2009

CAFOs, Culture, and Conflict on Sand Mountain: Framing Rights and Responsibilities in Appalachian Alabama

Zachary Henson
Auburn University

Conner Bailey
Auburn University

Follow this and additional works at: <https://egrove.olemiss.edu/jrss>



Part of the [Rural Sociology Commons](#)

Recommended Citation

Henson, Zachary, and Conner Bailey. 2009. "CAFOs, Culture, and Conflict on Sand Mountain: Framing Rights and Responsibilities in Appalachian Alabama." *Journal of Rural Social Sciences*, 24(1): Article 9. Available At: <https://egrove.olemiss.edu/jrss/vol24/iss1/9>

This Article is brought to you for free and open access by the Center for Population Studies at eGrove. It has been accepted for inclusion in *Journal of Rural Social Sciences* by an authorized editor of eGrove. For more information, please contact egrove@olemiss.edu.

**CAFOS, CULTURE AND CONFLICT ON SAND MOUNTAIN:
FRAMING RIGHTS AND RESPONSIBILITIES IN APPALACHIAN
ALABAMA**

ZACHARY HENSON and CONNER BAILEY

AUBURN UNIVERSITY

ABSTRACT

This paper presents a case study of controversy associated with large confined animal feed operations (CAFOs) on Sand Mountain in the northeast corner of Alabama, the tail-end of the Appalachian Mountains. We examine competing cultural frames developed by supporters and opponents of CAFOs that produce hogs. Both sides of the CAFO controversy utilize locally-specific cultural understandings of private property. Those opposed have framed their concerns both in terms of formal environmental standards of regulatory agencies and the responsibility of landowners not to engage in activities that adversely affect neighboring land owners. CAFO operators have framed the issue by drawing upon local traditions of individual rights over how one uses land, while calling upon reciprocal social relationships that stretch across multiple generations to win support or mute opposition. The controversy has spilled over into the legislative and regulatory arenas, where tradition-based cultural frames are repeated but in different forms.

Over the past 100 years, agriculture in the United States has gone through a well-documented transition from small family farms to larger and more capital-intensive production systems closely tied to a global agro-food system (e.g., Burmeister 2002; Busch and Bain 2004; Buttel 2003; Lyson 2004). Both the number of farms and total farm acreage has declined over the past half century due to consolidation of land into larger production units, and to increased productivity driven by technological and structural changes in agriculture (Kloppenburger 2004). Among these changes has been the emergence of industrial systems of animal agriculture characterized by confined animal feed operations (CAFOs), intensive production systems that concentrate many animals in a small space.

Raising many animals in confined conditions generates significant concerns regarding air and water quality, and this is particularly the case with hog CAFOs. These concerns have often led to struggles between farmers and local residents over odor, health concerns, and contamination of both surface and groundwater resources (e.g., Bonanno and Constance 2006; Von Essen and Auvermann 2005; Williams 2006).

Our contribution to the literature is to present a case study focusing on cultural dimensions of CAFO controversies. We do so by examining competing cultural frames used by proponents and opponents of CAFO production systems in a region known as Sand Mountain, at the southern terminus of the Appalachian Mountains

in northeast Alabama. Analysis of these competing cultural frames allows us to explore how actors on both sides of the dispute have used a mix of culturally emotive and technical/scientific claims to establish legitimacy for their respective positions. We extend our analysis of cultural factors by considering how local traditions of personal loyalty shape the expression of conflict.

To Goffman (1974), individuals and groups define or “frame” issues in terms of culturally significant values and beliefs to give meaning to the phenomena being framed. These interpretative orientations encourage others to see an event, process, or condition in light of shared understandings. Frames are socially constructed and used to define (diagnostic) conditions as social problems and to articulate (prognostic) a solution to the problem (Snow and Benford 1988). Frame analysis has been used both for textual analysis of secondary data (Koenig 2006; Robinson 2002; Snow, Vliegenthart, and Corrigan-Brown 2007) and to interpret primary data collected through qualitative methodologies (Walton and Bailey 2005).

Snow et al. (1986) used the framing concept to understand how social movement organizations consciously ascribe meaning to their actions and those of their opponents, doing so in ways “intended to mobilize potential adherents and constituents, to garner bystander support, and to demobilize antagonists” (Snow and Benford 1988:464). However, social movement organizations are not the only actors engaged in framing conditions to match their interests and concerns. Government agencies, corporations, and industrial interests actively seek to frame issues, often seeking to counter the frames put forward by social movement organizations (Robinson 2002). Both sides seek to elicit support and marginalize their opposition and bring to bear differing financial, legal, or political resources in defining the situation (Krogman 1996).

David Snow is a leading researcher in the field of frame analysis. In a recent publication (Snow et al. 2007), he and his colleagues noted that “we know little about the factors that account for variation in frames, particularly with respect to the same event, object or issue” (page 385). In this paper, we analyze conflicting cultural frames put forward to supporters and opponents of animal agriculture (specifically swine) using CAFO production systems for swine. We begin by describing briefly the emergence of CAFO production systems, the research setting, and methods used in collecting field data. We then introduce in more detail the actors on opposing sides of the CAFO controversy on Sand Mountain and how they frame the issues. We then proceed to describe and analyze two sets of cultural frames, one based on local traditions, and another associated with contemporary legal and regulatory processes.

BACKGROUND TO THE ISSUE

Swine production has long been a part of diversified farming systems, providing an opportunity to add value to corn, soybeans, and other crops. Pigs were ubiquitous because they were omnivores and grew rapidly. During the last decades of the 20th century, however, farm specialization became the dominant mode of production. Nationwide, hog production has been moving to fewer, larger operations that generate increased profits. In 2006, the inventory of farms with 5,000 or more hogs accounted for 54% of the national total, and farms with 2,000 or more hogs represented an additional 36% of total hog production (USDA 2007c). This increase represented a dramatic change from 1993, when hog farms with more than 2,000 animals accounted for “only” one-third of national inventory (USDA 2007c), and this in turn is dramatically different from decades previous when such concentrations were unknown.

In Alabama as elsewhere in the United States, many farms used to raise pigs both for household consumption and for sale. Between 1965 and 2006, however, the number of hog producers dropped from 39,000 to only 450 (USDA 2007a). These 450 farms had a 2006 inventory of 160,000 hogs (USDA 2007b). Instead of many farms each having a few hogs, we have today a few operations that account for most hog production, and the possibility of increasing the number of these large operations.

Hog production in the United States is centered in the upper Mid-West, the center of corn and soybean production. North Carolina, however, has emerged as a major producer state, ranking second nationally to Iowa (USDA 2007c). The rapid increase in CAFO operations in North Carolina led to emergence of social and environmental concerns (Kilborn 1999) and mobilization of opposition there during the 1990s (Wing, Cole and Grant 2000). Cates, Chvosta and Wossink (2006) reported that swine producers in North Carolina primarily use anaerobic lagoons and sprayfields to manage manure, favoring this approach over alternatives because of cost considerations

Alabama ranks third in the nation in poultry production (USDA 2006). Poultry CAFOs are popular among many Alabama farmers, especially those with limited land of marginal productivity that characterize much of the northern half of the state. For these farmers, chickens provide a welcome opportunity to earn a good living (Molnar, Hoban, and Brant 2002). To do so, they have entered contracts with agribusiness firms (“integrators”) who provide both inputs and an outlet for production. Generally, integrators own the birds and provide the feed, paying the

farmer/producer for weight gain at the end of the growing cycle. The producer provides management skills, labor, physical facilities (land, buildings) for growing the animals, and is responsible for handling wastes and dead animals. The producer also covers costs for water and energy used to heat and cool buildings and provide necessary ventilation. Similar arrangements exist between integrators and producers in establishing hog CAFOs. Considerable attention has been devoted to asymmetries in power between integrators and producers (e.g., Heffernan 1984; Molnar et al. 2002; Mooney 1983).

CAFO production systems generate significant volumes of waste from feces and dead animals. Chicken litter is made up of absorbent organic material (e.g., wood shavings, peanut shells) and handled as dry bulk material that generates relatively little odor. In contrast, hog wastes are managed as slurry that have a strong and pervasive odor affecting neighboring property owners. One extension specialist asked “What do you get when you add 10 gallons of water to one gallon of hog shit?” The answer was “11 gallons of hog shit.”

Beyond the humor of that statement is the reality that not only do hogs generate enormous volumes of fecal material, that volume is compounded by a factor of ten by water used to flush the waste that falls through slats in the floor of the confinement barn. This slurry is then pumped into holding ponds or lagoons and periodically sprayed on pastures or farm fields, spreading both the wastes and the odor over an extensive area, and posing water quality problems due to runoff into creeks and streams. Animal pathogens including bacteria, pathogenic protozoans, and viruses are found in animal wastes and can survive for extended periods in lagoons (Mallin and Cahoon 2003). Lagoons and ponds sometimes leak, causing problems with groundwater pollution. Other problems occur if heavy rains cause overflows from holding ponds or lagoons (Wing et al. 2000). Public health concerns associated with CAFOs that are of particular concern to the elderly and those suffering from asthma include the increased prevalence of respiratory problems associated with exposure to toxic gases, odors, and microbes in both air and water (Heederik et al. 2007; Sigurdarson & Kline 2006). Hydrogen sulfide is one air contaminant associated with swine production and has been found to exceed air quality standards in residential areas close to CAFO operations. Threats posed to surface and ground water, and complaints associated with odor are common causes for public opposition to hog CAFOs. Declining property values are another source of opposition to siting of CAFOS (Kilpatrick 2001).

Agro-Ecology of Sand Mountain

Culturally and geographically, Sand Mountain is part of Appalachia. Jackson County, the political jurisdiction within which Sand Mountain is located, was part of the Cherokee Nation before it was annexed by the federal government in 1835. The first white settlers built houses out of timber in the area, farmed, and ate wild game. Like most yeoman farmers of northern Alabama memorialized by Flynt in his book *Poor But Proud* (1989), farmers on Sand Mountain historically engaged in a mix of subsistence and cash crops coaxed from soils of limited productivity. Land ownership, hard work, and individuality were highly prized. By the middle of the 20th century, farming on Sand Mountain was in a period of prolonged decline, supplanted in the local economy by textiles and other manufacturing. Yet even today, the phrase “40 acres of cotton and corn” is repeated as a sort of mantra idealizing the past.

World War II and the postwar economic boom produced rapid industrial growth that attracted labor from Sand Mountain. Many farmers, looking for more stable work, began to abandon farming in favor of wage-labor jobs in Chattanooga, Ft. Payne, Scottsboro, and Birmingham. On Sand Mountain, the remaining farmers moved to peanuts, potatoes, or chickens. The fine, sandy loam soils of the area were well suited to peanut and potato production but this declined in the 1980s as farmers in the area began losing contracts with processors.

For many farmers with small acreages, intensive animal agriculture was one of the few remaining options available. In Jackson County, the average farm size was 167 acres in 2002, and three quarters of all farms were smaller than 180 acres (USDA 2002). Broiler production increased dramatically between 1981 and 2006, from 8.6 million to 37.1 million birds (USDA 2007d). The 2002 Census of Agriculture reported 58 broiler producers operating under contracts in Jackson County (USDA 2002).

Swine operations come in three types—sows, feeder pig producers, and finishing operations. Sow operations involve artificial insemination and production of piglets. Nursery operations grow piglets from 10 to 75 pounds, and finishing operations grow the animals from 75 to about 250 pounds, at which point they are picked up by the integrator and taken to the processing plants. Finishing operations grow out a batch of animals about 2.7 times a year. Exact production figures are treated as confidential by producers, but the USDA (2007b) reported an inventory of 10,000 hogs in Jackson County during 2001. Nearly all these animals were being raised on three CAFOs on Sand Mountain.

RESEARCH METHODS

A combination of primary and secondary data was used for this paper. Semi-structured qualitative interviews, participant and nonparticipant observation, and documentary analyses were the primary methods employed. Primary data were collected by the lead author during the summer of 2006. The first author attended city council meetings, talked with community members and civic groups, and lived in the area for nearly three months. There were two points of entry to the field. One key informant had nothing to do with the conflict and the other was directly involved as an opponent to the local hog CAFO. Starting with these local key informants, a snowball approach was used to identify potential respondents. Each respondent was asked who they would recommend be interviewed to further our understanding of the CAFO controversy and how this controversy was culturally understood. Aware of the potential for bias inherent in snowball sampling (Babbie 2005), and that one key informant was a partisan in the conflict, a conscious effort was made to identify individuals who would provide a variety of viewpoints. Nonetheless, because several initial interviews included individuals opposed to hog CAFOs in the area, one CAFO owner was convinced the researchers were biased against CAFOs. Repeated efforts were made by the first author to contact this producer, who instead called the second author and the Chair of the second author's academic department threatening legal action against the researchers.

A total of 19 formal interviews involving 23 respondents were conducted. Fourteen of these interviews occurred in the homes of respondents, often including multiple members of a household and, sometimes, other interested individuals. These interviews lasted between two and four hours. One interview was conducted by phone that lasted approximately 30 minutes. The focus of these interviews centered on personal history and on the meanings of private property for Sand Mountain community members. Eleven of the 14 interviews were with members of the local CAFO opposition group and the remainder were with individuals neutral on the issue. For reasons noted above, there were no formal interviews conducted with individuals expressly supporting CAFO operations. In addition, four interviews were conducted in the offices of extension agents that lasted about one hour. Discussions with extension agents focused on their interpretations of the conflict over CAFOs and potential resolutions. The interviews were structured so that respondents could direct the discussion and, most important, frame the CAFO issue in their own terms. Members of the Extension System were careful to avoid taking sides in the issue. CAFO opponents primarily were concerned with airing

CAFOS, CULTURE AND CONFLICT ON SAND MOUNTAIN 159

their grievances with one respondent beginning the discussion with a prepared statement.

Besides these formal interviews, nonparticipant observation of city council meetings, or discussions with multiple respondents after church services provided additional opportunity to understand how local residents framed issues related to the CAFO controversy.

Legal documents related to lawsuits between CAFO operators and opponents were retrieved from the Dekalb County Courthouse in Fort Payne, Alabama and from the United States District Court for the Middle District in Birmingham, Alabama. Legal documents from lawsuits between CAFO operators and their supporters were retrieved from the Dekalb County Courthouse in Fort Payne. Local and state newspaper articles from the Times and Free Press (Chattanooga), the Fort Payne Times Journal, The Birmingham News, and The Montgomery Advertiser were used to provide context for the case study. We also have followed the CAFO controversy in the state legislature, where attempts have been made to insulate CAFO operators from local regulation.

Our intent has always been to understand the cultural meaning of the CAFO controversy on Sand Mountain, and not to take sides in this controversy. The disinclination of the CAFO operator was unfortunate, not least because it limited our ability to effectively articulate the position of those who believe CAFO production systems provide important options for those who want to earn a living from farming. Through attending public meetings (including those of agricultural interests groups), reviewing legal documents, and reading newspaper stories, we attempted to understand differing views. We leave to our readers' judgment whether we were successful in this regard.

The Actors

In this section we introduce two sets of actors involved in the Sand Mountain CAFO controversy: hog producers and their corporate supporters; and members of a local environmental group organized against CAFOs, and their own supporters.

CAFO Producers and Supporters. As a region of small farms with soils of limited productivity, agriculture long has been in decline in Sand Mountain. CAFO production systems, being land intensive, offer farmers an opportunity to earn a living from farming, and such systems have gained in popularity, particularly in the northern half of Alabama where conditions similar to those found in the Sand Mountain area exist. Broiler operations are the most common form of CAFO in Alabama, but the potential for expanded swine operations is attractive for some

farmers. For both broiler and swine, the farmer must invest significant financial capital in grow-out and waste management facilities. Farmers are solely responsible for maintaining environmental standards. Losses due to illness or other factors cut into the profit of farmers, which is calculated based on weight gain. This business model concentrates most of the risk on individual farmers (Harper 2005). Broiler operations operate under short contracts (as little as six weeks, i.e., each growing cycle) with the integrator, who provides chicks, feed, and other inputs. Contracts for swine operations generally are for ten years, providing farmers greater stability.

The primary integrator in the study area was Goldkist, a Georgia-based firm that contracted with farmers to grow animals that Goldkist owned. In early 2007, Goldkist became a wholly-owned subsidiary of Pilgrim's Pride, a Fortune 500 corporation with annual sales of \$7.4 billion (Pilgrim's Pride 2007). Goldkist processes 45 million pounds of pork a year (Goldkist 2007) and depends on CAFOs to supply their processing and distribution systems.

The Alabama Farmers Federation (ALFA), a member of the American Farm Bureau Federation, has been vocal in support of CAFOs in Alabama. ALFA is a politically-powerful special interest group that represents large farms and agribusinesses. ALFA is a major player in the state's insurance industry and maintains a significant lobbying presence in the state capital. In addition, researchers and Extension specialists at Auburn University have provided CAFO producers technical assistance on a variety of issues including waste management.

Sand Mountain Concerned Citizens (SMCC). Sand Mountain Concerned Citizens are a local environmental group that formed in reaction and opposition to hog CAFOs. Such opposition is common wherever hog CAFOs are proposed (Burmeister 2002, Constance 2002; Curran 2001). Their primary goal is to move hog farming operations out of their neighborhoods and they have used both litigation and lobbying to achieve their goal. Politically the SMCC has teamed up with the state chapter of the Sierra Club to lobby for stricter controls of CAFO operators. SMCC has been active in soliciting grants from such sponsors as Patagonia, a well-known outdoor sporting goods brand that donates to a range of environmental causes (Patagonia n.d.). They have sought assistance from researchers at a regional university to do water quality testing to document contamination and have used this information in court against CAFO operators. SMCC has developed a small cadre of leaders, including one with charismatic appeal as a public speaker, another who is a meticulous record keeper, water sample collector and strategic planner, and a third who writes grant applications and is responsible for networking. The rest of the group, about 40 in all, are local

CAFOS, CULTURE AND CONFLICT ON SAND MOUNTAIN 161

residents, many elderly, who long for a time when farming and community did not include going to court or being political.

Aaron (pseud.), the strategic planner, recently returned to Sand Mountain. As a teenager, he quit high school to begin farming, but, after one unsuccessful farming season, he moved to Chattanooga to work in manufacturing which he did until his retirement. His “home place” remained in his family and his retirement plans were to use this property to build a house. After operations began at the CAFOs, Aaron felt that “it was obvious that we weren’t going to be able to live (on that property),” and purchased a lot a few miles north of his family land. He rented the existing house and began planning and organizing to oppose CAFOs. His opposition began by contacting the local health department to determine whether CAFOs had to get permits to operate. His logic was that “I had to get a permit to put a septic system in, and I don’t have a problem with that, but farms should have to live by the same rules. But, I was told that they didn’t need (a permit) because they were agriculture.” Eventually, SMCC, under his leadership, opened up the state CAFO rules and put “some more teeth in there.” The new regulations require a buffer zone rule that forced hog CAFOs to operate on 240 acres per barn.

Angie (pseudo.), the charismatic public speaker, has lived on Sand Mountain nearly all her life. Her family’s house and property which neighbors a CAFO was purchased thirty years ago and is paid for. Both she and her husband work in manufacturing in the area, and her children attend the local high school. She is active in her church and community, seemingly knowing everyone. Of all the leaders, she feels the most personally affronted by the presence of CAFO operations since one was built near her family home. She has become a highly effective speaker, sharing her concerns with people throughout the area. To arguments that CAFOs are the only way to stay in business, she replies that she would “rather close up shop than do what the hog farmers have done to this community.” In her view, not splitting the community is more important than attempting to maintain the agrarian way of life.

Drew (pseudo.), the planner, classifies himself as an “outsider” in the Sand Mountain. College educated and somewhat familiar with organized political protest, he expresses frustration at the reluctance of many local residents to speak out against CAFOs despite their privately held views. “No one will say anything about anyone else because they know a relative of a (CAFO operator).” He expressed positive feelings toward the single public forum on the conflict held at a local camp ground, but disappointment that the public engagement did not continue past this event. Drew purchased his property as an investment believing that the growth of

north Alabama would pay off in increased property values; the presence of a neighboring CAFO hurts the value of his investment. His ability to network with outside non-profits has proven valuable, securing grant money and technical help for SMCC.

CONTENDING CULTURAL FRAMES

In this section, we examine the competing frames used by supporters and opponents of hog CAFO operations on Sand Mountain. Both sides to this controversy use a mix of tradition-laden cultural values and values associated with modern rationality.

Cultural Values Associated with Property Rights and Responsibilities

We start our discussion by considering the cultural meaning of land ownership to the residents of Sand Mountain. Land can be valued monetarily, but fundamentally land is valued for its connection to the past. The history of yeoman farming and rugged individualism characteristic of rural Appalachia places land squarely within the realm of personhood construction. Individual and family identity is closely linked with ownership of land and a history of having worked that land. People frequently recall their family history and reminisce about how important the land is and was. One former farmer said that land was “very important to us; it is how we made our way.” To many people we interviewed, land ownership is deeply embedded in self-identity, is how family names become established in the community, and how community maintains its solvency. Individual and collective identity is tied to land ownership. Land ownership also represents a measure of freedom and independence that is jealously guarded, and a shared community freedom that should be guarded from outsiders. One respondent noted the history of the local telecommunications co-op started by her late husband and expressed pride in the abilities of current members of the co-op to resist attempts by telecommunications conglomerates to purchase it. From this springs the contemporary desire to be left alone to do with one’s land as one chooses, and the tendency to resist outside—especially governmental—controls over land-use.

Most families in the study area no longer farm. They work in manufacturing or the service industry. Many younger people have moved to cities where more job opportunities exist. One result has been a partial disintegration of traditional social structures and norms and partial integration into a more globalized modern world (Wolf 2001). These changes do not sit well with some residents of Sand Mountain

CAFOS, CULTURE AND CONFLICT ON SAND MOUNTAIN 163

who are deeply religious and react to the spread of more worldly ways with radical forms of religious ritual, which included the handling of rattlesnakes and drinking strychnine, to reaffirm their faith (Covington 1996). Like many parts of the South, traditional cultural values are strongly held by many, even as the larger society around them changes.

Cultural framing of CAFO opposition. This gradual transformation from an isolated and largely agrarian setting to a region more fully integrated into a global economy is reflected in the social construction of private property rights and responsibilities among Sand Mountain residents. A local leader argued that “(a property owner) can do whatever he wants to on his land so long as it doesn’t hurt the health and well-being of his neighbor.” If a land owner does not follow this rule, he or she becomes a “bad neighbor.” “Good neighbors” are spoken of very highly while bad neighbors are spoken of poorly. On Sand Mountain, it is expected that everyone should want to be a good neighbor because one’s personal reputation and good name are at stake. In the past, bad neighbors would be the object of informal social sanctions that pressure offending parties to behave in a culturally appropriate manner.

Community is based on the shared experience of owning and working land and helping neighbors during difficult times and the personal and familial relationships that emerge from these experiences. Most respondents were careful not to make disparaging comments directed at specific individuals or farm operations, instead attacking the practice of industrial farming generally with comments like “(CAFOs) stink to high heaven.” Another neighbor commented that “none of us like the smell, but (CAFO operators) have been awful good to us, and I can’t say anything against them” (Gilbert 2000). During an interview with a local historian, he described in detail the hydrology of a piece of property in his ownership. The description seemed out of place considering our conversation was about local history and he had already stated that he did not want to discuss the CAFO controversy. It was later learned that this piece of property adjoined a hog CAFO, and that the information about hydrology was intended to provide insights into how that CAFO affected neighboring property owners. The reluctance to comment on CAFO operators permeated even within SMCC. A respondent who is also a SMCC member would comment negatively about a local operation but not the others because of personal and familial connections with the owners of those operations. Much of the resistance to industrial agriculture takes this covert form.

Owning land and one’s personal identity are mutually constitutive and violating one’s property rights is not merely a legal issue but an affront to personal

autonomy. Opponents of CAFOs argue that their property rights and therefore autonomy has been violated while producers believe that their opponents are trying to use the media, non-profits, and the legal system to deprive them of their property rights and their autonomy. "It is trespassing (for CAFOs to pollute one's property)" one respondent noted. Nevertheless, the willingness of local residents to speak out against CAFOs, even among members of the SMCC, is constrained by personal relationships that run deep on Sand Mountain. If conflict exists, it must be resolved between the parties involved or through informal sanctions such as gossip and rumor. CAFOs on Sand Mountain are particularly troublesome for people in the community because it represents the breakdown of historically-produced cultural norms. Both sides can be seen as disobeying implicit rules about conflict resolution, the CAFO owners for trespassing and SMCC members for making conflict public.

Private property demarcates the boundaries of family space; through identity and fences, property lines create a space for social and cultural reproduction. Boundaries that are traditionally permeable to neighbors and friends become rigid in the face of conflict with feuding actors becoming increasingly hostile about perceived affronts to property and autonomy. A respondent related that he had "great neighbors" and they are allowed to discipline his children, use his lawn equipment, and they take care and "watch" each others property. In contrast, one actor related that interactions between him and a CAFO operator escalated to the brink of physical violence numerous times.

Ideas of community are wrought with deep seeded personal relationships. Respondents often talked of relationships with present and past local leaders and how those personal relationships paid off for individuals and their families. One farmer got his road paved because he knew the county commissioner and local leaders spoke of forgiving utilities debts to poor people "as long as they were trying." The tension between farming, community, and property rights is evident in conversations among locals about the conflict. During a discussion with a couple, the husband related the importance of farming to the region and his concern for the well-being of hog farmers, but his wife chimed in saying "how would you [referring to the husband] feel if they were your neighbors, you can't even take a neighbor's dog walking across our yard."

Societal changes have weakened the power of informal social sanctions, but CAFO opponents within the SMCC nonetheless use this good/bad neighbor dichotomy and respect for widely held beliefs about private property to frame their critique of industrial hog farming in local cultural terms. From their perspective, CAFO operators are bad neighbors because they cause harm to others through odor

CAFOS, CULTURE AND CONFLICT ON SAND MOUNTAIN 165

and water pollution. This critique is the more powerful because it is seldom used among residents of Sand Mountain. A strong sense of personal freedom is associated with property ownership in this region. Claims that challenge the sanctity of private ownership are not made lightly because they call into question strongly-held cultural values, and because imposing restrictions on others opens the door to the independence of all landowners being circumscribed. Thus, many members of the SMCC are troubled not only by the presence of CAFOs, but by having to rethink their understanding of private property rights. This is represented by the shift in identity felt by members of SMCC. During a meeting of SMCC leaders, Angie posed the question about “what they thought about becoming activists” to which Aaron immediately responded that he “was not an activist.” After looking up the definition of activist, however, Aaron acknowledged that “I guess I am an activist.” The initial reaction is not surprising considering ALFA’s characterization of SMCC as a group of “environmental extremists” working with “trial lawyers and some newspapers” (Alabama Farmer’s Federation 2002). Walton and Bailey (2005) note that many rural Alabamians eschew the label of environmentalist, believing this a term that refers to eco-liberals, but that a pervasive populist sentiment often carries with it a strong desire to protect the local environment from harm. SMCC members claimed that they have often been characterized as “out-of-state environmental extremists” but reject that label. SMCC members resolve the tensions between farming, community, and private property and between activism and cultural norms by framing air and water as common property that belongs to everyone.

Cultural frames supportive of CAFO operators. CAFO operators and their supporters use their own cultural frames to present their side of the issue. Like much of the South, both farming and private property rights are seen as integral to the identity of communities. A SMCC member noted that the history of Sand Mountain is characterized by “farming... people were poor much the same as they are now, but people made it.” Conflicts about property lines permeate personal histories implying that property issues have always been prevalent, but the use of “activism,” meaning lawsuits and lobbying, has never been a widely accepted way of resolving property issues. CAFO operators and their supporters consciously use the label of “activist” to marginalize their opponents.

Integration into the global economy has deprived farmers of some of their autonomy by dictating the types of crops or animals to grow and through the ownership of farm products by agribusiness. Farmers understand these contradictions; as one farmer commented “they’re turning us all into

sharecroppers.” CAFO operators argue that industrialization in agriculture is “both the natural direction for animal husbandry and the only option” to maintain an agrarian life-way.

The right of a property owner to do what they please on their land resonates deeply on Sand Mountain. CAFO operators could draw upon the agricultural heritage of the region, arguing that CAFO operations are a continuation of the agrarian tradition that defines the region. Earning a living from the land draws upon a deep cultural reservoir of respect for family farmers. CAFO operators acknowledge that their production systems differ from those of the past, but argue that this is necessary to maintain an agrarian way of life. A CAFO operator argued that purchasing equipment meant high levels of investment and debt claiming that “the kind of money we put into equipment, you can’t pay for it with a wage-earning job,” and that “the bank owns most of it” (Gilbert 2000). Further, they argue that “we’re just a family farm that had to adjust to the time we’re in now” (Gilbert 2000). Finally, CAFO operators point out they provide income and employment opportunities in the area. All these claims represent positive culturally-based frames supportive of CAFO operators.

Personal loyalties. The ability of actors on the two sides of the CAFO controversy to use their contending cultural frames is affected by cultural values of personal loyalty that cross generations and shape how conflicts are resolved. Batteau (1982) and Webb (2004) provide insight into the combination of individualistic and independent character and the strong sense of kinship and interpersonal loyalty characteristic of the Scots-Irish population of Sand Mountain. When conflict emerges, people tend not to take sides – the conflict must be fought and resolved by the individuals involved. This is because, one way or another, most residents are connected to individuals on both sides of a conflict. Such connections may be based on kinship or they may relate to interpersonal relationships stretching back over generations. One respondent in the present study would not speak out against a CAFO operator because that individual’s “grandfather helped my grandfather out and out of respect for him, I can’t say anything bad about (the hog producer).” People have long memories, both of cooperation and affront. Cooperation is so highly valued that, generations down the line, one cannot comment negatively about a grandson of someone who helped one’s grandfather. When a conflict occurs it must be between individuals or gigantic webs of factions would be created based on long standing familial and personal relationships similar to the famous Hatfield and McCoys feud (Jones 1948). As one preacher put it “hell is every man for

CAFOs, CULTURE AND CONFLICT ON SAND MOUNTAIN 167

himself... heaven is where we sit on the front porch with our friends and family and just have a good time.”

TECHNICAL AND LEGAL DIMENSIONS OF THE CAFO CONTROVERSY

Cultural norms regulating interpersonal conflict limit the ability of local residents to resolve the CAFO controversy. Lacking informal social control mechanisms, both sides of this issue have expanded the struggle into technical, scientific, and legal domains, to which we turn next.

In Defense of CAFOs

CAFO operators and their supporters have developed a framing argument based on what might be called plain necessity. Simply put, they argue, the days of small farms that had a few chickens and pigs are long gone, replaced by an era of specialization and economies of scale. CAFO operators, agribusiness firms, and many agricultural researchers agree with a poultry producer interviewed for this study, who noted that CAFO production systems are “both the natural direction for animal husbandry and the only option” and that they “are inevitable in the changing world in which we find ourselves.”

ALFA is the most visible agribusiness firm in Alabama and a powerful lobbying force in the state legislature. Between 2004 and 2008, ALFA pushed a piece of legislation called the Alabama Family Farm Preservation Act (known as Senate Bill 368 in the 2008 session) which would eliminate the ability of local governments to regulate any farm or expansion of farming operations. The bill includes a wide range of activities protected from legal action based on nuisance, including roadside stands and farmers’ markets, the plowing of land, the use of labor, and also “the generation of noise, odors, dust, and fumes in the production of farm products” and “the disposal of manure” (Section 2, SB 368). The bill concludes with a detailed discussion of how CAFOs are to be regulated.

ALFA’s legislative initiative has failed each year (including during the 2008 legislative session) to win passage, but this has not dissuaded ALFA in bringing the bill back for reconsideration. The bill itself frames the CAFO controversy both in terms of protecting traditional family farms and relying on the state regulatory process to protect public interests. The bill’s name (Alabama Family Farm Preservation Act) is a clear effort to frame the intent of the bill in terms that could brook no opposition – who could possibly be opposed to preserving family farms? The rhetorical references to such values continued in Section 1 of the Act, which stated that “The Legislature recognizes the importance of the family farm in

Alabama” and that the intent of the bill is “to assist in the preservation of family farms in Alabama” (SB 368).

CAFOs in Alabama currently are subject to common laws dealing with nuisances, meaning that citizens have the right to sue in local courts to protect their interests. Senate Bill 368 would specifically prohibit such legal action. Instead, CAFOs were to be subject only to formal regulation under authority of the federal Clean Water Act, and CAFOs would be licensed through the National Pollutant Discharge Elimination Systems permit system administered by the Alabama Department of Environmental Management (ADEM). Public interests under the proposed legislation were to be served not through local legal actions but by an underfunded state agency with a widely shared reputation of being probusiness (Long 2007).

Scientific and Legal Challenges to CAFOs

Members of SMCC recognize that framing their opposition to hog CAFOs only in terms of local definitions of what constitutes a bad neighbor are unlikely to have significant impact. They have, accordingly, also framed their opposition in scientific and legal terms. In particular, they have incorporated scientific assessments of water quality and legal challenges based on those assessments in an attempt to force hog CAFOs on Sand Mountain to cease operations. SMCC first sued a CAFO for being a “nuisance” based on odors and other environmental effects. Nuisances are handled under common law in the State of Alabama, and this legal challenge was unsuccessful. The second lawsuit was filed under the Federal Clean Water Act. This suit was successful and SMCC won a small settlement because they presented technical data demonstrating that there had been an impact attributable to a CAFO. To accomplish this, SMCC established its technical credentials by working with scientists from nearby Jacksonville State University, who provided training in scientifically-valid methods of collecting water samples for testing done at that University. The results effectively documented *e. coli* levels approximately 100 times the legal limit. As one SMCC member noted, “It was basically just poop water.”

SMCC has been active on both political and legal fronts and as a source of scientifically reliable water quality data. SMCC has established itself as an influential voice within the statewide environmental movement, and in particular helped bring CAFOs to the forefront of environmental consciousness in the state. The SMCC worked with the Sierra Club and other groups to strengthen regulations affecting CAFOs and in opposing legislative initiatives designed to

CAFOS, CULTURE AND CONFLICT ON SAND MOUNTAIN 169

protect CAFOs from legal challenge. In doing so, they faced opposition from ALFA and other agribusiness interests supportive of CAFO operators.

The SMCC benefited from connections with people who lived near local hog CAFOs and would alert SMCC members when wastes were being spread on the land. One SMCC leader noted that wastes were often sprayed at night and during rainstorms. The morning after the spraying, water samples were collected downstream from the swine facilities, allowing the SMCC to pinpoint the source of pollution. Ultimately, this was the most important piece of evidence for the lawsuit and secured a settlement in favor of the plaintiffs. Although many neighbors were unwilling to speak out publicly against hog CAFO producers, some were willing to alert SMCC members when to collect water samples.

CONCLUSION: CULTURAL FRAMES AS POLITICAL TOOLS

Actors on both sides of the Sand Mountain CAFO controversy have sought to frame their position using a mix of traditional and technocratic cultures. Both sides of the CAFO controversy use competing cultural frames to define and publicly criticize those on the other side of the issue, while mobilizing support within the larger community. They have created identities grounded in local and personal histories but also draw upon outsiders for support in the realm of regulatory and legislative politics.

Mirror-like, both sets of actors in the CAFO controversy have attempted to frame the issue in their own terms. Both have called upon traditional values in support of their position. CAFO supporters have framed the issue in terms of support for the family farm, a phrase that resonates deeply in Alabama as elsewhere in the United States. The oppositional frame characterizes farmers who have adopted CAFOs as bad neighbors who allow odor and other forms of pollution to effect those who live nearby adversely.

Both sides in the controversy also have framed CAFOs in legal and scientific terms that address concerns of courts and regulatory agencies of the state. The members of SMCC, especially the leaders, were effective in establishing themselves as credible sources of scientific data that allowed them to articulate effectively with the regulatory and legal systems of the state. They have been effective in mobilizing support within the wider environmental community, just as CAFO operators have been successful in mobilizing their own supporters. We have argued that how both sets of actors have framed their concerns, each framing the issue in a mix of tradition-based and legal-scientific values, have contributed to their respective

abilities to mobilize support. Apparently, neither side has defined the CAFO controversy in a way that demoralizes or demobilizes their opposition.

For better or worse, Sand Mountain and Appalachian Alabama generally have become part of the contemporary world, no longer insular and standing apart, and no longer able to depend on informal social sanctions to resolve conflicts. The tendency for local elites to control such processes for their own advantage (Schulman and Anderson 1999) suggests that we should not mourn this change. In the Sand Mountain CAFO controversy, local social control mechanisms had limited utility despite efforts on both sides to frame the issue in a way that undermines the legitimacy of the other. Even local residents who were directly affected by the smell emanating from the hog CAFOs refused to take a public stand in opposition because of personal loyalties based on kinship or other personal relationships.

The limits of local social control mechanisms have forced both sides of the CAFO controversy to carry their struggle to external audiences and domains of power. As this is written in early summer 2008, both sides continue their efforts to frame CAFOs to support their position and undercut that of their opposition. CAFOs are variously described as a modern approach to family farming or a plague on the land. The cultural context of this struggle is no longer that of local Sand Mountain tradition defining the qualities of neighborliness or the sanctity of private property, but the more universalistic arena of legislative politics and the courts.

REFERENCES

- Alabama Farmers' Federation. 2002. "Family Farm Bill Stalls in House, Senate." Retrieved June 19, 2008 (http://www.alfafarmers.org/leg_newsletter/index.phtml?id=3166).
- Babbie, Earl R. 2005. *The Basics of Social Research*. New York: Thomson Wadsworth.
- Batteau, Allen. 1982. "Mosbys and Broomsedge: the Semantics of Class in an Appalachian Kinship System." *American Ethnologist* 9(3):445–66.
- Bonanno, Alessandro and Douglas H. Constance. 2006. "Corporations and the State in the Global Era: The Case of Seaboard Farms and Texas." *Rural Sociology* 71(1):59–84.
- Burmeister, Larry L. 2002. "Lagoons, Litter and the Law: CAFO Regulation as Social Risk Politics." *Southern Rural Sociology* 18(2):56–87.
- Busch, Lawrence and Carmen Bain. 2004. "New! Improved? The Transformation of the Global Agrifood System." *Rural Sociology* 69(3):321–46.

CAFOS, CULTURE AND CONFLICT ON SAND MOUNTAIN 171

- Buttel, Frederick H. 2003. "Continuities and Discontinuities in the Transformation of the U.S. Agro-Food System." Pp. 177–89 in *Challenges for Rural America in the Twenty-First Century*, edited by D. Brown and L.E. Swanson. University Park, PA; Penn State University Press.
- Cates, Sheryl C., Jan Chvosta, and Ada Wossink. 2006. "Swine Producers' Perceptions of Alternative Waste Management Systems." *Journal of Sustainable Agriculture* 29(1):53–74.
- Constance, Douglas H. 2002. "Globalization, Broiler Production, and Community Controversy in East Texas." *Southern Rural Sociology* 18(2):31–55.
- Covington, Dennis. 1996. *Salvation on Sand Mountain: Snake-Handling and Redemption in Southern Appalachia*. New York, NY: The Penguin Group.
- Curran, Mary E. 2001. "Foucault on the Farm: Producing Swine and Subjects." *Southern Rural Sociology* 17:12–36.
- Flynt, Wayne. 1989. *Poor But Proud: Alabama's Poor Whites*. Tuscaloosa: University of Alabama Press.
- Gilbert, Kathy. 2000. "Hog Farm Carves Rift in Community." *The Times & Free Press*, October 1. Retrieved March 10, 2008 (<http://lists.iatp.org/listarchive/archive.cfm?id=15907>).
- Goffman, Erving. 1974. *Frame Analysis: An Essay on the Organization of Experience*. Cambridge, MA: Harvard University Press.
- Goldkist. 2007. Company. Retrieved November 4, 2007 (<http://www.goldkist.com/company/index.asp>).
- Harper, Allen. 2005. *Hog Production Contracts: The Grower-Integrator Relationship*. Virginia Cooperative Extension Publication No. 414-039. Retrieved June 23, 2008 (<http://www.ext.vt.edu/pubs/swine/414-039/414-039.html>).
- Heederik, Dick, Torben Sigsgaard, Peter S. Thorne, Joel N. Kline, Rachel Avery, Jakob H. Bønløkke, Elizabeth A. Chrischilles, James A. Dosman, Caroline Duchaine, Steven R. Kirkhorn, Katarina Kulhankova, and James A. Merchant. 2007. "Health Effects of Airborne Exposures from Concentrated Animal Feeding Operations." *Environmental Health Perspectives* 115(2):298–302
- Heffernan, W.D. 1984. "Constraints in the Poultry Industry." Pp. 237–60 in *Research in Rural Sociology and Development*, edited by H. Schwartzweller. Greenwich, CT: JAI Press.
- Jones, Virgil C. 1948. *The Hatfields and the McCoys*. Chapel Hill: University of North Carolina Press.

- Kilborn, Peter T. 1999. Hurricane Reveals Flaws in Farm Law as Animal Waste Threatens N. Carolina Water. *The New York Times*. October 17, 1999. Sunday, Late Edition-Final. Section 1, Page 32.
- Kilpatrick, John A. 2001. "Concentrated Animal Feeding Operations and Proximate Property Values." *Appraisal Journal* 69(3):301–6.
- Kloppenburg, Jack. 2004. *First the Seed; The Political Economy of Plant Biotechnology*. Madison, WI: University of Wisconsin Press.
- Koenig, Thomas. 2006. "Compounding Mixed-Methods Problems in Frame Analysis through Comparative Research." *Qualitative Research* 6(1):61–76.
- Krogman, Naomi T. 1996. "Frame Disputes in Environmental Controversies: the case of wetland regulations in Louisiana." *Sociological Spectrum* 16:371–400.
- Long, L. 2007. "Pale Green." *Business Alabama* 22(11):40–3.
- Lyson, Thomas A. 2004. *Civic Agriculture; Reconnecting Farm, Food, and Community*. Medford, MA: Tufts University Press.
- Mallin, Michael A. and Lawrence B. Cahoon. 2003. "Industrialized Animal Production – A Major Source of Nutrient and Microbial Pollution to Aquatic Ecosystems." *Population and Environment* 24(5):369–85.
- Molnar, Joseph J., Thomas Hoban, and Gail Brant. 2002. "Passing the Cluck, Dodging Pullets: Corporate Power, Environmental Responsibility, and the Contract Poultry Grower." *Southern Rural Sociology* 18(2):88–110.
- Mooney, Patrick H. 1983. "Toward a Class Analysis of Midwestern Agriculture." *Rural Sociology* 48(4):279–91.
- Patagonia. N.d. "Environmentalism." Retrieved March 10, 2008 (http://www.patagonia.com/usa/contribution/enviro.jsp?OPTION=ENVIRO_ARTICLE_DISPLAY_HANDLER&assetid=1809).
- Pilgrim's Pride. 2007. "From Humble Beginnings to Industry Leader." Retrieved November 4, 2007 (<http://www.pilgrimspride.com/aboutus/>).
- Robinson, Erin E. 2002. "Community Frame Analysis in Love Canal: Understanding Messages in a Contaminated Community." *Sociological Spectrum* 22(2):139–69.
- Schulman, Michael D. and Cynthia Anderson. 1999. "The Dark Side of the Force: A Case Study of Restructuring and Social Capital." *Rural Sociology* 64(3):351–72.
- Sigurdarson, Sigurdur T. and Joel N. Kline. 2006. "School Proximity to Concentrated Animal Feeding Operations and Prevalence of Asthma in Students." *CHEST* 129(6):1486–91.
- Snow, David A. and Robert D. Benford. 1988. "Ideology, Frame Resonance, and Participant Mobilization." *International Social Movement Research* 1:197–217.

CAFOS, CULTURE AND CONFLICT ON SAND MOUNTAIN 173

- Snow, David A., E. Burke Rochford, Jr., Steven K. Worden, and Robert D. Benford. 1986. "Frame Alignment Processes, Micromobilization, and Movement Participation." *American Sociological Review* 51:464–81.
- Snow, David A., Rens Vliegthart, and Catherine Corrigan-Brown. 2007. "Framing the French Riots: A Comparative Study of Frame Variation." *Social Forces* 86(2):385–415.
- USDA. 2002. *2002 Census of Agriculture*. Retrieved June 20, 2008 (http://www.nass.usda.gov/census/census02/volume1/al/st01_2_008_008.pdf; http://www.nass.usda.gov/census/census02/volume1/al/st01_2_037_037.pdf).
- _____. 2006. *Alabama Agricultural Statistics*. Bulletin 48. Montgomery, AL: Alabama Field Office, National Agricultural Statistics Service, U.S. Department of Agriculture.
- _____. 2007a. "Hogs & Pigs—Operations: Number by Size Group (Alabama)." Washington, DC: National Agricultural Statistics Service, U.S. Department of Agriculture. Retrieved October 13, 2007 (http://nass.usda.gov/QuickStats/PullData_US.jsp).
- _____. 2007b. "Alabama County Data—Livestock (Hogs & Pigs)." Washington, DC: National Agricultural Statistics Service, U.S. Department of Agriculture. Retrieved October 13, 2007 (http://nass.usda.gov/QuickStats/PullData_US_CNTY.jsp).
- _____. 2007c. "Hogs and Pigs—Operations: Percent of Inventory by Size Group." Washington, DC: National Agricultural Statistics Service, U.S. Department of Agriculture. Retrieved October 13, 2007 (http://nass.usda.gov/QuickStats/PullData_US.jsp).
- _____. 2007d. "U.S. and All States Data—Hogs & Pigs—Inventory by Class, Wt. Group: December 1, 2006." Washington, DC: National Agricultural Statistics Service, U.S. Department of Agriculture. Retrieved October 13, 2007 (http://www.nass.usda.gov/QuickStats/PullData_US.jsp).
- Von Essen, Susanna G. and Brent W. Auvermann. 2005. "Health Effects from Breathing Air Near CAFOS for Feeder Cattle or Hogs." *Journal of Agromedicine* 10(4):55–64.
- Walton, Bryan K. and Conner Bailey. 2005. "Framing Wilderness: Populism and Cultural Heritage as Organizing Principles." *Society and Natural Resources* 18(2):119–34.
- Webb, James. 2004. *Born Fighting: How the Scots-Irish Shaped America*. New York: Random House.

- Williams, Heather. 2006. "Fighting Corporate Swine." *Politics & Society* 34(3):369–97.
- Wing, Steve, Dana Cole, and Gary Grant. 2000. "Environmental Injustice in North Carolina's Hog Industry." *Environmental Health Perspectives* 108(3):225–31.
- Wolf, Eric R. 2001. *Pathways of Power: Building an Anthropology of the Modern World*. Berkeley, CA: University of California Press.