

A Thesis Presented to
The Faculty of Alfred University

HOW THE PLIGHT OF SMALL FARMERS
SHAPES THEIR PERCEPTIONS OF ABANDONED LAND

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INTRODUCTION TO THE HONOR'S THESIS



Figure 1: Allegany County, New York

Thesis

For my honor's thesis, I surveyed Allegany County farmers on their perceptions of abandoned land, with a goal of discovering how they felt personally affected by land abandonment and what personal factors (socio-political) may have influenced that perception.

Defining abandoned land

Abandoned land is a politically and emotionally charged term. Some individuals find the word "abandoned" negative because it suggests that the land is useless or inconsequential, while they consider the area to be quite productive for wildlife. Additionally, the term "abandoned" is used by many development agencies who hope to claim wild land for new commercial or industrial projects. Communities struggling to survive in the modern economy may find the term

“abandoned land” triggering, especially if they were forced to abandon farming the land due to financial circumstances.

For the purpose of this project, abandoned land is land that is no longer used for cultivation. Typically, the land is neither barren earth nor undisturbed wilderness; rather, it is populated by a mix of invasive, quick-growing scrub grasses and brushes. Depending on previous use, the land may be polluted by agricultural residue or may be teeming with wildlife taking advantage of the newly opened space. Abandoned land is not, as the name may suggest, usually deserted; it may be set aside purposefully for conservation or abandoned because the previous owners could not afford to cultivate it.

Abandoned farmland in Allegany County

The history of farming in Allegany County has been brief. In 1910, 56% of the land in the county was used for agriculture. By 1992, only 13% was used for agriculture (Copenheaver 2008). Because Allegany County has one of the shortest growing seasons in New York, and is cooler and less sunny than most of the state, it is difficult to grow many crops. Additionally, as farming technology and equipment evolved to favor larger tracks of farmland, Allegany County farmers lacked room to expand among the steep hills and slopes of the landscape. This is not to say that farming in Allegany County is impossible, merely that it is challenging, and combined with many other socio-political factors, has forced many farm families to find other work (Tucker 2012).

The unique and difficult climate of Allegany County is not the only struggle that local farmers face. Because farming is less prevalent in the area and is more common in the wide, flat expanses of the Mid-West, farm supply stores have vacated, leaving farmers with little options

for new equipment and few avenues for market or transportation. Because of the ease and cost-effectiveness of industrial farming, government subsidies and programs favor industrial farms, while regulating and taxing small farms so heavily that single families find it difficult to support themselves solely by farming.

Despite these challenges, farming still has a presence in Allegany County, and finding new ways to market their products. Many small-scale family farms are thriving, especially those who have followed the national trend back towards small, organic agriculture.

Selection of the subject

Over the summer of 2011, I took part in a project that studied the effects of land cover change, notably the increase in abandoned fields, on stream salamanders in the Genesee River Valley Watershed. The project involved calling landowners to gain access to their property, a small part of the overall process, but a formative one. I found that the landowners had stories about their property and their livelihoods that they wanted to share.

Driving around the county all summer, I became aware of the vast amount of abandoned farmland covering the landscape. As I researched abandoned land, the literature attributed the phenomenon to a national shift away from family farming and towards industrial agriculture. The forces that power modern industrial agriculture (heavy pesticide use, commercialization, profit maximization, decreased labor, genetic technology, and global trade) are financially “encouraged” by the government and generally make farming difficult and expensive for small-scale farmers, which forces them to stop farming and abandon their land.

In my research, I found that scientific literature lacked the perspectives of abandoned land that were most relevant: the perspectives of the farmers whose lives depend on farming.

Many of the articles dealt with the aesthetic perceptions towards abandoned land, without including how and why those perceptions had formed. The goal of my study was to fill this gap, both in my own knowledge, and in the scientific literature regarding abandoned land.

Methods

Through lists at the websites of various organic and governmental farm agencies, I generated a list of 57 farmers in Allegany County. In January 2012, the farmers were mailed a cover letter, which explained my intent, and a standardized survey. This survey contained a mix of 17 qualitative and quantitative questions. The respondents were asked to answer questions about land ownership, abandoned land as it contributes and relates to other environmental issues, and background.

Results

Out of the 57 surveys that I dispatched, I received 45 replies, which is a 79% response rate. The respondents covered the page in writing, depicting clear passion. They answered the write-in questions thoroughly and when they found my multiple-choice questions unsatisfying, wrote in answers that were more appropriate to their specific situation. One respondent contacted me to talk more about the subject, and we ended up having a two-hour conversation. Each time I searched for more community authorities to speak on the subject, the people that I spoke to provided eager support and personal stories. Clearly, this demonstrates not only the relevance of abandoned land to Allegany County farmers, but also the willingness of Allegany County residents to support student research.

In the results, I found not only enthusiasm but frustration. Respondents expressed despair over the financial situations that forced them to abandon their land and seek work outside the

home. They felt economically pressured by increasing agricultural costs, the plummeting US economy, industry promoting government regulations, and high property taxes. Respondents recounted how difficult it was to reclaim abandoned land and to control the invasive species that abandoned land encourages. They saw abandoned land as a symbol of the downfall of farming, and remembered a time when farming was more successful in the county. A few respondents even asked me to mail them my results, in hopes of personally sharing this information among their community groups.

Implications of the Honors Thesis

As with all student research, the completion of this thesis was a learning process. The responses to the survey revealed that I had overlooked several issues crucial to Allegany farmers. As a first-time user of SPSS (Statistical Package for Social Sciences), I had to learn how to use the program while simultaneously trying to obtain meaningful results. Despite these challenges, the opportunity to read the responses of concerned and passionate residents and to gain the support of community members interested in aiding student research imbued me with a confidence in social science research that I had previously lacked. Allegany County residents desire an outlet to voice their concerns and participating in student research is one avenue. Hopefully I will have the chance to share these results in a way that produces meaningful dialogue among local political and regulatory authorities.

ABSTRACT

Over the last century, the U.S. economy has favored large-scale agribusiness over small-scale farming. This trend has led to the widespread abandonment of cultivated land. Despite this, there is a lack of scholarly literature that discusses how farmers are affected by this change. Mainstream studies by environmental researchers deal with the ecological implications and aesthetic value of abandoned farmland, but leave out the opinions of those who live depend most on farming. The goal of this study was to examine Allegany farmers' perceptions of abandoned land and the correlates of those perceptions such as political party affiliation, views on the economy and government regulations, as well as socioeconomic status. The data were collected through surveys mailed to 57 full-time farmers and part-time farmers in Allegany County, NY, in January 2012. I found that the majority of farmers not only found abandoned land personally troubling, as the land was unproductive and difficult to reclaim, but attributed the increase of abandoned land to oppressive and nearly insurmountable larger forces. Farmers felt under assault by government regulations and taxes and left behind by industrial farming. These findings address the sociopolitical significance of abandoned land and contribute to an understanding of how abandoned land affects residents of rural communities who are typically left out of discussions on policies affecting their livelihoods.

1. INTRODUCTION

In the early 1900s, more than one out of every three Americans lived on farms. By the end of the century, only 2% of the farming population remained, and of that 2%, nearly 90% of household income came from nonfarm sources (Lobao & Meyer 2001). This stark change was

due to a massive transformation in the North American economy, which shifted from primarily agricultural to industry and service based in less than a century (Benjamin et al. 2007).

Until the industrial revolution, most farmers used a mixed-agricultural system, which succeeded through the diverse rotation of crops and livestock rearing. Over the last century, technological advances in farming practices, the incorporation of farming operations, and heavy reliance on agro-chemicals fostered the success of large-scale, mono-culture operations nationwide (Howley et al 2011). This industrial shift is not the only factor that impacts American farms. As farming continues to evolve, pressures on small farms will include: increased land degradation, competing land uses, global climate change, increasingly strict state and federal health regulations, the challenge of obtaining organic certification, a lack of government support, and the increasing age of farmers without children to take over when they retire (Hanson et al 2008). Nationwide, the majority of farm operators are 45 to 65 years old, and farm operators over 65 is the fastest growing group (2007 Census of Agriculture).

This increased pressure on farmers has led to the widespread abandonment of agricultural fields (Howley et al. 2011). This abandonment has caused vast tracks of farmland to go through vegetative succession and reforest. These abandoned lands do not necessarily return to their historical vegetative states; rather novel pioneer species may invade and reshape the surrounding plant and animal communities (Hicks & Pearson 2003).

Opinions of abandoned land are especially negative among farmers. In one study, vacated fields suggested a loss of tradition and a loss of value (as potential farmland), and upset respondents who were reminded of the difficult work that their ancestors had spent cultivating the land (Hunziker 1995). When surveying owners of abandoned land, a study found that

abandoned land is the part of their property that had the least value and was the least liked. Because of an increase in the area of land owned per owner, the reduction in the number of farms, and the high costs associated with agricultural business, farmers were found to hold surprisingly anthropocentric views of nature (a value system which emphasizes how humans can benefit from nature). Historically, farmers have been associated with more nature-centric views. (Benjamin et al. 2007).

For those whose lives are less dependent on farming, abandoned land is a welcomed sign that nature is reclaiming space once exploited by humans and becoming more hospitable to local wildlife. Its unkempt and scraggly grasses are a symbol of land healing from human disturbance and providing new and diverse habitat. A study that surveyed urban tourists and rural locals revealed that urban tourists especially found the reforestation of abandoned agricultural fields to be pleasant based on increased feelings of “freedom” and “wildness” (Hunziker 1995). Many communities which lack green space choose to convert abandoned land to protected conservation areas or recreational spots (Parmenter 2011).

Few studies have been conducted on the implications of abandoned land, especially as a result of the issues of modern farming rather than as an aesthetic concern. None of these studies to my knowledge have taken place in Western New York. I believe that this component is critical in both understanding the plight of rural farmers and understanding national changes in agriculture. Scientific literature tends to place importance on urban social relationships while ignoring rural areas like Allegany County, and this study is intended to fill that gap (Lobao & Meyer 2001).

The goal of this study was to determine how land ownership and socio-economic characteristics influenced feelings towards abandoned agricultural fields in the farmers of Allegany County, New York. This was accomplished through a county-wide survey of land ownership, socio-economic status, and feelings towards abandoned land, which were analyzed statistically to determine how the systems influenced each other. A collection of short answer questions were also analyzed for general trends in opinion and thought.

As farming continues to evolve, each generation of farmers is met with a diverse set of challenges and concerns, and modern farmers feel more pressured than ever by external economic and governmental forces. To ignore the voices of farmers when the practice of modern agriculture is changing so rapidly is a loss of crucial input. Abandoned land is not simply a change in land use for farmers; it is the loss of their livelihood.

2. METHODS

2.1 Background of the study area

This study took place in Allegany County, located in the Genesee River Valley of Southwestern New York, from May 2011 to April 2012. The study area is 1,030 square miles and contains 49 persons per square mile. In 2009, the total population of the county was 49,157. Of the total population, there are 49% females and 51% males. The median age is 37 (U.S. Census Bureau 2010).

In Allegany County, education attainment levels vary, with the majority of individuals (40%) reporting high school graduation. The rest of the population (for individuals 25 years and older) is divided as follows: less than 9th grade 4%, 9-12th grade 8%, some college 16%, associate's degree 13%, bachelor's degree 10%, graduate degree 10%. Allegany County is

politically conservative, as 63% voted for George W. Bush in the 2004 elections and 61% voted for John McCain in the 2008 presidential elections (U.S. Census Bureau 2010).

Historically, Allegany County's main land use was dairy farming. In 1910, 56% of the land in the county was used for agriculture. By 1992, only 13% was used for agriculture (Copenheaver 2008). In 2010, the land in Allegany County was primarily deciduous forest, at 394,700 acres, and also contained 42,560 acres of evergreen forest, 30,470 acres of shrub land, 25,580 acres of mixed forest, 18,207 acres of open (developed) space, 2,450 acres of low density development, 2,380 acres of open water, 1,420 acres of fallow cropland, 1,360 acres of woody wetlands, 667 acres of herbaceous wetlands, 600 acres of medium density development, and 120 acres of highly developed land (Boryan 2011).

2.2 Conceptual Framework

Through lists at the websites of the Farm Service Agency, the North American Organic Farmer's Alliance, the Cornell Cooperative Extension for Allegany and Cattaraugus Counties, and the Allegany Tourism Bureau, I aggregated a list of 57 farmers in Allegany County. This sample is biased towards addresses which I could find through internet databases. In order to make this survey as inoffensive as possible, I chose to use addresses which were publically available.

On January 13th, 2012, 57 farmers were mailed a cover letter (see Appendix B), which explained my intent, a standardized survey, and a return envelope with included postage. The surveys were numbered to eliminate duplication, which cut down on costs, waste of materials, and postal resources. On January 26th, 2012, I sent out a follow-up mailing to those from whom I had not yet received a response.

This survey (see Appendix A) contained a mix of 17 qualitative and quantitative questions. In section 1, the respondents were asked to answer questions about land ownership. The assumption was that amount of land owned, length of land ownership, and possession of abandoned land would affect perceptions towards abandoned land, especially since abandoned land may be financially burdensome for those still pay taxes on land that they can no longer afford to farm.

In section 2, respondents were asked to answer questions about abandoned land as it relates to opinions on environmental issues. The assumption was the association between different economic, political, and environmental issues and abandoned land would differ depending on land ownership and socio-political background. I hypothesized that full-time farmers would feel more negatively towards abandoned land, more “personally affected” and would think that the best use of abandoned land would be for agriculture. I assumed that owners of abandoned land would feel more negatively towards abandoned land.

Because multiple choice questions ask respondents to simplify complicated issues, the respondents were asked to answer two short answer questions. These questions allowed respondents to express ideas and feelings that did not fit into the multiple choice categories. In the results, full and part-time farmers who “feel personally affected” by abandoned land are those who answered “yes” to the question “do you feel personally affected by abandoned farmland?”

In section 3, respondents were asked to answer questions about the community’s responsibility towards abandoned land. This question was designed to discover how this opinion differed based on land ownership and socio-political background.

Next, the respondents were asked to fill out a semantic differential, which measured the connotative meaning of different visual concepts (taken from Benjamin et. al). This portion of the research was meant to situate these findings among other assessments of the perceptions of abandoned land, which I found to be largely aesthetic.

In section 4, respondents were asked about their background. These results allowed for an analysis of how length of residency in Allegany County, gender, occupation, highest level of education attained and political affiliation drove perceptions of abandoned land.

2.3 Statistical Analysis

Using SPSS Statistics 17.0, I analyzed the data to determine relationships between dependent variables of land ownership and socio-political variables and independent variables of opinion and feeling. I assessed cross-tabulations of frequency and compared means to establish multi-variable trends.

3. RESULTS

Out of the 57 surveys that I dispatched, I received 45 replies, which is a 79% response rate. I received the bulk of the replies, 68% of the total, before sending out the second mailing.

Of the respondents, 93% owned land in Allegany County, and 28% of those who owned land considered some of their land “abandoned.” The amount of land owned ranged from 1 acre to 1356 acres, with a median of 160 acres. Forty-four percent of respondents owned less than 101 acres of land. Length of ownership ranged from 2 to 106 years (intergenerational family ownership in the latter case), with a mean of 25 years, indicating that many land owners did not grow up on the land that they own.

While 80% of the respondents listed “farming,” as their occupation, 42% listed farming as a secondary occupation or listed an occupation other than farming.

3.1 Differences in response between full-time farmers and part-time farmers

In the following sections, those who listed their primary occupation as farming are called “full-time farmers” and those who listed their primary occupation as something other than farming are called “part-time farmers.” They are called “part-time farmers” because many of the respondents listed farming as a secondary occupation, many had retired from farming, and all were found on the lists of agencies associated with farming.

Full-time farmers owned more land than part-time farmers and also owned the land longer. Full-time farmers are more likely than part-time farmers to feel affected by abandoned land but are less likely to own abandoned land. When those who own abandoned land were compared to those who did not own abandoned land, those who did not own abandoned land, especially full-time farmers, felt more affected.

The mean age of the full-time farmers was 54, while the mean age of part-time farmers was 59. Most full-time farmers were male, at 80%, while 63% of part-time farmers were male. Fifty-six percent of full-time farmers had a college degree. The political breakdown is as follows: 57% of full-time farmers consider themselves Republican, 22% consider themselves Independent, 17% consider themselves “other” (not affiliated with any of the listed political parties), and 4% consider themselves Democrat.

3.2 Farmers' perceptions of abandoned land

Regarding issues which were problematic to farmers in Allegany County, both full and part-time farmers selected the state of the U.S. economy (62%) and state, national, and local regulations (65%) over the rise of industrial agriculture, a lack of financial support and changing global weather patterns. However, when comparing full-time farmers and part-time farmers, part-time farmers were more likely to select every answer, perhaps because these issues explain why part-time farmers cannot farm full-time. A majority of both full and part-time farmers who considered themselves Republican thought that both the state of the U.S. economy and local, state, and national regulations were problematic to farmers in Allegany County. Over 80% of full and part-time farmers who considered themselves Democrats or “other” thought that the rise of industrial farming was problematic (Table 1).

Regarding the best use for an abandoned field, full-time farmers and part-time farmers both agreed that the best use of an abandoned field was to be used for new agricultural production (69% and 53%) (Table 1). Regardless of political party affiliation, full-time farmers felt more strongly that abandoned fields should be used for agricultural production, but especially if they were republican. Farmers who felt personally affected by land abandonment were also most likely (83%) to think that abandoned fields should be used for new agricultural production. One-hundred percent of part-time farmers, whether or not they felt personally affected by abandoned land, thought that abandoned fields should not be used for new commercial or industrial agriculture.

Regarding responsibility towards the land, full-time farmers and part-time farmers alike chose “other” over the provided responses, indicating that they thought that the community’s

responsibility to the land was neither predominantly to “make as little of an impact as possible” nor to “use natural resources to our benefit.” Nearly 50% of both full-time farmers and part time farmers chose “other” and of that group, 16% of full-time farmers and 23% part-time farmers wrote in an answer similar to “to use responsibly,” or “whatever the land is suited for” illustrating their desire for a multiple choice option that expressed sustainable and wise land use.

The only landscape which full-time farmers found more beautiful than part-time farmers was densely forested woodland (85%), but cultivated field also rated highly in beauty for both full-time farmers (85%) and part-time farmers (90%) (Table 1). It is also worth noting that 12% of both full-time farmers wrote in “pasture” in the “other” category.

Table 1. Environmental Attitudes (Respondents had the option of selecting multiple answers)

Question	Frequency %	
	Full-time Farmers	Part-time Farmers
Which of the following issues do you think are problematic to farmers in Allegany County?		
The state of the U.S. economy	62%	74%
Industrial farming	46%	68%
Lack of government financial support	4%	26%
Local, state, and national regulations	65%	68%
Changing global weather patterns	8%	16%
Other	46%	47%
What is the best use of an abandoned field?		
Kept wild as a place to observe nature	23%	32%
Used for new agricultural production	69%	53%
Used for new commercial or industrial agriculture	15%	0%
I have not thought about this issue	0%	5%
Other	35%	16%
What is the community’s responsibility towards the land?		
To make as little of an impact as possible	39%	42%
To use natural resources to our benefit	50%	26%
I have not thought about this issue	8%	5%
Other	42%	23%
Which of the following landscapes do you find beautiful?		
Densely Forested Woodland	85%	74%
Wild, overgrown Field	23%	47%
Cultivated Field	85%	90%
Baseball Field	12%	5%
Painting in a museum	23%	21%
Not Sure	4%	0%
Other	25%	16%

3.3 Aesthetic perceptions of abandoned land

Aesthetic perceptions of abandoned land were assessed through a semantic differential scale. Possible semantic differential scores ranged from 10 (most negative attitude toward abandoned farmland) to 70 (most positive attitude toward abandoned farmland). Full-time farmers who did not own abandoned land in Allegany County had more negative feelings (30) than farmers who owned abandoned land (37) and even more negative feelings than part-time farmers. Full-time farmers who felt personally affected by land abandonment felt most negatively towards abandoned land (31) while part-time farmers who did not feel personally affected by land abandonment felt the least negatively (45).

Both full and part-time farmers who considered themselves politically affiliated with “other” felt the most negatively about abandoned land (28), followed by independent farmers (31) and democratic farmers (32). These results indicate that while Republicans are more likely to attribute abandoned land to the state of the US economy and governmental regulations, respondents affiliated with other political parties are more likely to find abandoned land aesthetically displeasing. Additionally, full-time farmers with a college degree felt the most negatively (28), indicating that perhaps education plays a role in shaping aesthetic perceptions. Male full-time farmers scored most negatively (35), while female part-time farmers scored the most positively (39).

Full-time farmers felt most strongly that abandoned farmland was unproductive (2), common (2), and untidy (2). The selection of “unproductive” to describe abandoned land indicates that full-time farmers are troubled by the inability to cultivate abandoned land and wish to make the land productive agriculturally. This is supported by their selection of “untidy” which

is associated with the absence of the neatly tilled rows and corridors of agricultural land.

“Common” attests to the perceived prevalence of abandoned land in Allegany County. Part-time farmers depicted similar trends, but thought less negatively of abandoned land overall (Table 2).

Table 2. Mean of Semantic Differentials (Possible score from 7 (most positive) to 1 (most negative))

	Primarily Farmer	Part-time Farmer
Tidy/ Untidy	2	3
Beautiful/Ugly	3	4
Varied/Uniform	6	5
Pleasant/Unpleasant	3	4
Useful/Useless	3	4
Stressful/Relaxing	4	5
Causes shame/Causes pride	3	3
Rare/Common	2	3
Artificial/Natural	4	5
Productive/Unproductive	2	4

3.4 Qualitative Responses

In the following section, short answer responses have been categorized and selected responses have been shared. When asked, “Do you think that any of these problems contribute to land abandonment in Allegany County?” 34 out of 45 (76%) of respondents answered the question. Below are some responses to this question.

The Economy

“The small farm is unable to compete in today's economic conditions because the cost of fuel, seed, feed, and farm equipment has skyrocketed. Our transportation and advertising costs to get goods to market is also costly.”

-full-time farmer, age 51

“The small farms I'm aware of have at least one full time spouse working a full time job somewhere other than the farm to help support the household and farm. Our county has very little industry so much people cannot find any job in the area of their farm, which increases the number of abandoned farms.”

-full-time farmer, age 51

“When income from farming isn't enough to sustain a family's living expenses, let alone the business, most of us have to work off the farm, decreasing quality of business and lifestyle of family.”

-part-time farmer, age 64

Industrial Farming

“Industrial farming has practically obliterated small and medium sized farms, forcing them to move to obtain jobs and leave land abandoned.”

-part-time farmer, age 61

“The efficiencies of industrial farming have kept food prices low compared to the rest of the economy making small farming and small fields unprofitable.”

-full-time farmer, age 65

“As industrial farming grows so does the size of equipment they own making it impossible for them to cultivate small plots economically thus the land was abandoned.”

-full-time farmer, age 64

NYS Regulations

“The cheap food policy at the national level coupled with subsidies is the perfect environment for corporate food companies to obtain inexpensive corn, milk, meat and make money retailing low nutrition, long-shelf-life food that leads to health problems and abandoned land.”

-full-time farmer, age 57

“National regulations favor industrial agriculture resulting in low price for farm commodities- forcing out small, local, farmers when a farmer can't make a living on the land, which sometimes results in abandoning the land.”

-full-time small farmer, age 57

Taxes

“With all the taxes, it is becoming increasingly harder to make a living off the land. Small farms on marginal land are having a real tough time.”

-full-time farmer, age 62

“The costs of owning land from taxes is significant and restrictive for low income farms.”

-part-time farmer, age 45

“Allegany County is one of the poorest counties in the state, yet has the highest property taxes in relation to property values.”

-full-time farmer, age 43

3.5.2 Ways in which farmers feel “personally affected” by abandoned farmland

In the following section, as above, short answer responses have been categorized and selected responses have been shared. When asked, “Do you feel personally affected by land abandonment,” 35 out of 45 (78%) respondents answered this question. Seventy-three percent of full-time farmers answered this question, while 54% of part-time farmers answered this question, demonstrating how strongly full-time farmers feel personally affected by abandoned land. Below are the responses to this question.

Abandoned land is difficult to reclaim

“The owners of abandoned acreage find little work in keeping it cleared, lined or seeded, so that it is difficult to find extra land to lease for pasture or hay that is of any quality.”

-part-time farmer, age 54

“Abandoned land grows up to brush. Birds carrying the seeds to our land and make it harder for us to keep our land clean. Also a great habitat for deer. They eat everything that we grow.”

-full-time farmer, age 62

“Weeds and invasive species from abandoned land make it more expensive to control on adjacent land still in production”

-full-time farmer, age 44

The increase in abandoned land is a result of a decline in farming

“The abandoned land gives the impression that farms cannot be successful in this country. It is very difficult to make a living on farm income alone.”

-full-time farmer, age 51

“It just gives me a sad feeling to see fields growing up in weeds and brush. I would like to see it cleaned off and being farmed.”

-full-time farmer, age 27

“I grew up in Allegany County and remember when most of these smaller farms were productive and viable. It took years to "make" these farms--clean the land etc. and what a waste to see beautiful hay fields and crop fields taken over by scrub brush. IT'S HORRIBLE.”

-part-time farmer, age 50

“Some of my neighbors are in danger of losing land that has been in their family for 150 years because they can't keep up with rising property tax rates.”

-full-time farmer, age 43

“Farming is a 24/7/365 day job with little monetary compensation. We do it because it is a heritage and honorable way of life, but a dying breed.”

--part-time farmer, age 64

To summarize the short answer questions, respondents expressed frustration over the financial situations that forced them to abandon their land and seek work outside the home. They felt economically pressured by increasing equipment and materials costs, industry geared government regulations, and high property taxes. Respondents recounted how difficult it was to reclaim abandoned land and to control the invasive species that abandoned land encourages. They saw abandoned land as a symbol of the downfall of farming, and remembered a time when farming was more successful in the county.

6. DISCUSSION

To discover the relationship between socio-economic status and perceptions of abandoned land, the survey results of 45 respondents were collected and analyzed statistically. Overall, both full-farmers and part-time farmers felt personally affected by abandoned land. Full-time farmers felt more affected than part-time farmers, despite only 29% of all respondents actually owning abandoned land, and full-time farmers owning less abandoned land than part-time farmers.

As reported in numerous studies (Benjamin et al. 2008); (Howley et al. 2011); (Hunziker 1995); there was a strong relationship between socio-political status and perceptions of abandoned land. Overall, full-time farmers and part-time farmers would like to see abandoned land redeveloped for cultivation, they are generally divided over the community’s responsibility towards the land, and they think that densely forested woodlands and croplands are the most

beautiful landscapes. Aesthetically, full-time farmers found abandoned land unproductive, common, and untidy, and scored more negatively than part-time farmers, despite owning less abandoned land. Republicans are more likely to attribute abandoned land to the state of the US economy and governmental regulations, while respondents affiliated with other political parties are more likely to find abandoned land aesthetically displeasing.

All farmers were concerned with the state of the U.S. economy and local, state, and national regulations, as displayed in their multiple choice responses. Despite much of the literature reviewed attributing the increase in abandoned land to a rise in industrial farming (Copenheaver 2008); (Benjamin et al. 2008); (Hanson 2008); (Howley et al. 2011); (Hunziker 1995); (Lobao & Meyer 2001); the full-time farmers and part-time farmers of Allegany County attributed land abandonment to the many external economic and governmental challenges that cause their livelihoods to be threatened, rather than the industrial farming which drives many of these policies.

7. CONCLUSION

Based on the high response rate (79%), and the length and volume of the survey replies, abandoned land is an issue that is relevant to full-time farmers and part-time farmers. Because full-time farmers and part-time farmers consider their struggles to be largely economic and political, the conclusion of this research suggests that government agencies and farming agencies must focus more on the specific economic hardships that farmers face. On a more global scale, more attention needs to be focused towards the small, family farms that keep farming sustainable and less on the industrial farms which make it so difficult to farm in Allegany County.

APPENDIX

A. Survey

Section 1: Land Ownership

- 1) Do you own land in Allegany County?
 - a) If yes, continue to question 2
 - b) If no, skip to the next section
- 2) How much land do you own? _____acres
- 3) How long have you owned this particular land? _____years
- 4) Is any of the land that you own considered abandoned land?
 - a) Yes
 - b) No
 - c) I'm not sure

Section 2: Abandoned Land

- 5) Which of the following issues do you think are problematic to farmers in Allegany County? (Select all that apply)
 - a) The state of the U.S. economy
 - b) The rise of industrial farming
 - c) A lack of financial support from the government
 - d) Local, state, and national regulations
 - e) Changing global weather patterns
 - f) Other_____
- 6) Do you think that any of these problems contribute to land abandonment in Allegany County? Please describe how.
- 7) Do you feel personally affected by abandoned farmland? Please describe how.
- 8) What is the best use of an abandoned field?
 - a) Kept wild as a place to observe nature
 - b) Developed for new agricultural production
 - c) Developed for new commercial or industrial infrastructure
 - d) I haven't thought about it
 - e) Other_____

Section 3: Environmental Attitudes

- 9) What is the community's responsibility towards the land? (Select all that apply)
 - a) To make as little of an impact as possible
 - b) To use natural resources to our benefit
 - c) I haven't thought about it
 - d) Other_____

10) Which of the following descriptions of landscapes do you find beautiful?

- a) A densely forested woodland
- b) A wild, overgrown field
- c) A cultivated field
- d) A baseball field
- e) A painting in a museum
- f) I'm not sure
- g) Other _____

Please select a number on each line of the scale that lies closest to the word that describes your feelings towards abandoned land.

Tidy	7	6	5	4	3	2	1	Untidy
Beautiful	7	6	5	4	3	2	1	Ugly
Varied	7	6	5	4	3	2	1	Uniform
Pleasant	7	6	5	4	3	2	1	Unpleasant
Useful	7	6	5	4	3	2	1	Useless
Stressful	7	6	5	4	3	2	1	Relaxing
Causes shame	7	6	5	4	3	2	1	Causes pride
Rare	7	6	5	4	3	2	1	Common
Artificial	7	6	5	4	3	2	1	Natural
Productive	7	6	5	4	3	2	1	Unproductive

Section 4: Your Background

11) How old are you? _____ years

12) How long have you lived in Allegany County? _____ years

13) What is your gender? _____

14) What is your occupation? _____

15) What is the highest level of education that you have completed?

- a) Less than High School
- b) High School
- c) Some college
- d) College Degree
- e) College Degree and Higher

16) With what political party do you consider yourself affiliated?

- a) Democratic
- b) Republican
- c) Independent
- d) Other _____

B. Cover Letter

Dear Participant,

My name is Kara Kuntz and I am completing my Honors Thesis in Environmental Studies at Alfred University. I am conducting a survey of Allegany County farmers. The goal of my project is to understand how Allegany County farmers feel affected by abandoned farmland.

I consider abandoned farmland to be land that was previously cultivated but has been left alone long enough for woody brush and weeds to dominate the space. Whether abandoned lands are beneficial or harmful to the local ecology, rural communities lack information about how farmers are affected by their presence. My study aims to find that out.

The survey enclosed in this envelope should only take five minutes. Your voluntary participation in this research will ensure the success of my project. I will share these results with farming agencies in the hopes that **your voice will be heard. Together we can raise awareness of the issues facing small farmers in Allegany County.**

The results are **anonymous**; therefore please do not identify yourself on the questionnaire. I do not need to know your name for my purposes. This study poses no risks beyond those encountered in daily life.

If you find that none of the multiple choice questions accurately depict your feelings, I encourage you to write in an answer.

I have included in this envelope a stamped and addressed return envelope for your convenience. I hope you will return the survey as soon as you can.

Thank you so much for your help and support. Please let me know if you would like a copy of my final paper upon completion in April.

If you have any questions about the study, please contact the Human Subjects Research Committee Chair, Dr. Danielle Gagne, gagne@alfred.edu, or my project advisor Dr. Karen L. Porter, fporter@alfred.edu.

This study was approved by the Human Subjects Research Committee at Alfred University, on November 22nd, 2011.

If you have any questions about this survey or other aspects of my research, or you feel especially strongly about abandoned land and would like to talk more about the issue, please **call (845-825-0795)** or **email (kak20@alfred.edu)**

Thank you for your time and consideration,

Kara Kuntz, Student
Department of Environmental Studies,
Alfred University, Alfred, NY

REFERENCES

- Benjamin, K., Bouchard, A., & Domon, G. (2007). Abandoned farmlands as components of rural landscapes: an analysis of perceptions and representations. *Landscape and Urban Planning*, 83, 228-244.
- Boryan, C., Yang, Z., Mueller, R., Craig, M., (2011). Monitoring US agriculture: the US Department of Agriculture, National Agricultural Statistics Service, Cropland Data Layer Program. *Geocarto International*, 26 (5), 341–358.
- Bush, Vivian Kate. “Allegany County.” Photo.
<http://www.rootsweb.ancestry.com/~nyallega/county.html> 16 July 2006. Accessed 25 April 2012.
- Copenheaver, C. (2008). Old-field succession in Western New York: the progression of forbs and woody species from abandonment to mature forest. *Rhodora*, 110, 157-170
- Hanson, J. D., Hendrickson, J. & Archer, D. (2008). Challenges for maintaining sustainable agricultural systems in the United States. *Renewable Agriculture and Food Systems*, 23, 325-334.
- Hicks, N., & Pearson, S. (2003). Salamander diversity and abundance in forests with alternative land use histories in the southern blue ridge mountains. *Forest Ecology and Management*, 177, 117-130.
- Howley, P., Donoghue C., Hynes S. (2011). Exploring public preferences for traditional farming landscapes. *Landscape and Urban Planning*, 104, 66-74.
- Hunziker, M. (1995). The spontaneous reforestation in abandoned agricultural lands: perception and aesthetic assessment by locals and tourists. *Landscape and Urban Planning*, 31, 399-410.
- Lobao, L., Meyer, K., (2001). The great agricultural transition: crisis, change, and social

consequences of twentieth century US farming. *Annual Review of Sociology*, 27, 103-124.

Northeast Organic Farming Association of New York (2011). Organization Directory Search Results. Retrieved from: <http://www.nofany.org/directory>

Parmenter, Thomas (October 26th, 2011). Email correspondence

Robinson, M. (November 4th, 2011). The New Generation of Farmers. *Environmental Studies Seminar*. Conducted from Alfred, University, Alfred, NY

Snyder, J. (January 15th, 2012). Personal Interview.

Tucker, T. (April 12th, 2012). Personal Interview

U.S. Census Bureau (2010). United States – Fact Sheet. Retrieved from:
<http://2010.census.gov/2010census/data/>

U.S. Census Bureau (2010). Allegany County. Quickfacts from the U.S. Census Bureau.
Retrieved from: <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>

U.S. Department of Agriculture (2007). Census of Agriculture. Retrieved from:
<http://www.agcensus.usda.gov/Publications/2007/index.php>

