

A Farmland Protection Plan
for
Clay County, North Carolina

**Prepared for the County Commission and the
Clay County Farmland Preservation Committee**

by
Smithson Mills and Sam Bingham

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CLAY COUNTY FARMLAND PROTECTION PLAN

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Executive Summary

This Farmland Protection Plan is intended to be a working guide to understanding the status of farms in Clay County, threats to and opportunities for the continuance of agriculture, and practical options for both policies and strategies that will protect agriculture and preserve it for future generations. Adoption of recommendations contained in this plan will secure the County's commitment to addressing the decline of farms and farmland in Clay County and to investigating options and alternatives for future farms and farmers.

In accordance with state law, components for this plan include the following:

1. A description of existing agricultural activity in the County;
2. A list and description of existing challenges to continued family farming in the County;
3. Identified opportunities for maintaining or enhancing small, family-owned farms and the local agricultural economy;
4. A description of how the County plans to maintain a viable agricultural community.
5. A schedule for implementing the plan and an identification of possible funding sources for the long-term support of the plan.

Agriculture in Clay County has been in decline for several decades, with a rapid acceleration in the loss of farms and farmland in the past 13 years. The County has experienced a near-elimination of burley tobacco production and the complete elimination of dairy farming during this period. Agricultural receipts declined from just over \$4.6 million in 1997 to just over \$1.1 million in 2007, a 76% decline. On a per-farm basis, the average market value of agricultural products sold decreased from \$28,181 in 1997 to \$8,131 in 2007.

Along with the decline of economic activity, the County experienced steep drops in the number of farms, land in farms, and the number of active farmers. From 1997 to 2007, the number of acres in farms plummeted by 47.2%. Total cropland declined by 64.8%. The number of full-time farmers declined from 75 to 54, and the median size of farms was cut in half, from 60 acres in 1997 to 30 acres in 2007. According to the Census of Agriculture there were 137 farms remaining in the County in 2007.

To better illustrate the status of farming today in Clay County, this plan profiles 14 agricultural landowners and professionals within the County. Their stories represent several different situations and circumstances that many landowners are facing today: former dairy farmers worried about transition issues; newcomers to the County who want to preserve the agricultural character of their land; a successful row-crop farmer; cattle farmers diversifying into local beef

production; small-scale produce farmers; a producer of top-breed cutting horses; and a lumber mill operator. This plan also includes results of an agricultural landowner survey that further illustrates the status of farming in the County and the demographic characteristics of landowners holding land under Present-Use Valuation (PUV).

This plan lists key challenges to and opportunities for the continuance of farming in Clay County. Key challenges include recently soaring land values, steep land unsuitable for most types of farming, shrinking farm sizes, a scarcity of farm labor, and various restraints to marketing agricultural products both locally and for export to larger consumer markets. This plan recommends policies and actions that both protect agricultural land and improve the viability of agriculture. Broadly defined, these recommendations fall into six categories:

- Public promotion of agriculture locally as an engine of economic growth and regionally or nationally as a reason to invest in Clay County.
- Promotion and facilitation of farmland protection through Voluntary Agriculture Districts, Present Use Value taxation, estate planning, easements, development ordinances, and development planning.
- Promotion of leases and other multiple use agreements to bring farmland owned by non-farmers into productive use.
- Marketing and processing development to support greater variety and profitability in agricultural enterprises.
- Promotion, training, and support for “grass farming” and other production techniques to lower costs, reduce capital requirements, increase margins, and meet the environmental and aesthetic requirements of a healthy rural landscape.
- Support for developing and carrying out the forestry plans required for PUV tax assessments.

In the coming year, this plan recommends several action steps to address these aspirations. Chief among these are adoption of this plan at the highest level of local government and a continuation of educational outreach to both landowners and the general public on the importance of agriculture to Clay County’s identity.

Adoption of this Farmland Protection Plan and a commitment to ongoing efforts to develop an active base of landowners dedicated to farmland preservation are tangible first steps towards securing a future for agriculture in Clay County.

Introduction to the Plan and Associated Research

This comprehensive farmland protection plan for Clay County North Carolina was commissioned by the Clay County Farmland Preservation Committee in August 2009, with generous support from the NC Agricultural Development and Farmland Preservation Trust Fund.

In accordance with state law, the researchers were tasked with developing a plan for the County that meets or exceeds statutory requirements for farmland protection plans. Required components for this plan include the following:

1. Contain a list and description of existing agricultural activity in the County.
2. Contain a list of existing challenges to continued family farming in the County.
3. Contain a list of opportunities for maintaining or enhancing small, family-owned farms and the local agricultural economy.
4. Describe how the County plans to maintain a viable agricultural community and address farmland preservation tools, such as agricultural economic development, including farm diversification and marketing assistance; other kinds of agricultural technical assistance, such as farm infrastructure financing, farmland purchasing, linking with younger farmers, and estate planning; the desirability and feasibility of donating agricultural conservation easements, and entering into voluntary agricultural districts.
5. Contain a schedule for implementing the plan and an identification of possible funding sources for the long-term support of the plan.

In addition, the researchers were assigned the following key deliverables for this research:

- Conduct interviews with land owners and land managers, with a minimum of 12 interviews.
- Conduct a mailed survey with Clay County owners of agricultural land in present use value designation for agricultural production.
- Generate maps of farmland, analyze rates of farmland conversion and identify those areas of most critical need for farmland preservation.
- Analyze soil types found on farmland in the County, and identify areas of the county possessing highest quality soils as per USDA ranking criteria.
- Analyze the current state of farming and potential for future profit enhancement on working farms.
- Identify viable agricultural economic development strategies that can increase

farm profitability and preserve farming for future generations.

- Present a formula for ranking farmland for priority preservation, using criteria approved by the North Carolina Agricultural Development and Farmland Preservation Trust Fund.
- Attend and assist with community meetings to serve the interests of agricultural landowners, and develop meeting agendas that increase awareness of farmland preservation tools and policies.

The research process was determined to have two key components. The first component was to develop an actionable farmland protection plan that will serve as the guiding document for preservation efforts in the County for years to come. The second, equally important task, was to assist in implementing a grass-roots outreach and education strategy that brings together landowners in the county to create a robust constituency of individuals who care about issues related to farmland preservation. These components were implemented concurrently.

To assist in generating interest in the mission of farmland preservation, the Committee established an ongoing series of monthly “farmers’ breakfasts” that would attract landowners. At each breakfast a topic of discussion and a featured presenter led participants through subjects important to creating a vibrant and active farmland preservation effort in Clay County. From November 2009 to May 2010, breakfasts were hosted by the Clay County Soil and Water Conservation District and the Clay County Farmland Preservation Committee, using technical assistance funds provided by the ADFPTF. Topics included how to establish an active farmland preservation effort in the County, an explanation of VADs and EVADs, advice on generational transition of land ownership, and examples of agricultural economic development activities taking place elsewhere in the state.

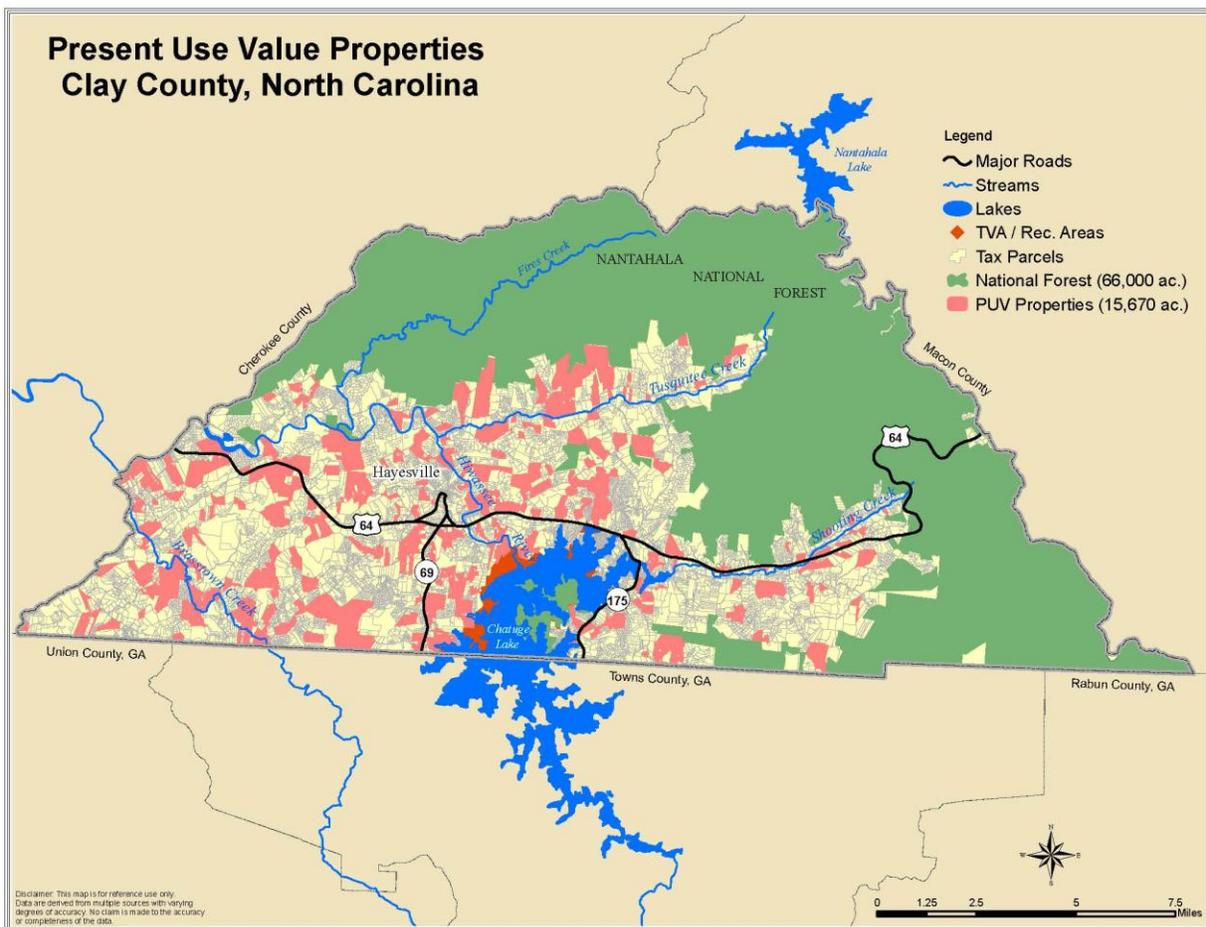
The researchers conducted face-to-face interviews with farmers and landowners who exemplified types of agricultural activities present in the County. They also executed two direct-mail outreach efforts to landowners with Present Use Valuation: A survey on land use patterns and an invitation to attend breakfasts, and a second mailing to recruit landowners to enter their land into Voluntary Agricultural Districts (VADs). This resulted in 27 applications to the Committee for VAD designation on over 1,330 acres as well as two applications for Enhanced Voluntary Agricultural Districts (EVADs) covering over 35 acres.

This document is intended to be a working guide to understanding the status of farms in the county, threats to and opportunities for the continuance of agriculture, and practical options for both policies and strategies that will protect agriculture and preserve it for future generations.

The Status of Farming in Clay County, North Carolina

In 2007, the Census of Agriculture listed 9,660 acres of farmland on 137 different farms in Clay County.¹ In 2009, the county tax office reported 15,670 acres classified under Present Use Valuation (PUV) for agriculture, forestry, and/or horticulture.² Privately owned agricultural lands constitute just over 20% of the approximately 75,000 acres of non-federal land in the county.

A GIS map of PUV designated lands shows where most agricultural land use exists:



Agriculture in Clay County has been in decline for several decades, with a rapid acceleration in the loss of farms and farmland in the past 13 years. Most notably, the County has witnessed the

¹ Except where noted, all data is derived from the United States Census of Agriculture. Census data is developed through confidential information available to the USDA Farm Service Agency and the National Agricultural Statistics Service.

² Discrepancies between county statistics for land in PUV and farmland acreage in the Census of Agriculture are common and are due to different methodologies.

near-elimination of burley tobacco production and the complete elimination of dairy farming during this period. Agricultural receipts declined from just over \$4.6 million in 1997 to just over \$1.1 million in 2007, a 76% decline.

The statistics below from the 1997, 2002, and 2007 Agricultural Censuses bear witness to the rapid decline of agriculture’s economic vitality in the county:

	1997	2002	2007	% Change, 1997-2007
Market Value of Ag Products Sold	\$4,678,000	1,334,000	\$1,114,000	(76.2%)
Average Market Value of Ag Products Sold per Farm	\$28,181	\$7,942	\$8,131	(71.1%)
Crops, Incl. Nursery and Greenhouse	\$675,000	\$462,000	\$431,000	(36.1%)
Livestock, poultry and their products	\$4,003,000	\$872,000	\$683,000	(82.9%)
Cattle and Calves Inventory	5,619	2,986	2,278	(59.4%)
Milk Cows	296	8	0	(100%)
Beef Cows	3,229	1,820	1,414	(56.2%)
Avg Net Farm Income	\$2,081	\$1,354	\$260	(87.5%)

The steepest decline was found in the category of livestock, poultry and their products, from just over \$4 million in 1997 to \$683,000 in 2007. This decline can be largely attributed to the disappearance of dairy farms in the county and a 59% decrease in the number of cattle and calves. The 296 dairy cows counted in 1997 (quite possibly under-reported) represented a capital- and labor- intensive form of agriculture that, while hardly profitable for farm operators, generated significant economic activity in the form of farm inputs and hired labor. The Census of Agriculture recorded seven dairy farms in 1997. There were none ten years later.

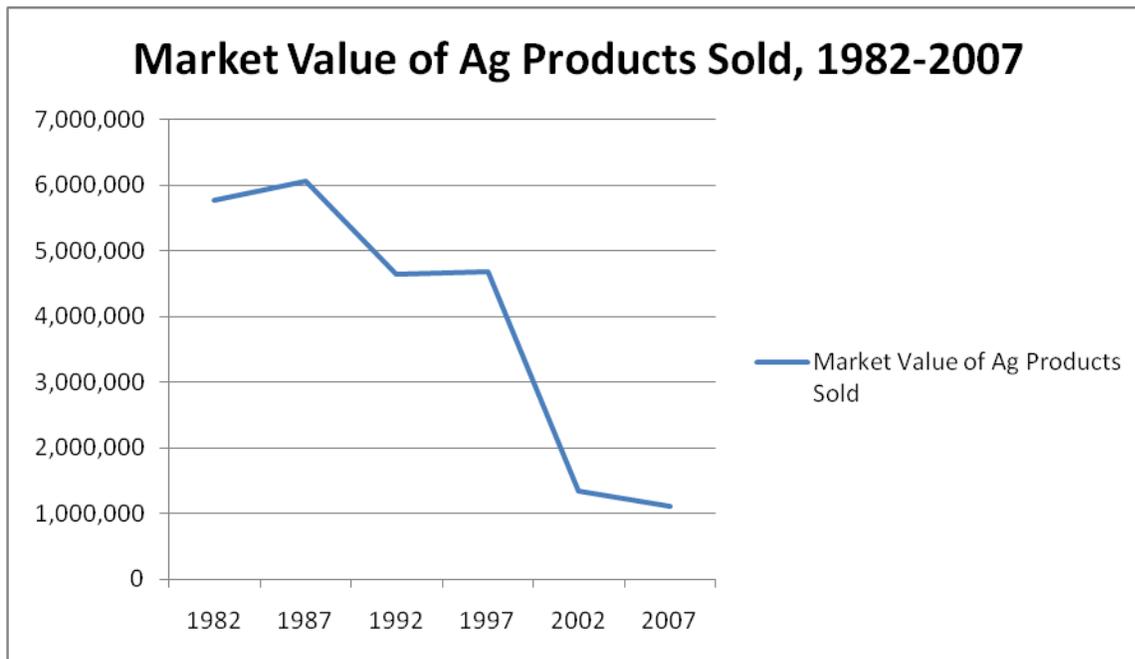
The number of cattle and calves in inventory declined from 5,619 in 1997 to 2,278 in 2007. This decline may have been exacerbated by the extreme drought conditions common in western North Carolina during much of the last decade, and production of feeder cattle for beef may have stabilized or even rebounded in the past few years.

The value of crops dropped 36% from 1997 to 2007, most probably due to the elimination of the burley tobacco price support system. In 2002, 30 farms grew 74 acres of tobacco, with a total

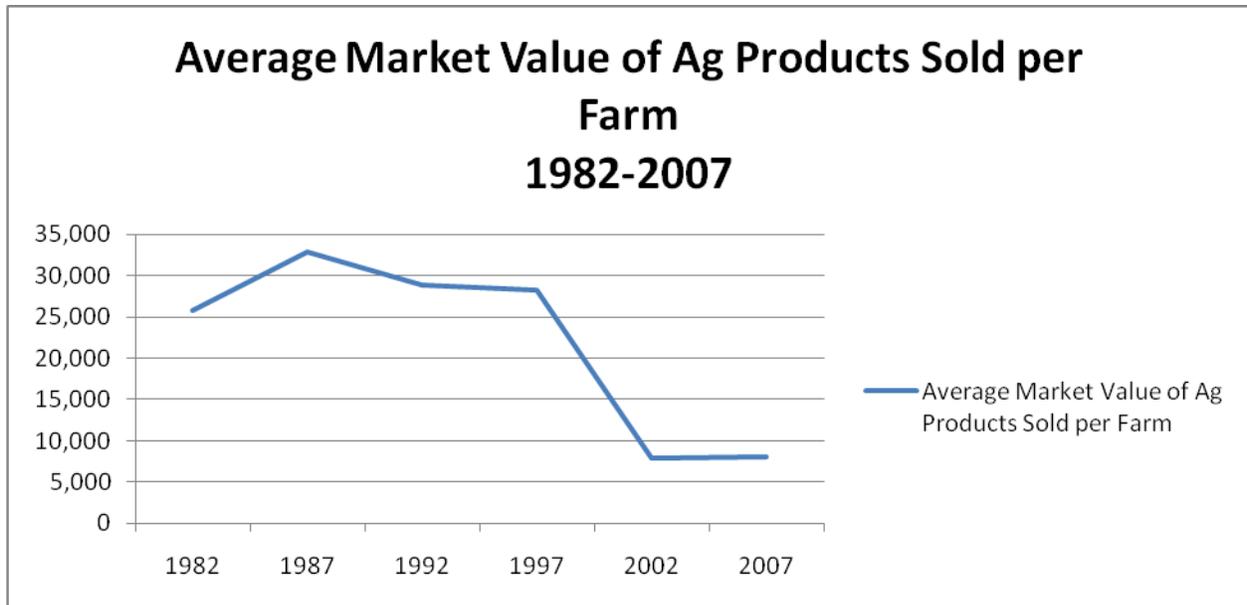
yield of 85,193 pounds. By 2007, only 5 farms continued to grow tobacco on 7 acres, with a total yield of 8,950 pounds. At \$1.70 per pound, this change equals \$129,613 in lost farm income.

On a per-farm basis, the average market value of agricultural products sold decreased from \$28,181 in 1997 to \$8,131 in 2007. A small increase in per-farm sales from 2002 to 2007 was more than offset by the rate of inflation during that period. Average net farm income from 1997 to 2007 declined from \$2,081 to \$260, an 87.5% decline.

The graph below, a longitudinal analysis of the value of agricultural product sold from 1982 to 2007, shows the decline really began in the late 1980s, with a peak in 1987 of just over \$6 million:



On a per-farm basis, the market value of products sold also peaked in 1987 at over \$32,000 per farm:

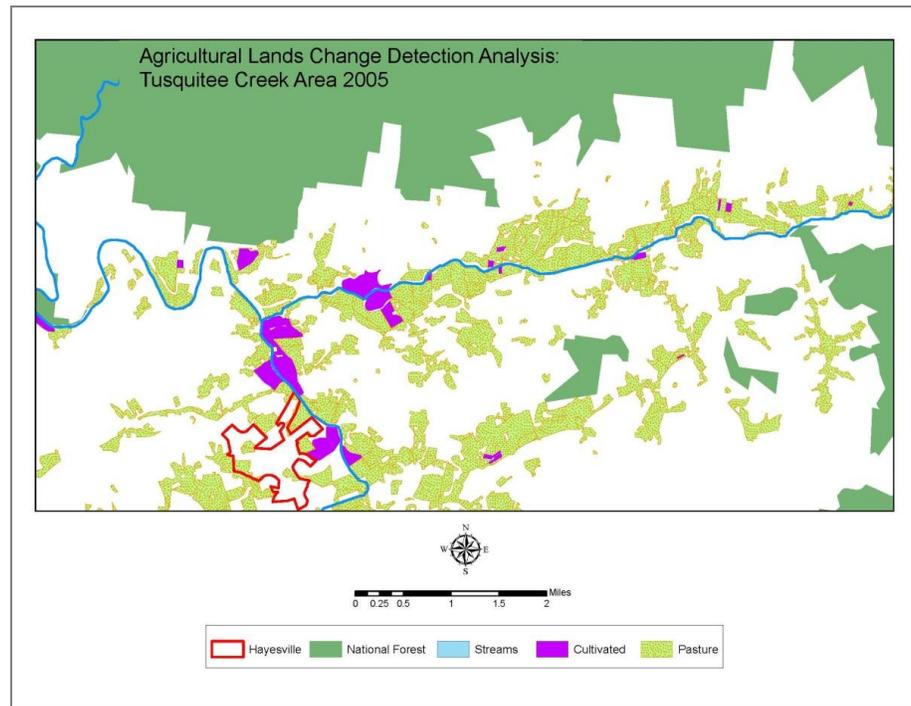
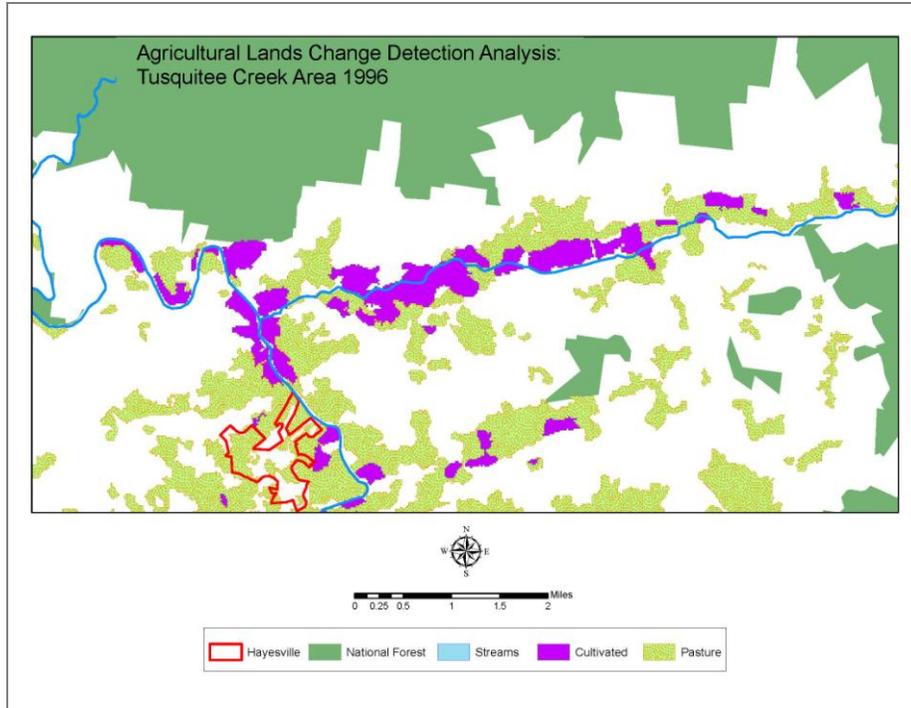


Along with the decline of economic activity, the County experienced steep drops in the number of farms, land in farms, and the number of active farmers.

	1997	2002	2007	% Change, 1997-2007
Number of Farms	166	168	137	(17.5%)
Land in Farms (acres)	18,288	13,434	9,660	(47.2%)
Average Farm Size	110	80	71	(35.4%)
Median Farm Size	60	66	30	(50%)
Farm operators whose principal occupation is farming	75	87	54	(28%)
Farms Less than 50 Acres	68	92	85	25%
Farms 50 to 179 acres	72	61	38	(47.2%)
Farms Over 179 acres	26	15	14	(46.1%)
Total Cropland	9,282	5,895	3,263	(64.8%)
Harvested Cropland	3,831	3,005	2,597	(32.2%)

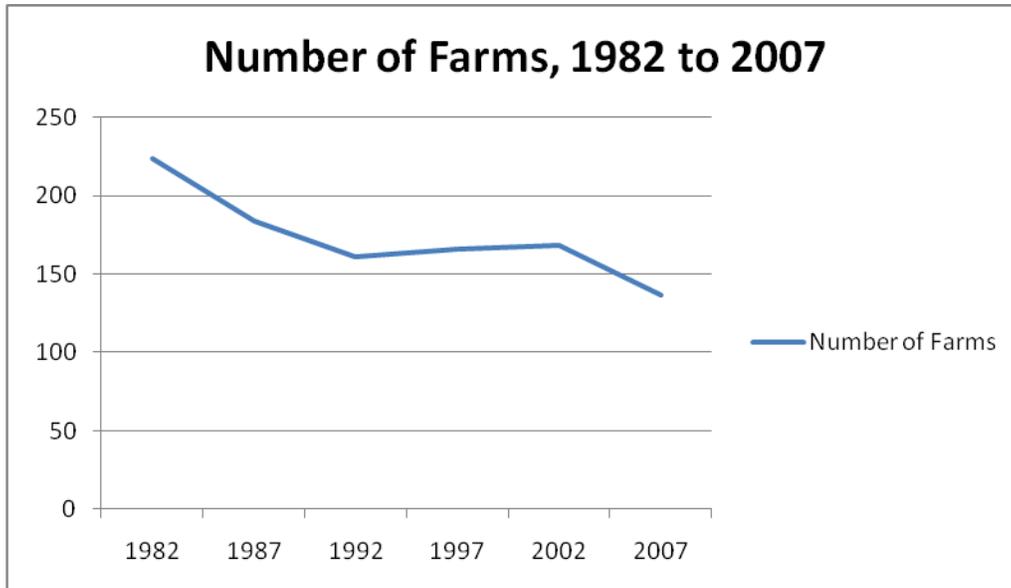
From 1997 to 2007, while the number of farms declined 17.5%, the actual number of acres in farms plummeted by 47.2%. Total cropland declined by 64.8%. The number of full-time farmers declined from 75 to 54, and the median size of farms was cut in half, from 60 acres in 1997 to 30 acres in 2007.

As an example of cropland loss, the two maps below show cultivated cropland found in Tusquitee Valley in 1996 and again in 2005³:



³ Data provided by the Land Trust for the Little Tennessee, using NRCS data and eyewitness assessments.

The decline of the number of farms began well before 1982, when the county had over 220 working farms. That number had dropped to 137 farms by 2007:



Even as the number of farms and the economic value of farming in the county have dropped, the estimated value of land and buildings on the remaining farms has skyrocketed. Over the ten-year period of 1997 to 2007, the average per-farm market value of farm land and buildings rose 62.5%, from \$309,316 to \$502,820.

	1997	2002	2007	% Change, 1997-2007
Average Market Value of Farm Land and Buildings	\$309,316	\$396,351	\$502,820	62.5%

The increase in farm land values reflects the rapid increase in all land values in the period leading up to the financial crisis and collapse of the housing market in 2008.

Population and Housing

In recent decades, Clay County has experienced a high rate of growth, with a projected growth rate of 23.6% for the 2000 to 2010 period. Projections for the 2010 to 2020 period anticipate a growth rate of 17.7%, reaching a total population of 12,764 by 2020. This rate of growth surpasses that of North Carolina as a whole, and can be attributed to a large influx to the county of retirees and those seeking a slower pace of life.

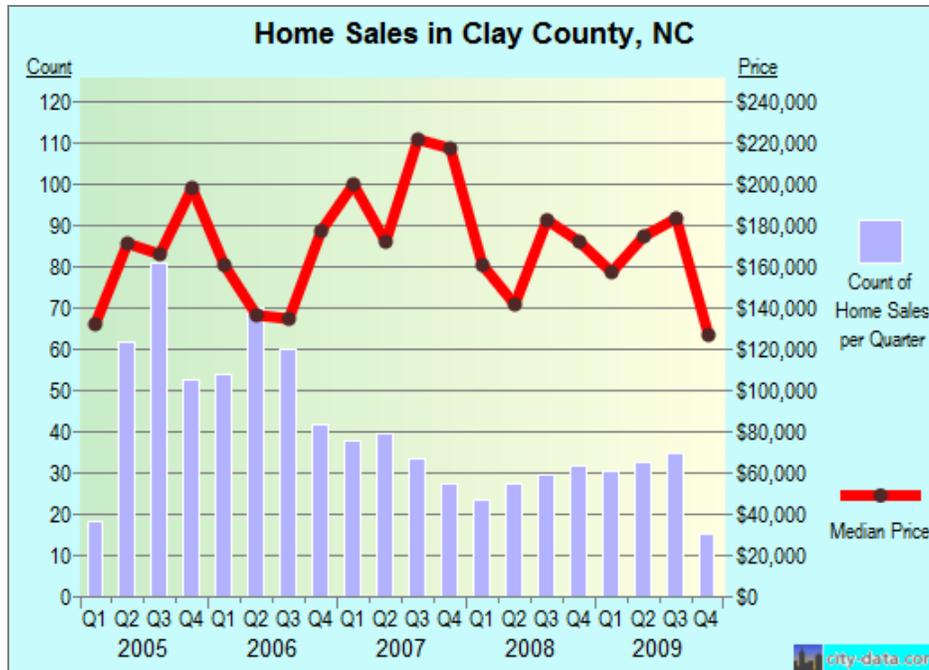
Figure 1: Clay County Population Projections							
	2000	2007 Est	% Growth 2000-2007	2010 Projection	% Growth 2000-2010	2020 Projection	% Growth 2010-2020
Clay County	8,775	10,295	17.3	10,848	23.6	12,764	17.7
North Carolina	8,046,491	9,069,398	12.7	9,502,904	18.1	10,966,956	15.4
Source: NC Office of State Management & Budget							

The population growth rate, along with soaring real estate prices, low commodity prices for agricultural products, an aging farm population, and loss of burley and dairy in the region, were all prime factors in the loss of farmland in the 2000s.

Statistics are unavailable for the actual conversion of farmland to residential housing, but a visit to Clay County tells the story quite well: new housing communities dot the landscape, while other planned communities sit idle due to the real estate collapse. Other scenes tell the story of lost incomes from farming: idle farmland, now overgrown with weeds and multiflora rose and often accompanied by For Sale signs, are found throughout the County.

The graph below shows the boom-then-bust nature of the housing market in Clay County from 2005 to 2009. A total of 225 homes were sold in the County in 2006. In 2009, after the bust, only 112 homes were sold. The median price of a home sold dropped from \$220,000 in the summer of 2007 to about \$130,000 in the fall of 2009.⁴

⁴ Source: city-data.com



Where We Are Today

It is too soon to tell if Clay County has hit the bottom in its agricultural decline, or if the trend will continue until farming as a livelihood is nearly eliminated. On the remaining farms, researchers believe over 80% of agricultural activities are in feeder cattle, hay and other feedstock, and forestry. According to the 2007 Census of Agriculture, 78 farms reported holding cattle and livestock inventories of 2,278 head. Of the 2,597 acres of harvested cropland, 2,127 of those acres grew forage crops for the livestock industry. The county had 82 farms holding 3,096 acres of woodland, with many presumed to derive some income from forestry. These are all low-capital, low profit activities that allow land to remain in production (and under PUV) but which do not generate significant income for farmers and landowners. Furthermore, the median farm size of 30 acres in 2007, a 50% drop from 1997, means that farmers have less land from which to wrest an income.

A small but positive trend was identified from Census of Agriculture data. In 2007, 8 farms reported growing vegetables, melons, potatoes and/or sweet potatoes, with a market value of \$139,000. While only a small part of overall agriculture, this type of production increased by 300% from 2002, when 11 farms reported vegetables sales of \$46,000. This increase is believed to come from one or two farms that have increased vegetable truck farming operations and several farms that have increased direct-market sales of vegetables within the immediate region. Furthermore, census data does not likely account for several micro-farms that fall under PUV thresholds for land size.

A reversal in the economic decline of agriculture in Clay County will depend on changes in both market conditions for existing production methods and the introduction of new types of production that will maximize returns on small acreage farms. More capital-intensive types of production, such as high value vegetables, finished beef, and commercial nursery production, can increase per-farm profits and the overall economic value of agricultural products sold. Weather patterns, which probably accounted for many farms dropping cattle production in the past decade, may also be a crucial factor in the next decade. Changes in market prices for existing production, such as for feeder cattle or forest products, may contribute to fluctuations in the overall value of agriculture in the county.

The rate of farmland lost to development has undoubtedly slowed, if not stopped completely, since the real estate bust. For the next 18 months or more, we do not anticipate a high rate of conversion of farmland to residential use. Newcomers to the region, usually retirees, must have the financial means to make their moves from mainly urban areas to Clay County. This usually necessitates selling existing homes in order to build or buy homes in the county. Many retirement age Americans have seen steep drops in their life savings, and many may feel a need to continue working for several more years than originally planned. This abatement may not continue, however, if and when the national economy and real estate market rebound.

Another demographic trend, the aging out of farmers, is not impacted by changes in the national economy. As farmers retire or die, the issue of transfer of land ownership will be a crucial factor in how such land is used in the future.

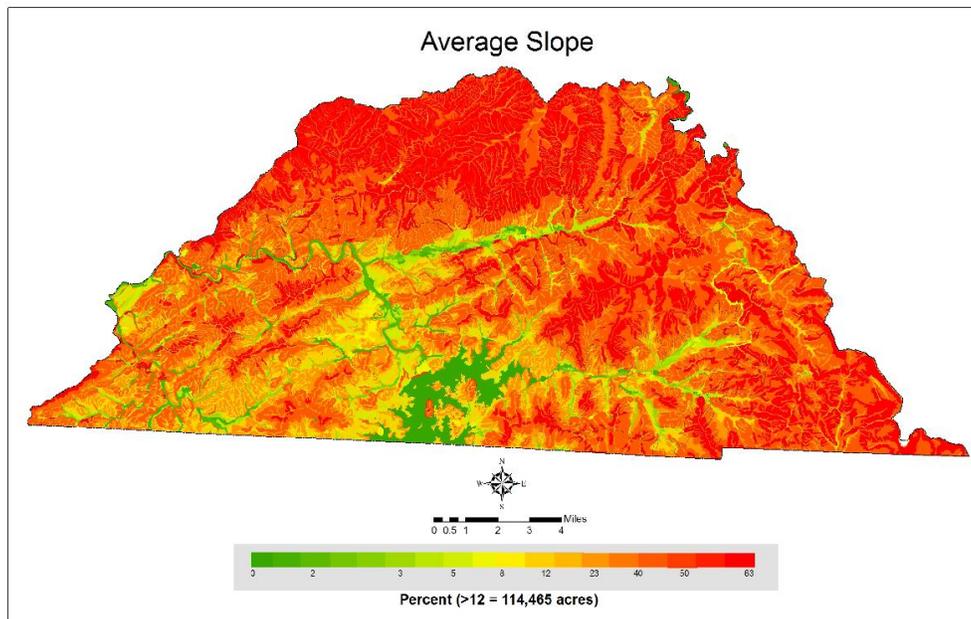
While the loss of productive farmland to real estate development is stalled, the county has an excellent opportunity to develop and promote policies and strategies that will support the continuation of agriculture. These include policies that will preserve the rights and benefits of farming, such as a robust program to enroll farms into Voluntary Agricultural Districts (VADs) and Enhanced Voluntary Agricultural Districts (EVADs), as well as investigating subdivision ordinances and other county policies that encourage continued agricultural activity in the midst of new rural housing developments. But perhaps more importantly, county leaders including elected officials, Cooperative Extension, Soil and Water, and the Farmland Preservation Committee, can pursue economic development strategies that will ensure the continuance of farming as an economic activity and source of livelihood for residents of the county. These may include promotion of more small scale intensive farming for food production, accessing new markets both within and outside the region (such as the greater Atlanta market), more value added food production (such as beef and other red meat processing and marketing), and support for the transition of farmland to a new generation of young farmers.

Adoption of this Farmland Protection Plan and an ongoing effort to develop an active base of landowners dedicated to farmland preservation is a tangible first step towards securing a future for agriculture in Clay County.

The Status of Farmers and Landowners in Clay County

With a mountainous geography and large tracts of public lands, only a small part of Clay County's landmass is suitable for farming, but what farmland the county does possess is often of extraordinary quality. Much of this farmland is concentrated in valleys and along waterways, most notably the Hiwassee River and its tributaries including Tusquitee Creek, Brasstown Creek, and Fires Creek, along with Shooting Creek which flows into Chatuge Lake and from thence to the Hiwassee. Many of the loam soils found in these valleys are classified as prime farmland by the USDA Natural Resources Conservation Service.

The slope map below shows the bottom land most suitable for farming in green and yellow:



Both surveys and targeted interviews with land owners and farmers indicate deep concern over the rapid transformation of the rural landscape. The following discussion of landowner feedback regarding their land holdings reveals strong concern for the future of family farms and a desire for proactive measures to support farmland now and in the future.

Clay County Land Owner Survey Responses

In November 2010, researchers mailed a short survey questionnaire to all landowners in the county with their land registered for Present Use Value taxation (PUV). PUV designation, as discussed elsewhere, lowers the tax value of lands in agricultural production and is perhaps the most important policy tool used by owners of farm and forestry lands in North Carolina. The vast majority of land under agricultural or forestry production is registered under PUV, although

small micro-farms not meeting minimum land production thresholds, as well as some larger tracts, are not. A total of 187 surveys were mailed out, and 78 complete or partially complete surveys were returned to the Clay County Soil and Water Conservation District.

PUV landowners were asked fourteen questions regarding their farmland. Responses are discussed as follows:

Question 1: How long has your land been in your family? Seventy-seven respondents answered this question, with the vast majority (55 respondents, or 71.4%) reporting their land having been in their family for more than 50 years. This result indicates that a large portion of farmland has a relatively stable ownership and turnover rates for these lands are not very high.

1. How long has your land been in your family?

Responses	Frequency	Percent
a. Less than 5 years	1	1.3
b. Between 5 and 20 years	10	13.0
c. Between 20 and 50 years	11	14.3
d. More than 50 years	55	71.4
TOTAL	77	100.0

Question 2: What is your age category? The largest percentage of respondents (37.2%) reported their age as over 70, with the next highest percentage (29.5%) reporting an age of 60 to 69. Only seven landowners (8.9%) reported their age as under 50. The obvious conclusion from the advanced age of respondents is that a significant percentage of Clay County land will transition to a new generation of landowners in the next two decades.

2. What is your age category?

Responses	Frequency	Percent
a. Over 70	29	37.2
b. 60-69	23	29.5
c. 50-59	19	24.4
d. 40-49	4	5.1
e. 30-39	3	3.8
f. Under 30	0	0.0
TOTAL	78	100.0

Question 3: Please list the top three uses of your land under PUV designation. Respondents were asked to report the top three uses of their land under PUV designation. Seventy-seven landowners replied, with most listing three different types of production. Just over 80% of

responses were for three types of production: forestry (28.1%), hay (26.5%), and cattle (25.4%). These results closely match reported production from the 2007 Census of Agriculture, and provide evidence that Clay County farmland use is fairly homogeneous. These types of production are also relatively low capital, low profit economic activities. Vegetable production, which is more capital and labor-intensive but also typically can result in higher per-acre profits, was reported by only 10 survey respondents, or 5.5% of all response types. The six respondents who listed “other” as a land use reported burley tobacco, soybeans, pasture, wildlife, and recreation and preservation as land uses.

3. Top Uses of Your Land

Responses	Frequency	Percent
a. Forestry	51	28.1
b. Cattle	46	25.4
c. Other Livestock	12	6.6
d. Hay	48	26.5
e. Corn	7	3.9
f. Vegetables	10	5.5
g. Christmas Trees	1	0.0
h. Aquaculture	0	0.0
i. Other (Please Describe)	6	3.3
TOTAL	181	99.3

Question 4: Approximately how many acres of your land do you have in forestry or agriculture? Of 75 respondents, a plurality (36%) reported having between 25 and 50 acres of land in production, followed by 26.7% who reported less than 25 acres. Eleven landowners reported more than 100 acres in agriculture or forestry.

4. Approximately how many acres of your land do you have in forestry or agriculture?

Responses	Frequency	Percent
a. Less than 25 acres	20	26.7
b. More than 25 and less than 50	27	36.0
c. More than 50 and less than 100	17	22.7
d. More than 100 acres	11	14.6
TOTAL	75	100.0

Question 5: Who manages your land for agricultural production? Of 75 respondents, 43 (57.3%) reported that they manage their land themselves. Seventeen landowners reported leasing their land to someone else not in their family, while 10 owners reported their land was managed by someone in their family.

5. Who manages your land for agricultural production?

Responses	Frequency	Percent
a. I manage it myself	43	57.3
b. Someone else in my family	10	13.3
c. I contract with someone to manage it for me	2	2.7
d. I lease it to someone not in my family	17	22.7
e. Other	3	4.0
TOTAL	75	100.0

Question 6: Do you sell your forestry or agricultural products? Just over 50% of respondents reported selling their forestry or agricultural products. This result may reflect a misunderstanding among respondents as to how their forestry, cattle, or hay derives economic benefit to the landowner. Those who lease their land to others, for example, may have given a negative response, as well as those who may have a timber management plan but are not actively harvesting trees. Responses to a follow-up question about percentages sold in different ways were determined to be invalid due to a lack of explanation in the survey instrument.

6. Do you sell your forestry or agricultural products?

Responses	Frequency	Percent
a. Yes	37	51.4
b. No	35	48.6
TOTAL	72	100.0

Question 7: Are you familiar with Voluntary Agricultural Districts (VADs)? Of 73 respondents, only 12 (16.4%) said they were very familiar with VADs. A plurality of respondents (25 or 34.8%) said they were somewhat familiar with VADs but would like to know more. Nineteen said they had never heard of VADs but would like to know more, and 17 said they had never heard of VADs and were not interested in them.

7. Are you familiar with Voluntary Agricultural Districts (VADs)?

Responses	Frequency	Percent
a. Yes, I am very familiar	12	16.4
b. Somewhat familiar but would like to know more	25	34.3
c. Never heard of them and would like to know more	19	26.0
d. Never heard of them and not interested	17	23.3
TOTAL	73	100.0

Question 8: Are you familiar with voluntary agricultural conservation easements? Similar to Question 7, a plurality (31 or 43.1%) said they were somewhat familiar with easements but would like to know more. Eighteen had never heard of them and wanted to know more, and 7 said they had never heard of them and were not interested. Only sixteen respondents (22.2%) said they were very familiar with voluntary agricultural conservation easements.

8. Are you familiar with voluntary agricultural conservation easements?

Responses	Frequency	Percent
a. Yes, I am very familiar	16	22.2
b. Somewhat familiar but would like to know more	31	43.1
c. Never heard of them and would like to know more	18	25.0
d. Never heard of them and not interested	7	9.7
TOTAL	72	100.0

Question 9: What do you expect will happen to your land in the next twenty years? Over fifty percent of respondents expect their land's use and/or ownership will change in the next twenty years. Of 96 responses (some respondents selected more than one choice), 36 of 96 (37.5%) expect their land to stay intact but will pass to another member of the family, while eleven (11.5%) expect it will be subdivided among family members. Only 3 expected their land to be sold to someone else for forestry or agricultural use.

Only one respondent expected their land to be sold for development. The responses here are encouraging in that 68 responses (70.8%) expect to keep their land just the way it is or to have other family members keep it intact.

9. What do you expect will happen to your land in the next twenty years?

Responses	Frequency	Percent
a. Nothing different; I'll keep it just the way it is	32	33.3
b. It will stay intact but will pass to another member of my family	36	37.5
c. It will be subdivided among family members	11	11.5
d. It will be sold to someone else for forestry or agricultural use	3	3.1
e. Part of it will be developed for residential use, and my family will retain the rest	3	3.1
f. It will be sold for development	1	1.0
g. I have no idea	9	9.5
h. Other (Please Describe)	1	1.0
TOTAL	96	100.0

Question 10: Do you have a transition plan for what will happen to your land after you pass on? Of 74 respondents, 34 (46%) said they had their transition plan “all worked out.” Thirty-one said they had made no decisions and 7 said they had never thought about a transition plan for their land.

10. Do you have a transition plan for what will happen to your land after you pass on?

Responses	Frequency	Percent
a. Yes, I have it all worked out	34	46.0
b. I have some ideas but have made no decisions	31	41.9
c. I have never thought about a transition plan for my land	7	9.5
d. No, I don't need a transition plan as I plan to dispose of my land before then	1	1.3
e. Other (Please Describe)	1	1.3
TOTAL	74	100.0

Question 11: Would you like to know more about any of the following? Among 66 respondents, 32 said they would like to know more about planning a generational transition of their land to family members. Another 13 chose “Developing strategies to keep from selling my land.”

About 30% of respondents chose issues concerning agricultural production: thirteen who wanted to learn more about developing new products to sell, and 7 who want to learn more about marketing their agricultural production.

11. Would you like to know more about any of the following?

Responses	Frequency	Percent
a. Marketing my agricultural production	7	10.6
b. Planning of generational transition of my land to family members	32	48.5
c. Developing strategies to keep from selling my land	13	19.7
d. Developing new products that I can grow and sell	13	19.7
e. Other (Please Describe)	1	1.5
TOTAL	66	100.0

Question 12: What activities do you recommend the county engage in to help preserve agriculture and open farmland in Clay County? Twenty four Clay County landowners offered suggestions for county activities in this regard. Some respondents listed several activities, but types of responses can be divided between land use and farmland preservation, taxes, agricultural production and marketing, and increased communication with farmers and landowners.

Responses regarding land use and farmland preservation included the following:

“Develop a good land use plan before it gets out of control, like I’ve seen in Florida.”

“Have a committee organized and ready to get farmland preservation funds.”

“Continue to support our farmland preservation program and other programs that will ensure sustainable agriculture in the county.”

“[Develop a] farm association whereby joint land operations form strategies pertaining to their acreages to preserve open farmland.”

“Adopt zoning protecting farmland and discouraging housing development on bottom land.”

“Help keep land intact and not broken up for farmland.”

Closely tied to farmland preservation is the issue of land taxation. Nine comments were directed at taxes, and several respondents noted the importance of PUV tax status to keeping their farms intact. One respondent summed up the general sentiment thusly:

“Keep taxes low enough for people to keep family farms intact.”

Seven comments focused on issues to help keep working farms economically viable. Three comments asked for support in developing local famers’ markets or other markets for small vegetable producers. Other comments requested help with production capacity such as support for new wells, grants for lime and fertilizer, and alleviation of fire ants.

Finally, several comments called for increased outreach and educational opportunities in regards to preserving farmland, making a living in agriculture, and encouraging young people to become involved in family farming.

Question 13: Would you like to attend the Farmer’s Breakfast on December 10th? Thirteen respondents said they would like to attend the breakfast, while another 33 said they could not but would hope to attend other breakfasts.

13. Would you like to attend the Farmer’s Breakfast on December 10th?

Responses	Frequency	Percent
a. Yes	13	20.3
b. I cannot, but hope to attend other breakfasts	33	51.6
c. I am not interested in attending	18	28.1
TOTAL	64	100.0

Question 14: May we contact you for an interview to learn more about your interests in farmland preservation? Over half of the 66 respondents to this question said they could be contacted for an interview. This high level of willingness to participate perhaps indicates a basis for developing a robust outreach and education strategy as part of any farmland protection plan.

14. We’d like your help and input. May we contact you for an interview to learn more about your interests in farmland preservation?

Responses	Frequency	Percent
a. Yes	36	54.5
b. No	30	45.5
TOTAL	66	100.0

Conclusion

Responses from the landowner survey combined with official production statistics show a homogeneous land use pattern with little diversity following a steep decline in agricultural

activity in general. Over 80% of land appears to be used for forestry, cattle, or hay production, a low-intensity land use producing little, if any profit while risking little investment in production and maintenance expenses.

There is nevertheless a high level of interest in preservation and in outreach and education focusing on farm transition issues. Most landowners in Clay County have reached or are approaching advanced age. As a result, a significant percentage of farmland, perhaps over 50%, will transition from their present owners in the next twenty years. Landowners express a desire to better prepare for such transitions, and overwhelmingly appear to want their land to remain dedicated to agriculture.

While farming appears to matter less and less, as measured by economic statistics, the stewardship and productivity of land in a broader sense matters more and more, as reflected in rising land values and the influx of urban refugees. Even as the conversion of land to other uses accelerates, the economic forces driving it – tourism, recreation, vacation and retirement home development – appear to thrive in proportion to the vitality of a rural environment.

All counties in the region and many others across the nation face this puzzle. Fortunately a large proportion of private land is still farmland or productive forest or could be again.

As land transitions to new ownership, homegrown and absentee, and new and younger farmers and landowners assume management, a more diverse future comes into view.

A closer look at people and places illustrates both the challenges and the opportunities.

Clay County Farmer Profiles

Local family stewardship of marginal farmland is disappearing rapidly because the return typically does not cover costs and often not even taxes. As detailed elsewhere in this report, for one of North Carolina's smallest counties, the most recent Census of Agriculture (2007) lists only 137 working farms altogether. Two thirds are 30 acres or less. Two thirds gross less than \$5,000. The average farm *nets* only \$260. These numbers all fall into the bottom 10 among the state's 100 counties, and the trend is dire. In the five years following the 2002 census report, the number of farms fell 18 percent, from 168, total farm acreage dropped 28 percent, and acres of cropland 45 percent.

Meanwhile a desire to see land used well remains strong among newcomers as well as long-time residents. Those remaining cow-spangled bottoms and hillsides reflect the energy of a significant number of people, old and young, home-grown and newcomers, of varied means, and operating through an intricate network of leases, handshakes, family ties, and business strategies. Also, no one questions the fact that the value of those unsold developments will never see another boom if the rest of the county grows up in either weeds or in houses.

The following voices illustrate both the challenges and the potential in Clay County.

Waldroup Farm

Just outside Hayesville, the county seat, the barns and sheds of Clay County's last dairy farm cluster in a rolling landscape of pasture and field. Cows graze there, but no longer the 140 black and white Holsteins that once produced 60 to 80 pounds of milk a day.

My grandfather bought the land when TVA built the lake (Chatuge in 1941-2) and they took up all the good bottom land. He thought lake front property wasn't worth anything.

Daddy went off to war, and when he came back, all he wanted to do was farm. He'd sent all his money back. He went into the dairy business and worked full time at it and at the creamery at Brasstown. I was born in 1951.

There were close to 30 dairies in the county at that time. There were local people doing the work, driving delivery trucks. We fed acorn silage mixed with other things. We grew corn. Only later we started buying feed to mix with ours. I can remember milking 30 cows, and most dairies had about 20. You couldn't make it with 200 now.

From the mid-1980's it started to go down hill. I tried to get larger. I got up to 140 cows. I had over 300 acres in the operation. Most of my cropland was rented. I raised all the corn silage,

but the dairy feed became a huge expense. I bought it all out of Georgia. It started out at 60 to 90 dollars a ton, but last year it went to 200. I remember thinking that any time the feed bill got to be half the milk check, we were going down hill, When Coble (dairy cooperative) went out in the 1980's, we lost our stock in the co-op. We were at their mercy. We had no say and no choices.

We'd get caught up, and then we'd have to borrow. I had to put in a waste management system. I'm still farming with Daddy's tractor. I've had the same barn for 60 years. I was paying \$30 an acre for leased ground and got hay, mostly for free, from people who had four or five acres, but no one will give you a long-term lease. This year I put out 25 acres of corn. If I'd done more I'd have had to buy a combine. As it was, the gearbox on my 1970 corn picker broke. With milk prices the way they were, we had to quit.

My son has helped. He has a truck and a track hoe, but that business has been tough since the economic crisis. That has happened to a lot of the dairies. When the kids needed to live there, they couldn't support the extra family.

I'd like to put some land in easement and see it stay in farming. There ought to be some way to hand on all of this. You look at the Tusquitee Valley. The Tusquitee loam was the finest in the state, but it has houses on it now.

Even without the dairy, Lynn and his wife keep farming – the 25 acres of corn, three acres of sweet corn, wintering cattle for others, selling hay. They have also sold land, but the buyer defaulted, and it is back on the market. They may buy beef cattle next, but lingering debt makes it hard to contemplate a bold new step when you are 59 years old.

Bruce and Mae Lee Cheek

Like two of his three brothers, Bruce Cheek saw no chance of making a living on the family farm and left for military service.

Bruce: Dad had something over 70 acres, and we raised a little bit of everything, including about all of our food. Like most folks, we grew tobacco for cash, but we did other things, too – eggs for hatching, seed corn, some beef cattle. Daddy worked for the highway department, and we boys worked the farm. It's divided among seven people now.

When Bruce returned to the Tusquitee Valley after 33 years in the Air Force, he found no place to land. Fortunately, he found a wife not far away, Mae Lee, who had managed to reclaim *her* family's old farmhouse from the briars and vines, and the two of them have expanded that and turned to restoration of the land.

Mae Lee: We want to restore it all. That's our work now, but of course if we weren't both retired, with income, we couldn't do it.

Working from the house outwards, they first added rooms, then decks, then a pond and then took on their hillside...

Bruce: The land up behind our house has trees on it but it's not a healthy forest. The lowest part used to be grass, but it all grew over, and above that the trees have been cut so many times. There's not much to harvest there now. The State Forester wants to carry out a controlled burn. We'll see what comes back after that. We'll have trails and sow grass on them.

... and their bottom land.

We've had a hard time cleaning up the privet and the multi-flora rose, but we want to turn it back into grassland or farmland. We've fenced out Tusquitee Creek, which is a trout stream, and we've got a young man who's got some cows and cuts hay there now.

Wildlife abounds – Raccoon, coyote, bear, turkey, deer, and swine varying degrees of wild Russian blood. And yet the Cheeks do not count on their children returning.

Mae Lee: Maybe a grandchild or a niece will decide they want to live here, but we don't expect them to come back. There isn't much here for young people; however, what we care about is the preservation. We're talking to the Land Trust of the Little Tennessee.

Robert and Virginia Anderson

The Andersons, like the Waldroups, represent the heritage of dairy farming in Clay County. Beginning in the 1930's they were among the first, and in time among the largest, to produce grade A milk. At that time, according to Robert Anderson, a great many people who had a few cows also sold grade C milk, which did not require such tight inspection or certified milking parlors and cooling facilities. "We called it 'shade tree production,'" he recalls.

Anderson remembers hand milking 15 to 20 Jersey cows, then Guernseys, but with the advent of electric power and milking machines, the operation grew. In 1950 they switched to Holsteins and began looking for more land for raising corn and growing out heifers. His uncle financed their purchase of a 311-acre "support farm" running down to the south bank of the Hiwassee River east of Hayesville where they pastured heifers and raise forage for the dairy. Along the way, the Andersons also raised three sons and a daughter. "When they were here we had 130 cows and 60 heifers," Robert says. "They've all gone on to do different things, but they're all interested in owning the property (the support farm)." They may even do some farming.

The Land Trust for the Little Tennessee has ranked the tract fourth among its priorities for protection and restoration in the Hiwassee and Valley River corridors. If current plans go

through, the Land Trust for the Little Tennessee will soon hold an easement that will protect all 311 acres with provisions for family homes on the upper end of it.

Most of the land is now forest, and the Andersons have sold some timber and worked with the state forestry program to replant areas affected by beetles. Of about 60 acres remaining in grass they have kept 30 acres of prime bottom soil limed and fertilized in order to sell the hay. Robert Anderson admits that the rest could use some bush hogging. He laments the fact that because the forest does not produce income every year, it has been difficult to keep the land in the Present Use Value agricultural tax category.

Glenn Cheeks

Glenn Cheeks began farming with his father Herbert “Hub” Cheeks when he graduated from high school in 1992. They represent another approach to survival based heavily on leased land, but they have to look far beyond Clay County to find it.

We’ve had tobacco and grains (corn/soy) and cattle. One thing might be up and another down, so it seemed to work out. The grains got better after 2004, and this year (2009) was the first time we didn’t grow tobacco. It hasn’t been easy. In about 2002 I bought \$200,000 worth of equipment, but the farming wouldn’t cover the payments. I had to get a job. I sold equipment for Massey-Ferguson in Cherokee County until they went broke. Then a job turned up at Soil and Water (Soil and Water Conservation District Office in Hayesville).

We’re farming grains on 300 acres of leased ground up Kentucky. We have about 150 acres here. We haul our equipment from here, when we go up to Kentucky. We also buy heifer calves in the fall and winter them up there. This year we have 120 that we’ll take from 500 pounds up to 750. They’re on leased pasture, some of them in the woods. We check on them every week or so, and we’ll go up and feed hay, if it snows.

I like farming. I’d farm 2,000 acres, if I could, but then I’d have to move away from here, where I’ve been all my life. It’s difficult to get leases here. We’ve lost several to horse people who will pay \$170 an acre where we could offer maybe \$40 or \$50, and some people are a little hard to deal with. They can take back a lease at any time.

Cheeks is optimistic about the future. The commute to Kentucky may be burdensome, but there seems to be as much cheap land as an enterprising farmer cares to take on. He is not attracted to intensive management and direct marketing, either in vegetables or livestock. “There may be room for one or two people around here to make a living at that,” but there’ll never be enough market to make a real difference,” he says.

Lou Lanwermeyer

Lanwermeyer, born in St. Louis, retired to Clay County from a banking career in Chicago. He has also steeped himself in community affairs, including the Clay County Farmland Preservation Committee, the Clay County Communities Revitalization Association, the board of the J.C. Campbell Folk School in Brasstown, and the Good Shepherd Episcopal Church.

An avid trout fisherman, he learned to craft bamboo rods at the Folk School. He and his wife, Barbara, live on a piece of 450 acres of aggregated farm and forest land west of Hayesville at the head of Trout Cove that they, plus two sisters and three others, began buying in 1998. One couple subsequently split off 90 acres in order to pursue their own Conservation Development⁵. All the former farmland on this property and 50 foot stream buffers throughout the rest is now preserved under an easement owned by the Land Trust of the Little Tennessee, and governed as a whole.

To recoup some of their investment, the Lanwermeyers and the others have carved out lots to sell but have not impinged on the 100 acres of pasture. Seven years ago, the Hiwassee Watershed Coalition proposed a project to restore the banks of Trout Cove Branch, which had become a source of silt in the main river. One of the workers on the project asked if he could run cattle there. Since then he has cut hay, some of which he sells, and maintained 20 mother cows year round to supplement what he makes as a fence contractor. Lanwermeyer describes this as a “trading arrangement.”

The fact is, we are not farmers, but we like farms, and we need a farmer. For access to the protein and energy in our pastures, he takes care of fences and boundaries. His animals save us hundreds of dollars in diesel fuel and time we would have to commit to bush hogging and weed control to keep the land from degenerating, which you see happening all over the county. Also, we enjoy the beef.

Our arrangement is informal, but we are on good terms. We did soil tests and have split the cost of fertilizer and lime as well as a no-till reseeding. When we have to upgrade fences, we supply the materials, and he does the labor.

Clay County is in the middle of a development pathway from the south, Atlanta, and the pressure and the need for development standards is obvious. Soon after we moved here I realized that the reasons we came here were threatened. We formed a group called Partnership for an Attractive Clay County (PACC). We managed to get a countywide survey sent out with people’s electric

⁵ The term Conservation Development is associated with the work of the landscape architect Randall Arendt and refers to a development where building is clustered to preserve open space that may be dedicated to agriculture or other useful environmentally healthy purposes.

4 copies of the completed surveys and tabulated results are available in the (Moss) County Library

*bills. We got 1,360 responses out of 8-9000 people, and of those, between 70 and 85 percent answered "concerned" or "very concerned" on all questions about the future appearance of our County. That was our first indication that there is strong, if unorganized, support for doing something about protection of water and mountain resources, standards for development and other longer term issues. I'm much more encouraged than I was five years ago.*⁴

Micah Reeves

Micah Reeves builds fences for a living and runs cattle on the side, wherever he can find land.

I'm 31 years old and have a wonderful family. We are proud of our beautiful 5 month old daughter. I've had cattle since I was 18, and dad had cattle before that. I'd like to farm full time, and one day maybe I will.

Reeves lives in Cherokee County but has cows on several places in Clay, including the Lanwermeyer land at the head of Trout Cove. He also has several hay agreements. Most of his stock is descended from animals he bought right after finishing high school, paying \$300 for bred cows. He wishes he'd bought more.

Reeves is serious enough about farming to have bought 100 acres of pasture outright, in Kentucky. There is a single-wide trailer on the land, where the family stays when checking on the farm. "A lot of people around here bought land up there, because land around here got so high," he says. "It seems like it's more suitable for agriculture."

Arrangements with landowners are informal and varied. On some places he just cuts hay, on others he pays for it by the roll. Some landowners pay for fertilizer and lime. Elsewhere he does to the extent of four hundred pounds per acre of the former per year. He also uses a no till drill provided by the soil and water conservation office to improve pastures and sometimes drill winter annuals, thus increasing his grazing capacity. The herd is of mixed race, mostly Angus salted with Charolais, but well adapted to the life they lead. He sells calves before winter at six to eight months. For his own table he uses a state-licensed abattoir in Cherokee County.

If I had more time, I'd do what Bass Hyatt does, rotate his pasture. If there were more pasture land, or I could get into that natural beef, we might make some money, but the fence business has been good to us, so we do all right. Mostly I just enjoy farming. Although my wife might disagree, I don't consider it work.

Bass Hyatt

Bass Hyatt, 76, is known to generations of farmers in Clay and Cherokee Counties where he was once County Executive Director of the Farm Service Agency (FSA). Since retiring in 1997, he attempted to manage the Hyatt farm in a holistic manner – that means improving all the resources of the farm—the soils, forests, landscape, wildlife, water resources, microbes and all other increments of the biological community. He aims to develop a sustainable operation centered on strong environmental and humane techniques.

Hyatt became interested in “grass farming” through reading about it, particularly in the monthly Stockman Grassfarmer newsletter. A field tour to Argentina led by Grassfarmer editor Alan Nation convinced him to become a “grazier” as practitioners call themselves.

For years, Hyatt ran a herd of around 100 mother cows. The calves sold as 700-800 pound stockers to be grown out and finished elsewhere. For the last six years, through planned strip grazing he has succeeded in wintering his cow herd on pasture, feeding no hay. A growing season plan aims at not allowing grazed plants to be grazed a second time before they recover while leaving a standing “stockpile” of forage for the winter. The weaned calves are maintained on bought hay and by-products until sale.

I am now transitioning to a grass finishing operation that will involve reducing the cow herd to 60 while keeping 50 calves to finish at 1100 pounds each. They will average about 600 pounds on the rail. Fifty would gross \$55,500 at last year's price of \$1.85, and I think I can keep costs below \$30,000. Any direct sales retail sales would increase my margins.

Through culling and bull selection Hyatt is year by year recreating a herd with genes that express ability to produce marbled meat from grass, a trait seriously diminished in modern breeds selected for feedlot finishing.

I'm pleased by our progress. The soil fertility shows a ph level of 6.0-6.5 with high potash and phosphate levels, good here, where acid soil is the norm. Organic matter has increased. Last year the total amount spent on fertilizers was \$3,800 down from \$12,000 of years past. Dung beetle and earthworm populations have increased—the pastures are containing more legumes and are more productive—the rabbits are fatter.

We did feed hay to the cow herd for two weeks this last winter (2009-2010), but that was an especially rough one with record-breaking snow, and by all accounts we came through it well. With the build-up in soil fertility and by learning more about how to graze, I expect operating costs to continue to decrease.

The challenge and strategies of grass farming, the conferences and meetings with other farmers, the visits to other farms and places, and the continual search for new knowledge make for an exciting experience.

Hyatt's wife Sandra keeps records, and his son Seth, who has a fulltime job off the farm, helps out when he is needed. Together, they get the work done.

Jackie McClure

One among many McClures in Clay County, Jackie McClure sensed a land boom coming down the tracks from the vibrations in the rail and acquired a ticket, a real estate license, before most folks realized where the train was going. He later sold his Hayesville Land Company just as the train pulled out.

He did well in lake front property and bought farms, 1,500 acres in Kentucky, some of it farmed under lease by Glenn Cheeks and his father, and in Clay County 500 acres rising to the Nantahala National Forest near the Georgia Line. Of the Clay County property he platted 400 acres, including the very steepest land, to market as a Shiloh Stables Equestrian Community. On the 100 acres in the middle he built a 48,000 square foot covered arena, converted two old chicken houses into 87 first class box stalls and another into a rustic but comfortably appointed lodge with 12 rooms for guests and stalls for their horses.

In building the horse facility, McClure had more in mind than simply selling real estate. He and his son Jason went into the business of breeding, training, trading, showing and selling cutting horses. A good one will bring six or seven figures. The sport's biggest event in a 12 month season of big events is the three-week-long Fort Worth Futurity where 1,500 contestants vie for a \$4 million purse. It takes a serious ante to play that game, but the McClures play seriously. On a given day they have about 60 horses in their program plus staff to work and care for them. According to the National Cutting Horse Association website, Jason's lifetime futurity winnings by April 1, 2010 were \$318,001.09.

Training cutting horses also requires a steady supply of calves, and Shiloh stables buys several hundred 450 pound heifers a year, which typically stay in the horse operation eating hay local fescue hay until they reach 600 pounds. (The cutting horses get a mix of the fescue plus alfalfa trucked in from Nebraska). McClure puts up some hay on his own land, but most comes from 200 acres of hay ground in Clay county that he leases or cuts in return for liming and fertilizing. He says he spends \$25,000 a year on that. He'd rather be known as a farmer than a real estate developer.

A lot of people do not want to think of what we do here as agriculture, but what else can you call it? We raise livestock, more cows than horses in fact. We put up hay. We put down fertilizer, and manure. We take care of land. If you get right down to it, we didn't build all this to sell farmland, but people came because of what we did with this farm. You can have a horse here and ride out there in those mountains for a week and not see another person. It's a great place.

Salvador Morena-Mendoza

According to common wisdom, nobody without land or capital or credit or a government subsidy should think about trying to make a living as a commercial wholesale farmer in America. That would nevertheless be news to Salvador Morena, the only person in Clay County managing to make a living growing vegetables for the commercial market.

Morena leases the James V. Ledford farm from Ledford's heirs – 51 acres of level bottom alongside the Hiwassee River just below Hayesville, prime soil but also prime development property. The Ledfords don't want to sell the farm, at least not as long as prices remain depressed, but they aren't in a position to work it themselves. The Land Trust would like to preserve it, but can't afford to buy it. As the real estate market comes back and the heirs age, the pressure to sell or build on it will become enormous. It would typically yield \$40 an acre as hay ground or cow pasture, but Morena offered substantially more.

Morena left his village in the highlands of Central Mexico in 1976 and crossed the border to look for migrant farm work. He labored in Texas and Florida and a dozen other states for a decade without legal status until President Reagan signed an amnesty bill in 1986, opening a pathway to citizenship, which he took.

1995 found him in Swain County, North Carolina, working on Darnell Farms, one of the first farms in the state to explore the potential of agri-tourism, festivals, corn mazes and U-pick marketing as a way to add value to straight farming. He stayed there for 15 years until a Mexican friend working in Cherokee County heard about the Ledford farm and introduced him to the family.

They were interested in working with me and gave me the use of a little tractor they had, but I soon realized I could never make it with that. I was lucky enough to find a used Massey-Ferguson (90 horsepower 4 wheel drive model 5445) and bought it with a loan from a Spanish friend in Florida. After surviving that first year, the Massey-Ferguson dealership in Murphy agreed to finance a second one (Model 5455). So, it's been going okay so far.

Moreno's capital investments now include a full brace of plows, harrows, and other tools, a refrigerated 18-wheeler, a Bobcat, gooseneck trailers to move equipment, sprayers, greenhouses,

shop equipment and a mobile home. Two neighbors, seeing his work, have offered him leases, for which he pays top dollar. All his leases rest on verbal agreements. He could lose them at any time, but of course everything he owns has wheels, and the greenhouse comes apart.

Selling, he says, is his biggest problem. An open air stand at the turn in to the farm offers a wide selection – sweet potatoes, tomatoes, okra, peppers, and much more, but the bulk of his produce goes to a wholesale packing house in Waynesville. More direct sales would make a big difference.

In the days before spring planting Moreno hand painted his plows a fresh fire engine red. “I guess there’s no practical reason to do that,” he said, “but the red plow and the big red tractor just look so good out there in the field. It makes people happy.”

Charlie and Barbara Kissling

The Kisslings came to Clay County not only to escape from New Jersey but also to atone for it. They would establish and defend in the South what they had seen destroyed in the North. Selling a successful restaurant business gave them the means.

The suburban wave broke over our whole township. We watched it happen. Concrete covered the best farmland in the eastern United States. Monroe Township, Middlesex County, New Jersey. Remember, they called it the Garden State. That was over 10 years ago. We headed south, through Virginia and into South Carolina, but we liked what we saw here. What makes these counties pretty is not mountains or pastures or woods, but the way all three go together.

The Kisslings bought 160 acres of steep mountain land, of which 60 is pasture, and have since invested both money and time into making it productive. They bought cattle and set a goal of producing 50 calves a year from 60 acres of pasture. They installed fences to manage the grazing intensely. They bought semen from bulls to sire a herd that can produce good meat from grass. They built a guest house and barn to rent to trail riders. They are working to establish a local market their beef. They attend meetings. They support 4H.

They also have fun. They explore horse trails in the National Forest. They camp. They savor the taste of their own beef. But challenges still rise to meet them. The winter of 2009 –2010 was one. They fed a great deal of hay. Weather stress cut the efficiency of the artificial insemination program. They discovered the difficulty of selling their own branded beef, when they could not offer it in quantity or reach a wider market. The beeves they sent to feedlots and sold through the commodity market barely covered the variable costs of raising them and returned next to nothing on the capital investment underwritten by their previous enterprise.

We're not giving up, but it's been a long winter, and I worry a lot that Clay County will take a direction that will kill why people come here. Ironically, just after we decided to leave New Jersey our home county decided to designate one third of the land as agriculture zones. Although it meant that we got less for our property when we sold out, I can't complain. It has allowed some farms to survive.

No one without considerable capital to risk could afford to chase the Kissling's vision in similar style, but they have earned respect for trying. If they do succeed in raising the productivity of their land, establishing a race of grass-efficient cattle, and netting a bigger share of the market price of their beef, they will have cracked a nut that others can share. Also, they are not the only example of outside capital flowing to innovative agricultural development in the area. On Ridgefield Farm in neighboring Cherokee County, Steve Whitmire, with the endorsement and support of family members, is exploring new approaches to managing 400 acres of pasture, adapting cattle to the land, and direct marketing their Brasstown Beef.

To the degree the Kisslings, Whitmires, and others succeed, they raise the prospect of increasing local production, infrastructure, and market power enough to make smaller operations viable in their wake.

Land's End Homestead

Cathy Merckens decided she wanted to work a big garden in Clay County while attending a course at the John C. Campbell Folk School, on gardening.

I was living in Atlanta, but my life had just taken a big change. I found 18 acres, of which about four were flat enough to plant on. The rest is woods, and we have a nice stream. It was about four and a half miles from the Folk School, and there was a house. It seemed like just the right thing to do, but after I bought it, I realized I couldn't live there. I had two kids in Atlanta, and, well, it wasn't possible.

That was 1999. She went back to her old life, sort of. She kept the land and found a succession of students and interns at the Folk School who would keep the house and garden. For nearly 10 years she resigned herself to a largely vicarious enjoyment of her dream, but as her children grew more independent, her center of gravity shifted north toward Land's End Homestead. Now that the youngest has entered college she spends 95 percent of her time there, and she has plotted a new course toward making it self-sustaining.

Since 2004, Land's End has generated income by selling a variety of vegetables and shiitake mushrooms through a Community Supported Agriculture program. The critical labor of energetic young people still comes through the Folk School connection. Some pay rent to live on the

property. Merckens herself hopes to expand into herbs and medicinal plants, especially native species like ginseng, goldenseal, and ramps. She is also focusing on her 14 acres of forest, which, she believes was last logged in the late 1930s.

I'd like to recreate the natural diversity that is possible there. In fact, a surprising amount is still there. We have built trails. I hope we can become a nursery for others who want to restore their woods, and provide education and training there as well as classes in gardening. I believe our woods can play its part in making this place self-sustaining.

Merckens sees a lively market for fresh vegetables, but she would like to reap the benefit of added value, easier market access, and stronger networks of similar producers. Her wish list includes a commercial kitchen and packing facilities that would allow her to put up preserves and make tinctures and extracts. She could pack a lot of small things like sprouts, herbs and mixed greens that she could sell online. She waits for the day when Clay County has enough small growers to support a proper farmers market, a farm-to-school food program, and perhaps even a licensed kitchen for small farmers, such as exists in Buncombe County.

Steve Ericksen – Dairy Farmers of America

Ericksen is Southeast Area Manager for Dairy Farmers of America, one of the largest and most vertically integrated milk cooperatives in the country. DFA also maintains the last milk collection route in the vicinity of Clay County (One dairy remains in neighboring Cherokee County.) Historically, organizations like DFA have pushed production through technology – cows bred to produce 100 pounds a day, hormones, antibiotics, specially formulated feed mixes, etc. This has changed dramatically. When asked what small scale producers in his area could do to avoid the fate that overcame Lynn Waldroup, Ericksen struck an entirely different chord.

It's true that we had an unprecedented drop in milk prices that caused a lot of folks to drop out, and lot more people would have gotten out of the business if they could have sold their cows, but nobody was buying. The price is coming back, but our region is 50 percent short of supply. We now truck in half our milk.

The answer is grass! The more a producer can lower his costs by using grass, the better chance he will have. The key to survival in this kind of up and down market is lowering cost, and overhead especially. If you're chopping silage with expensive machinery that you only use three weeks a year, and you're buying grain, it doesn't matter that you're getting 80 pounds per day per cow. The people making money now are getting 40 just from grass. This has caught on big time in other areas, particularly Missouri, but you're going to see it here.

Ericksen says that the inspiration has come from New Zealand and the British Isles, where production costs are typically less than half those in the United States. The Missouri examples he cited ranged from 3,000 acre operations using miles of New Zealand style cross fencing to a family dairy that stayed profitable throughout the price slump milking 40 pounds a day from 180 Jersey-Holstein cross cows on 200 acres. Gerry Cohn, regional farm coordinator for the Organic Valley Family of Farms cooperative cites an Amish farmer near Salisbury, North Carolina, who, he claims, has stayed in the black selling milk from 40 cows averaging 45 pounds per cow at a certified organic price of \$27 per hundredweight.⁶ Within the past few years, both Dairy Farmers of America and Organic Valley Family of Farms have become major sponsors of conferences on pasture-based dairy production.

Qualla Berry Farm

Qualla Berry Farm began as an extension the kitchen garden of John Clarke and Karen Hurtubise in 1996, when a friend gave them a dozen starts of a race of red raspberry which had developed in Hiawassee, Georgia, just over the state line.

They did well on a well drained patch of Clay County, and by 2001 the raspberry rows had grown to the point where Karen and John could not pick, store or eat all the berries themselves. John put up a handwritten highway sign announcing “Organic U-Pick Raspberries.” The first customers showed up within an hour, and a base of regular U-pickers has grown ever since. About five years ago, they won a Western North Carolina AgOptions Grant that helped them develop a logo and graphics, print business cards, and initiate a website, and they bought a 10’ x 10’ canopy for storing containers, weighing berries and making change.

As of 2010 there are 900 linear feet of raspberry beds, 30 inches wide and double-dug by hand with t-post and wire trellising. Although red raspberries are the main cash crop, the farm also includes blueberries, strawberries, cherries, mulberries, Asian pears, and apples, as well as a vegetable, herb, and flower garden. A small bee yard for fruit pollination sometimes produces enough sourwood honey to have a surplus to sell. Future plans include the development of value-added products derived from the raspberries including small batch signature vinegars, jams, and raspberry sauce. Experimental batches of a fermented raspberry honey drink have been brewing in the kitchen. Raspberry smoothies are often served at the farm to family and friends.

John and Karen, who have been married for 30 years, have separate full time jobs – John as Buildings and Grounds Manager at the John C. Campbell Folk School and Karen as a self-employed licensed massage therapist with an office in Young Harris, Georgia. “The berry farm

⁶ Organic Valley does not have a milk route near Clay County at this time. Cohn says that it would require a minimum of 500 cows to establish one, and the co-op is not signing any new members at the present time, due to the weak market.

contributes maybe one percent to our actual living,” John says. In point of fact it covers less than one acre of their 56 acre property.

They do most of the work of the farm themselves but hire temporary help for spring weeding, mulching, and pruning. In 2008 they began trading customers’ weeding labor for berries by means of a coupon system. The addition of value added products will increase revenue but there are expenses, too, and a number of regulatory hurdles have to be crossed to bring these products to market.

Each year improvements and innovations gathered from sharing information with other farm entrepreneurs continue to encourage us on our farm profitability quest. We actively participate in regional organizations which promote local and organic farming including the Carolina Farm Stewardship Association, the Appalachian Sustainable Agriculture Project, Georgia Organics, and Appalachian Grown.

Challenges, Opportunities, and Solutions

The above stories reflect both positive and negative symptoms of forces affecting local economies throughout the Appalachian region:

Land values driven by a recreation-second home-retirement market to a level where no one can pay off a mortgage by farming. Owners who happen to be land rich and cash poor have few ways to pay for their own retirement, health care, emergencies or the college fees of their grandchildren other than selling land to non-farmers.

Steep land, ill-suited to large scale cultivation.

Small properties. Few farms boast over 100 acres of open pasture, let alone level bottomland. As cited above, two thirds of farms are less than 30 acres.

Scarcity of good non-farm employment. Even in 1940 when farming most dominated the Clay County population, and its population at 6,405, its many small tobacco farms and dairies often depended on at least one family member having a “job of work” on the side, plus a lot of children to do chores, plus a network of neighbors and relatives willing to pitch in when necessary. That model fell apart for numerous reasons, among them a massive flight of people, especially youth, in search of jobs. By 1970 the population had fallen almost 20 percent, to 5,180. Although it has almost doubled to a new high since then, by the year 2000 already less than half the people counted in Clay County were born here, according to the census. Few of the more recent arrivals have an agricultural background.⁷

Scarcity of farm labor. As in American agriculture generally, Hispanic immigrants are believed to be the main source of field labor in Clay County, but the jobs are too limited to draw a consistent number or support the infrastructure to maintain them.

Marketing constraints. Lack of convenient local processing and packing, have made it difficult for small producers to enter both wholesale and retail markets. For many years there has been no convenient sale barn for livestock, no creamery for dairies, no USDA licensed abattoir, sporadic access to local farmers’ markets, and little-to-no access to schools or other institutional food services or supermarkets.

⁷ Statics from the Historical Census Browser at the University of Viginia <http://mapserver.lib.virginia.edu/> and the North Carolina Rural Center <ncruralcenter.org>.

Opportunities and Solutions

The future remains precarious. The pastured livestock and supporting hay production that constitute the bulk of agricultural activity in Clay County are low margin, somewhat risky enterprises. They are generally practiced part time and are easily abandoned when expenses such as fence maintenance require substantial investment. Other forms of agriculture currently lack the critical mass of people, organization, markets and infrastructure required for stable enterprise. Although nowhere in North Carolina has a local government definitively reversed a similar decline, a number have made progress with the support of dynamic individuals and organizations, and Clay County is not without options.

As in other counties, success will require some combination of policies and actions that address two related aspects of the situation – irreversible withdrawal of land from agricultural use and progressive withdrawal of people from agricultural enterprise. The profiles above suggest a strategy of diverting the forces driving both of these trends toward the challenge of reversing them.

The developers, tourists, retirees, urban refugees, and others implicated in converting Clay County farmland find value in the rural environment. Thus, farmers willing and able to maintain that landscape might thrive, if they can capture the full value of their stewardship to those willing to invest here. Achieving this means not only regarding new players as resources, but also expanding the definition of farming to include almost any activity that involves maintaining the fertility of the soil and the health of the environment.

Policies and actions that both protect agricultural land and improve the viability of agriculture, broadly defined, fall into six categories:

- *Public promotion of agriculture locally as an engine of economic growth and regionally or nationally as a reason to invest in Clay County.*
- *Promotion and facilitation of farmland preservation through Voluntary Agriculture Districts, Present Use Value taxation, estate planning, easements, development ordinances, and development planning.*
- *Promotion and facilitation of leases and other multiple use agreements to bring farmland owned by non-farmers into productive use.*
- *Marketing and processing development to support greater variety and profitability in agricultural enterprises.*

- *Promotion, training, and support for “grass farming” and other production techniques to lower costs, minimize capital requirements, increase margins, and meet the environmental and aesthetic requirements of a healthy rural landscape.*
- *Support for developing and carrying out the forestry plans required for PUV tax assessments*

Each of these categories comprises a number of possible actions.

Promoting Agriculture

Public promotion of agriculture locally as an engine of economic growth and regionally or nationally as a reason to invest in Clay County.

Clay County leadership has already taken steps to promote agriculture as an asset in building economic vitality and community cohesion:

- Promotion of Voluntary Agricultural Districts
- Establishment of a Farmland Preservation Board with access to county government
- Monthly farmers’ breakfast meetings for new information and discussion of farm issues
- Promulgation of a Farmland Protection Plan
- Coordination in drafting the Farmland Plan and an Economic Development Plan

One of the Farmers’ breakfasts included a presentation by Polk County Agricultural Economic Director Lynn Sprague. Establishing such a position and hiring Sprague to fill it reflects Polk County’s statewide leadership in raising the profile of agriculture and integrating (or reintegrating) it into all aspects of community life. Clay and Polk Counties share many characteristics. Both are small and have been heavily impacted by second home, retirement, and recreation-oriented development at the expense of traditional farming. Polk County’s reputation as a destination for affluent horse people goes back to the 1920’s, but Clay County has a similar appeal for wealthy families seeking a rural experience.

Actions in the spirit of the Polk County example might include.

- Outreach to both owners and users of farm and forest land that is or might be managed for recreational or conservation value as well as more conventional agricultural use. The farmers’ breakfasts, for instance could include programs of interest to fishermen, hunting associations, trail riders, bird watchers, real estate developers, owners of defunct or bankrupt developments, etc.

- Signage celebrating the VAD and EVAD farmland combined with an ongoing information campaign to extent that everyone, including all real estate agents, know the implications and welcome them. The campaign will explain the right-to-farm provisions, the utility assessment exemptions, and the cost share benefits as elements in a program that raises land values by keeping Clay County beautiful.
- Identify and inventory the general areas, historic buildings, and, where appropriate, specific parcels of land that are most important to keep open for its agricultural, forestry, aesthetic environmental, cultural or recreational importance. Digital maps, accessible on the internet and suitable for publication will raise public awareness of changes and opportunities.
- A website, referenced on the farm signs and linked to county and chamber of commerce websites, that includes maps of Ag Districts, conservation focus areas, and related events, information and contacts.
- Staff time designated for advancing the Farmland Protection Plan. Ideally this would be a full time position within county government, as in Polk County and Buncombe County; however, much could be achieved by redefining existing positions or committees.

Facilitation of Farmland Preservation

Promotion and facilitation of farmland preservation through development planning, Voluntary Agriculture Districts, easements, development ordinances, Present Use Value taxation, and estate planning.

A Development Plan sets the stage for what individuals do. It influences the future to the degree that it expresses what the community collectively expects or hopes of its members. It should at least describe the general quality of life it pretends to promote, what activities will support that, and what the land will look like. A farmland plan has significance to the degree that it fits into a development plan.

Voluntary and Enhanced Voluntary Agriculture Districts (VAD and EVAD). Mentioned above as instruments for promoting a general awareness of agricultural values and interests, voluntary districts provide a pathway toward more serious preservations. The process of application introduces landowners to many of the general concepts involved in land preservation. The advisory committee established under the program provides a structure for evaluating and prioritizing land and access to helpful surveys, plans, and other standard government services.

Easements. The donation, sale, or even temporary leasing of development rights on a parcel of land requires surveys, appraisals, and negotiation of a detailed case-specific contract, typically involving multiple public and private parties. Based on direct observation by researchers, this can easily consume a year and \$50,000. A county employee tasked to shepherd this process can make it accessible to a wide range of people, especially if backed by a suitable budget. By assuming some of the transition costs and facilitating the participation of a local land trust, private donors and state and federal sources, Buncombe County has leveraged county funds to protect considerable acreage.

A county may of course buy and hold an easement on a key piece of land. More commonly, however, easements are transferred through “bargain sale” following a certified appraisal. Several parties, including perhaps a county government, a land trust, a private foundation and the landowner bargain over how much of the value the landowner will donate, and how the others will divide up the rest.

Development ordinances offer county government a way to induce or require developers to consider donating an easement on prime soils, important forest environments, or other inventoried assets within their properties just as it can enforce specifications on roads and sewage disposal. Incentives for such “conservation development” may include allowing more development, if it is clustered to preserve open space, lower the expense of public services, etc. Typically the net impact on tax revenue is minimal or even positive, as property adjacent to protected land has higher value and costs less to serve as density increases.

Short of actually requiring a developer to submit plans that preserve good soils as open space or agricultural land and respect other inventoried assets, a development ordinance can formalize procedures that encourage this result.

It can require, for instance, that a representative of the county entity that approves development plans actually walks the property with developers and the leader of their design teams (generally a landscape architect or engineer) *before* any designs are submitted on paper and that a true sketch plan, *in pencil* or other inexpensive, interactive format and on a map showing inventoried assets, be presented for discussion *before* a detailed proposal is drawn up.

Tax policies that encourage agriculture and landscape protection in general are governed by state law; however, county governments have considerable room for maneuver, and evolution continues. For example, considerable ambiguity attends the *Present Use Value* schedule that protects farms from property tax increases based on appraisals of nearby development land. It is the single most important gesture of government toward protecting agriculture, but it invites abuse. Thus, across the state, interpretation and enforcement of the regulations ranges from enabling to harassing. The continued careful attention of county leadership can assure that PUV is handled consistently and in a way that reinforces a recognized land policy.

Other tax initiatives such as the “leasing” of development rights on key property for an amount equal to all or part of the property tax are being explored.

Estate planning is a private matter that can have enormous public consequences, as landowners probably precipitate more changes to the land by dying by anything they do while living. Although County government cannot require anyone to get ready, but it can promote the idea and facilitate access to basic information and the lawyers and mediators who can help avoid sacrificing the family farm to taxes and family disputes.

Leases and multiple use agreements

Promotion and facilitation of leases and other multiple use agreements to bring farmland owned by non-farmers into productive use.

Several of the farmers profiled in this plan farm land they do not own. Some of the owners depend on others to care for land they themselves do not farm. Of the respondents in the survey cited earlier, nearly 40 percent have others working their land, generally on the basis of a handshake or deep family ties. This relationship has little in common with old time share cropping. Hardly ever do owners depend on income from tenants. They more likely spend money to keep them. This pattern is so well developed that it often escapes mention, and yet it offers several avenues for improvement.

However convenient, informal lease arrangements tend to inhibit the best efforts of both parties for a number of reasons. Landowners shy away from long-term commitments to people they don't know, especially if they have no experience of their own. Operators cannot risk serious investment in land they might have to leave at any time. There are liability issues and difficult questions in times of crisis, as when a well fails during a drought. The list of warnings is long.

As a result, many good operators complain that good leases are hard to find, and certainly plenty of land in Clay County goes unused or underused. Outreach, education, and technical support for the owners of unused land and potential operators would generate deeper cooperation. Long term leases based on the expectation of higher productivity and a wider range of benefits to the landowner are perhaps the most direct way in which the financial resources of landowners can subsidize farmers in return for the non-cash benefits of good land management.

Frequently heard statements such as, “Oh, we let our neighbor cut hay on our land so we don't have to bush hog so much,” could give way to, “We've now got 30 percent legumes in our lower 40 where a young couple finish their grass-fed steers, and last year we had three coveys of bob whites where we hadn't seen any for years.” To get there, however, both parties will have to have reason to believe that such a goal is possible, willingness to work through setbacks to reach it, and solid technical and social support.

Marketing and processing

Marketing and processing development to support greater variety and profitability in agricultural enterprises.

Small scale producers facing topography and demographics such as those found in Clay County universally complain that they cannot survive on the marginal return afforded by national wholesale commodity markets. Among those profiled earlier, exceptions may be the Cheeks, who have managed to find inexpensive leases on prime land in Kentucky to supplement their Clay County base and Salvador Morena's extremely efficient vegetable operation on a famously fertile bottom beside the Hiwassee, but they, too, lament the expense of selling into a distant market at prices diminished by the commissions skimmed by all the wholesalers, haulers, and processors that stand between their fields and the consumer.

Although some growers may prove correct in assuming that the local market for locally grown food at premium prices can never support enough farmers to seriously impact the economy of Clay County, the idea is still so undeveloped that no one knows just how far it can go.

In other mountain counties weekly farmers' markets thrive and continue to grow. Other places have organized direct sales to schools and institutions. Internet marketing is just beginning. A County-supported washing and packing facility exists in Madison County to help small producers prepare food for direct sale to retailers, restaurants, and other bulk consumers. The range of products continues to grow and now includes prepared herbs, preserves, and even wine.

In the livestock sector, a sale barn will hopefully open soon in Haywood County, bringing that service much closer to home. Meanwhile three meat processing facilities just across the state line in Georgia have recently acquired USDA inspection capability. Local Hayesville butcher shop owner David Waldrep bought one of them, with the intention of promoting local meat.

Clay County can facilitate and promote all these initiatives in a variety of ways. The single most important action the Clay County Farmland Preservation Committee can take is to continue a program of educating landowners on opportunities for both protecting farmland from development and capitalizing on new farming and marketing strategies to increase the economic value of agriculture. Through continued educational meetings, the Committee can forge collaborative solutions that can develop into programs for agricultural economic development and increased resources available to landowners interested in preserving their land for agriculture.

While the path towards reviving agriculture is difficult, and in many cases unsure, one thing is clear: Taking no action is a de-facto choice to allow agriculture to continue to dwindle and opens the way for continued conversion of farmland to nonagricultural uses. Quite literally, the future of agriculture in Clay County is at stake.

Next Steps and Schedule of Implementation

Because the development of this plan was conducted concurrently with implementation of strategies to preserve farmland, several recommendations in this report have already begun and are intended to continue on an on-going basis.

A schedule of implementing recommendations in this report is suggested as follows:

In 2010, the Farmland Preservation Committee is recommended to:

Enact the Farmland Protection Plan with approval of the County Commissioners;

Continue the ongoing program of farmers' breakfast meetings for new information and discussion of farm issues. Recommended topics for presentation include a focus on small land plots for intensive farming, direct marketing, attracting and supporting young farmers, introduction of new or improved production, and ways to increase profitability of low-intensive farming such as feeder cattle, forage crops, and forestry;

Pursue funding sources that will increase and continue preservation efforts and economic opportunities. Researchers have identified potential areas of support from the Agricultural Development and Farmland Preservation Trust Fund and the Community Foundation of Western North Carolina. Other funding sources are discussed in Appendix C of this plan;

Aggressively promote enrollment of farmland into Voluntary Agricultural Districts and Enhanced Voluntary Agricultural Districts. As of June 2010, the Farmland Preservation Committee is in the process of accepting over 20 applications from landowners to be enrolled in VADs or EVADs;

Educate the public and local leaders on the value of preserving farmland. A report by the American Farmland Trust has found that land used for farming or green spaces costs the county approximately \$0.38 per acre in services, whereas land in residential development costs taxpayers an average of \$1.38 in services;

Support and recognize newly enrolled Voluntary Agricultural Districts through excellent signage and public acknowledgements through the media and websites;

Develop a benefits list for landowners considering enrollment in VADs and EVADs. In addition to the natural benefits enumerated in standard VAD ordinances, the Committee may consider other services such as providing each VAD-enrolled landowner with a custom soil map of their land and grant-writing assistance for active farmers seeking support for new agricultural ventures. The Committee would do well to assist growers on VAD lands with access to mini-grants, such as those provided through the WNC AgOptions Program;

Work with the County's tax office and register of deeds to inform current or future landowners of the rights of farmers with land enrolled in VADs and EVADs;

Include multi-jurisdictional strategies to increase economic opportunity for producers. This should include facilitation of cooperative strategies among multiple counties, coordination between municipal and county governments, and collaboration across the state line with slaughterhouses and other infrastructure in North Georgia. These may also include cooperative marketing strategies to access larger markets, such as Atlanta, through replication of the Foothills Connect program for very small farms growing specialty produce crops;

Work closely with the Clay County Soil & Water Conservation District and the Land Trust for the Little Tennessee to begin identifying farmland for purchase of agricultural conservation easements;

Develop an attractive and well-maintained website that clearly explains farmland preservation policies and strategies, and provide a system to bring new people into the discussion of farmland preservation in the County.

In 2011, the Committee is recommended to continue the activities of 2010 and also:

Using the ranking system presented in this plan, score and prioritize farmland for purchase of agricultural conservation easements, with particular focus on land enrolled in VAD and EVAD;

Embark on an effort to entice landowners enrolled in VAD to consider "upgrading" to EVADs.

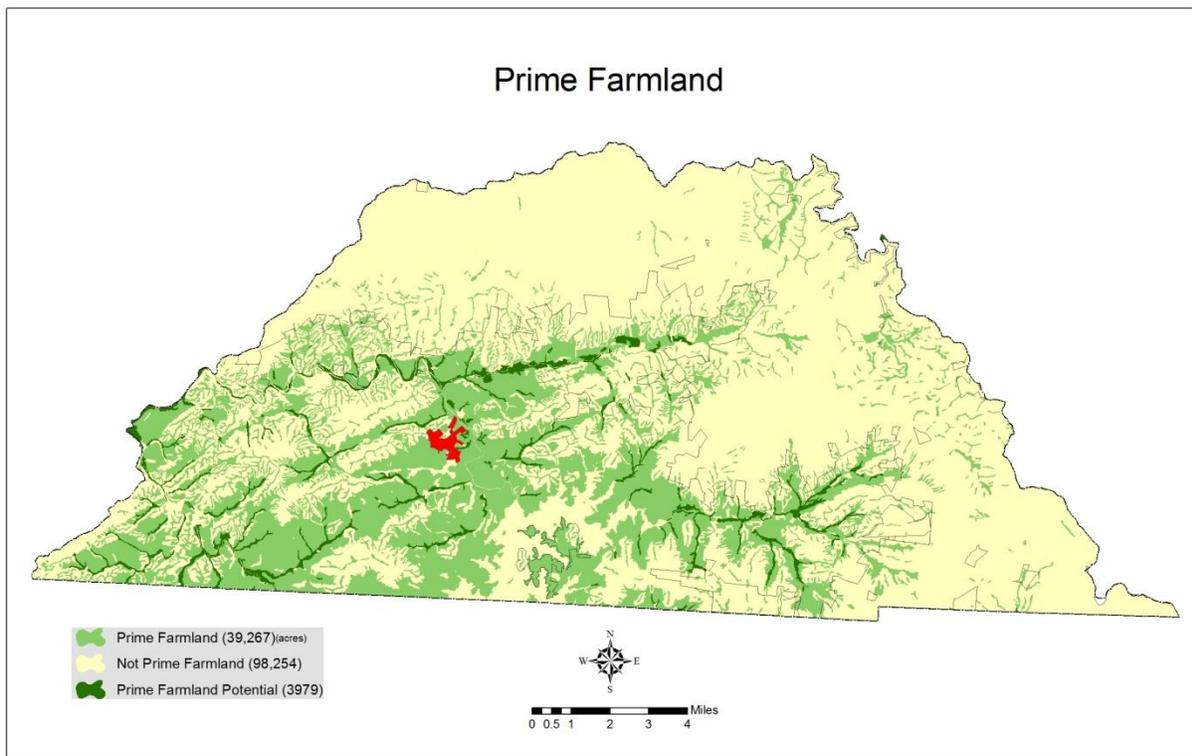
Investigate the possibility of enacting subdivision ordinances that encourage protection of arable farmland within housing developments. Enacting preferential tax status for such land that remains undeveloped and in agricultural production can provide a powerful incentive for the continuance of farming on these lands.

Facilitate professional assistance for landowners in planning generational transitions of ownership. The Committee may seek to secure grants, county appropriations, or donation of money and services to help people with legal implementation of farm transitions.

Appendix A: Soil Analysis for Clay County

Clay County possesses ten soil types that are classified as prime farmland, along with five types that are prime farmland if adequately protected from flooding. Additionally, NRCS lists eighteen soil types that are deemed of local importance, and nine types that are classified as of statewide importance. Not surprisingly, almost all prime farmland is found in the valleys along riverbanks and tributaries of the major waterways in the county.

The map below shows prime farmland located in the southwestern section of the county including Brasstown and near Brasstown Creek, in the area around Hayesville, in the Tusquitee Valley, and along Shooting Creek and its tributaries.



A listing of all soil types of prime farmland, soil types of local importance, and soil types of statewide importance is presented below. The County is encouraged to consider areas of prime farmland, or soils of local or statewide importance, when seeking to prioritize land for preservation efforts.

Prime and Other Important Farmlands, Clay County North Carolina		
Code	Description	Designation
BdB	Braddock loam, 2 to 8 percent slopes	All areas are prime farmland
BkB2	Braddock clay loam, 2 to 8 percent slopes, eroded	All areas are prime farmland
DrB	Dillard loam, 1 to 6 percent slopes, rarely flooded	All areas are prime farmland

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EvB	Evard-Cowee complex, 2 to 8 percent slopes	All areas are prime farmland
HaB	Hayesville loam, 2 to 8 percent slopes	All areas are prime farmland
HbB2	Hayesville clay loam, 2 to 8 percent slopes, eroded	All areas are prime farmland
LoB	Lonon loam, 2 to 8 percent slopes	All areas are prime farmland
RnA	Rosman fine sandy loam, 0 to 2 percent slopes, rarely flooded	All areas are prime farmland
SvB	Statler loam, 1 to 5 percent slopes, rarely flooded	All areas are prime farmland
ThB	Tate loam, 2 to 8 percent slopes	All areas are prime farmland
DgB	Dellwood gravelly fine sandy loam, 0 to 5 percent slopes, frequently flooded	Farmland of local importance
EdD	Edneyville-Chestnut complex, 15 to 30 percent slopes, stony	Farmland of local importance
EvC	Evard-Cowee complex, 8 to 15 percent slopes	Farmland of local importance
EvD	Evard-Cowee complex, 15 to 30 percent slopes	Farmland of local importance
FaD	Fannin fine sandy loam, 15 to 30 percent slopes	Farmland of local importance
HaD	Hayesville loam, 15 to 30 percent slopes	Farmland of local importance
HbD2	Hayesville clay loam, 15 to 30 percent slopes, eroded	Farmland of local importance
JbD	Junaluska-Brasstown complex, 15 to 30 percent slopes	Farmland of local importance
JtC	Junaluska-Tsali complex, 8 to 15 percent slopes	Farmland of local importance
JtD	Junaluska-Tsali complex, 15 to 30 percent slopes	Farmland of local importance
LoD	Lonon loam, 15 to 30 percent slopes	Farmland of local importance
PwD	Plott fine sandy loam, 15 to 30 percent slopes, stony	Farmland of local importance
SoD	Soco-Stecoah complex, 15 to 30 percent slopes	Farmland of local importance
TgC	Tate gravelly loam, 8 to 15 percent slopes, stony	Farmland of local importance
TgD	Tate gravelly loam, 15 to 30 percent slopes, stony	Farmland of local importance
ThD	Tate loam, 15 to 30 percent slopes	Farmland of local importance
TsC	Tuckasegee-Cullasaja complex, 8 to 15 percent slopes, stony	Farmland of local importance
BdC	Braddock loam, 8 to 15 percent slopes	Farmland of statewide importance
BkC2	Braddock clay loam, 8 to 15 percent slopes, eroded	Farmland of statewide importance
BsC	Brasstown-Junaluska complex, 8 to 15 percent slopes	Farmland of statewide importance
FaC	Fannin fine sandy loam, 8 to 15 percent slopes	Farmland of statewide importance
HaC	Hayesville loam, 8 to 15 percent slopes	Farmland of statewide importance
HbC2	Hayesville clay loam, 8 to 15 percent slopes, eroded	Farmland of statewide importance
HmA	Hemphill loam, 0 to 3 percent slopes, rarely flooded	Farmland of statewide importance
LoC	Lonon loam, 8 to 15 percent slopes	Farmland of statewide importance
ThC	Tate loam, 8 to 15 percent slopes	Farmland of statewide importance
AKA	Arkaqua loam, 0 to 2 percent slopes, rarely flooded	Prime farmland if drained
ArA	Arkaqua loam, 0 to 2 percent slopes, frequently flooded	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
FrA	French fine sandy loam, 0 to 3 percent slopes, frequently flooded	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season

ToA	Toxaway loam, 0 to 2 percent slopes, frequently flooded	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
RhA	Reddies loam, 0 to 3 percent slopes, frequently flooded	Prime farmland if protected from flooding or not frequently flooded during the growing season
RsA	Rosman fine sandy loam, 0 to 2 percent slopes, frequently flooded	Prime farmland if protected from flooding or not frequently flooded during the growing season
Source: Natural Resources Conservation Service		

The Natural Resources Conservation Service has completed a soil survey of Clay County, and data from that work is available on NRCS’s web soil survey at <http://websoilsurvey.nrcs.usda.gov>. This is a powerful resource that allows individuals to generate soil maps of any land in the county.

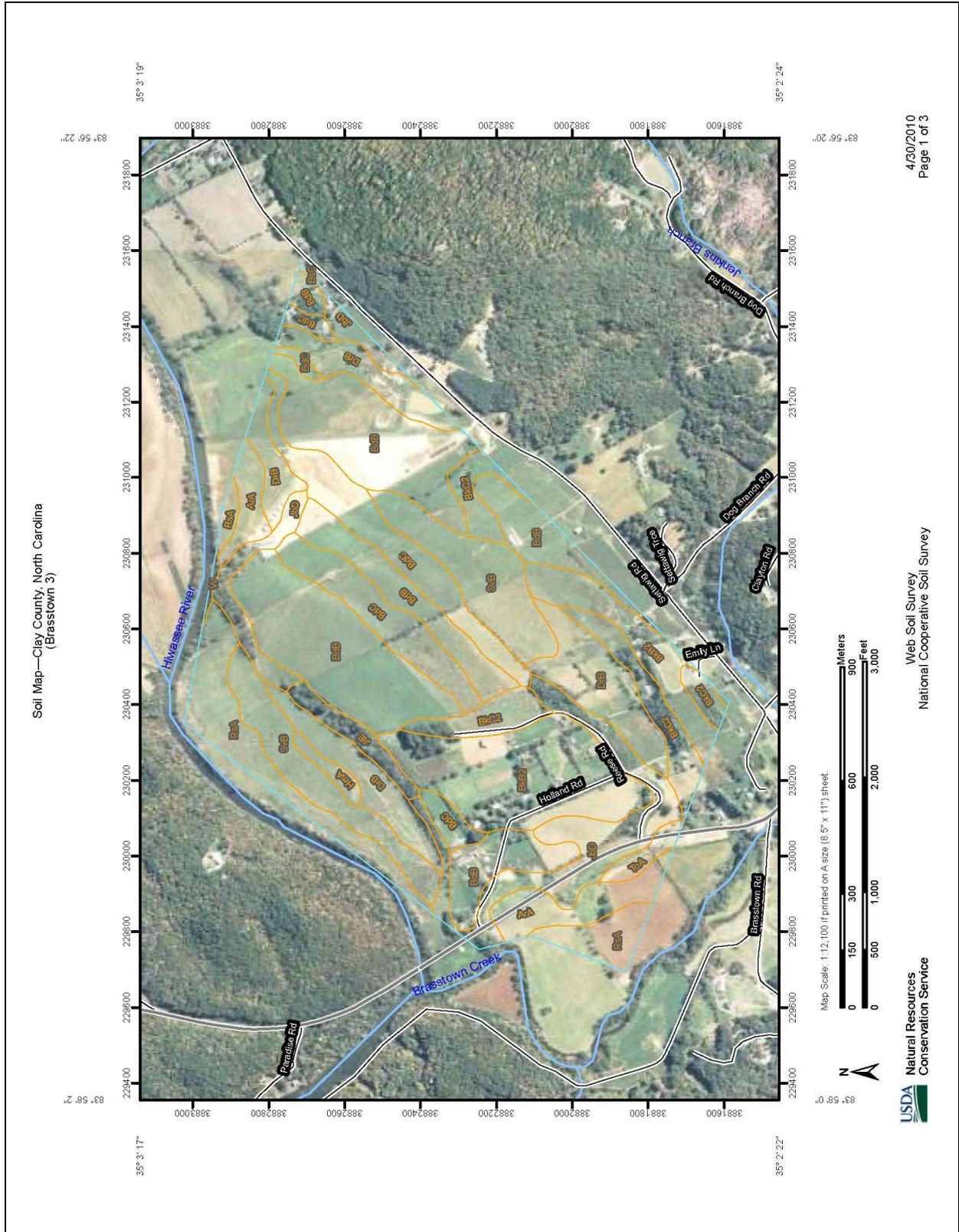
While online resources are able to clearly identify specific parcels containing these soils, this section of the plan uses three examples for analysis: farmland in the Brasstown area, farmland in Tusquitee Valley, and farmland in the area just north of downtown Hayesville.

Example 1: Brasstown

The Brasstown area, bordering Cherokee County at the confluence of the Hiwassee River and Brasstown Creek, possesses some of the best farmland in the County. The area contains four of the ten soil types designated as prime farmland and two additional types that are prime farmland if not frequently flooded during the growing season. Over 57% of the acreage shown in the soil map below is prime farmland. The entire map area is 348 acres. The soil key below describes soil type codes identified on the map on the following page:

Soil Types, Brasstown Area Soil Map			
Soil Code	Description	Acres	% of Acreage
BdB *	Braddock loam, 2 to 8 percent slopes	94.9	26.1%
BdC	Braddock loam, 8 to 15 percent slopes	38.3	10.5%
BkB2 *	Braddock clay loam, 2 to 8 percent slopes, eroded	47.1	13.0%
BkC2	Braddock clay loam, 8 to 15 percent slopes, eroded	23.0	6.3%
BsC	Brasstown-Junaluska complex, 8 to 15 percent slopes	0.1	0.0%
DrB *	Dillard loam, 1 to 6 percent slopes, rarely flooded	40.2	11.0%
HmA	Hemphill loam, 0 to 3 percent slopes, rarely flooded	2.2	0.6%
JbD	Junaluska-Brasstown complex, 15 to 30 percent slopes	34.3	9.4%
JtE	Junaluska-Tsali complex, 30 to 50 percent slopes	5.2	1.4%
RsA *	Rosman fine sandy loam, 0 to 2 percent slopes, frequently flooded	25.9	7.1%
SvB *	Statler loam, 1 to 5 percent slopes, rarely flooded	33.6	9.3%
ToA *	Toxaway loam, 0 to 2 percent slopes, frequently flooded	3.0	0.8%
W	Water	0.5	0.1%

*designated as prime farmland



Example 2: Central Tusquitee Valley

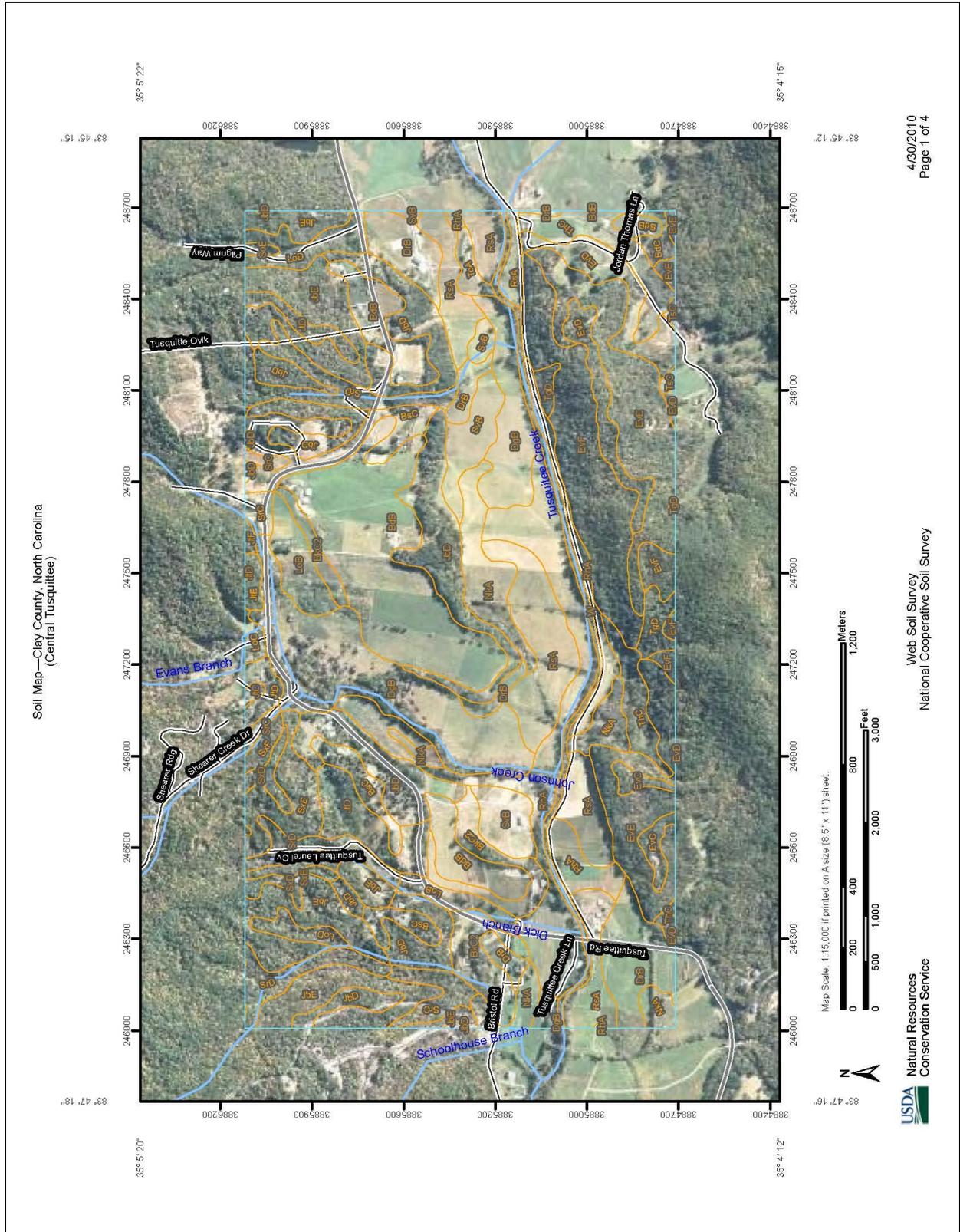
The soil map of central Tusquitee Valley covers 932.7 acres. It exemplifies the extreme diversity of soil types found in an area with a tumultuous geologic past. Thirty-four soil types are identified. Of those, four are prime farmland and another three are prime if properly drained. Four soil types are designated as of local importance, and one is designated as of statewide importance. In this soil map, which includes a significant amount of sloped hillsides, only about 32% of the acreage qualifies as prime farmland, with almost all of that adjacent to Tusquitee Creek.

Soil Types, Central Tusquitee Soil Map			
Soil Code	Description	Acres	% of Acreage
BdB*	Braddock loam, 2 to 8 percent slopes	90.2	9.70%
BdC	Braddock loam, 8 to 15 percent slopes	2.9	0.30%
BkC2	Braddock clay loam, 8 to 15 percent slopes, eroded	27.2	2.90%
BsC	Brasstown-Junaluska complex, 8 to 15 percent slopes	28.2	3.00%
DgB	Dellwood gravelly fine sandy loam, 0 to 5 percent slopes, frequently flooded	75.7	8.10%
DrB *	Dillard loam, 1 to 6 percent slopes, rarely flooded	38.7	4.10%
EvC	Evard-Cowee complex, 8 to 15 percent slopes	5.8	0.60%
EvD	Evard-Cowee complex, 15 to 30 percent slopes	25.9	2.80%
EvE	Evard-Cowee complex, 30 to 50 percent slopes	66.1	7.10%
EvF	Evard-Cowee complex, 50 to 95 percent slopes	49.2	5.30%
JbD	Junaluska-Brasstown complex, 15 to 30 percent slopes	87.5	9.40%
JbE	Junaluska-Brasstown complex, 30 to 50 percent slopes	68.2	7.30%
JtC	Junaluska-Tsali complex, 8 to 15 percent slopes	0.8	0.10%
JtD	Junaluska-Tsali complex, 15 to 30 percent slopes	23.6	2.50%
JtE	Junaluska-Tsali complex, 30 to 50 percent slopes	2.3	0.20%
JtF	Junaluska-Tsali complex, 50 to 95 percent slopes	0.8	0.10%

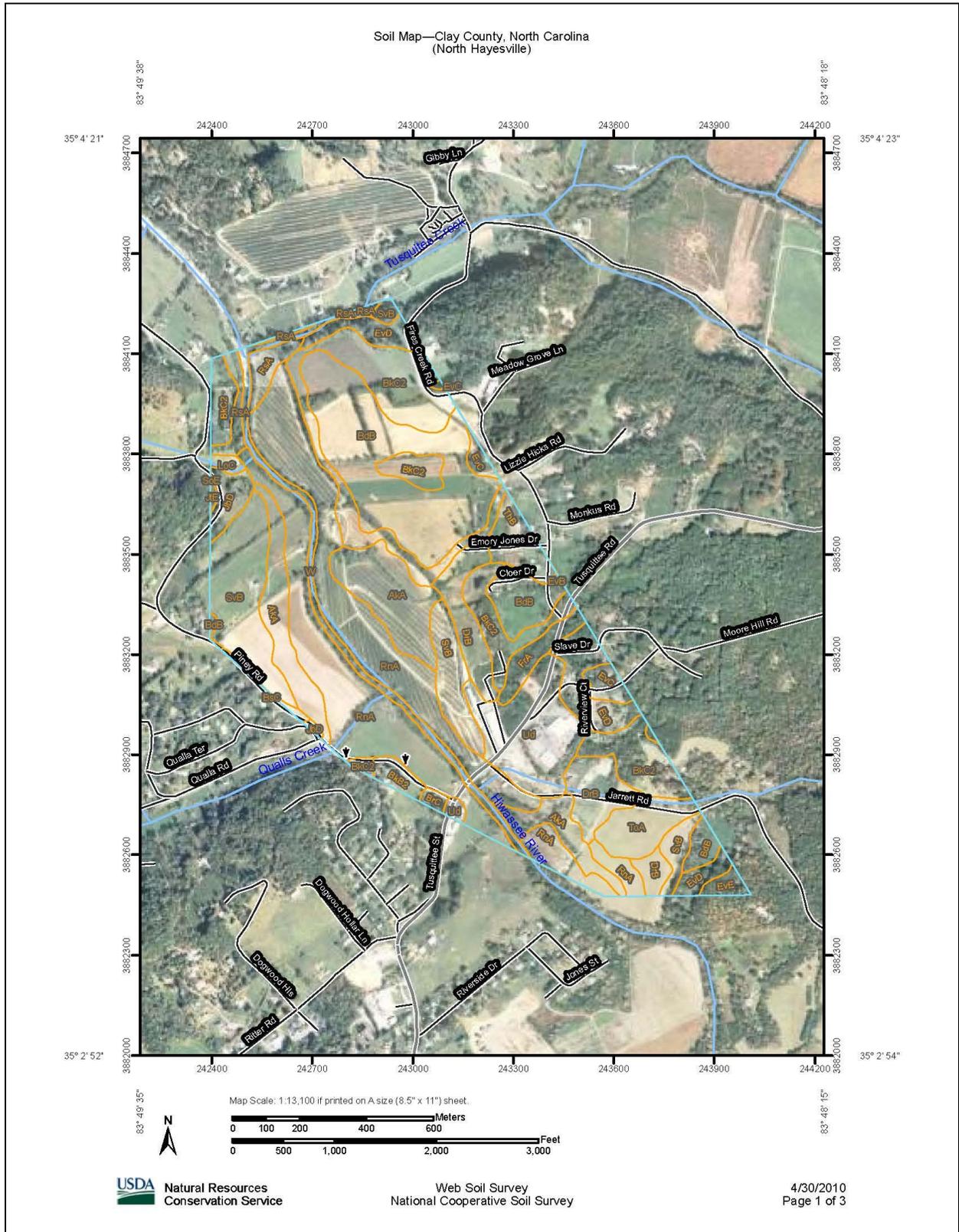
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LoB *	Lonon loam, 2 to 8 percent slopes	16.3	1.70%
LoC	Lonon loam, 8 to 15 percent slopes	2.1	0.20%
LoD	Lonon loam, 15 to 30 percent slopes	13.5	1.40%
NkA	Nikwasi fine sandy loam, 0 to 2 percent slopes, frequently flooded	31.2	3.30%
RhA *	Reddies loam, 0 to 3 percent slopes, frequently flooded	70.8	7.60%
RsA *	Rosman fine sandy loam, 0 to 2 percent slopes, frequently flooded	64.9	7.00%
SoE	Soco-Stecoah complex, 30 to 50 percent slopes	1	0.10%
SrC	Spivey-Santeetlah complex, 8 to 15 percent slopes, stony	12.8	1.40%
SrD	Spivey-Santeetlah complex, 15 to 30 percent slopes, stony	31.1	3.30%
SvB *	Statler loam, 1 to 5 percent slopes, rarely flooded	22.7	2.40%
SxD	Sylco-Cataska complex, 15 to 30 percent slopes	7	0.70%
SxE	Sylco-Cataska complex, 30 to 50 percent slopes	17.1	1.80%
SxF	Sylco-Cataska complex, 50 to 95 percent slopes	2.8	0.30%
TgD	Tate gravelly loam, 15 to 30 percent slopes, stony	6.9	0.70%
ThC	Tate loam, 8 to 15 percent slopes	23.1	2.50%
ToA *	Toxaway loam, 0 to 2 percent slopes, frequently flooded	3.6	0.40%
TsC	Tuckasegee-Cullasaja complex, 8 to 15 percent slopes, stony	1.2	0.10%
W	Water	11.4	1.20%
Totals for Area of Map		932.7	100.00%

*designated as prime farmland



Example 3: North Hayesville



The map of North Hayesville contains 367.9 acres and includes 22 different soil types. Of these, 10 soil types are either prime farmland or prime farmland if protected from flooding during growing seasons. Sixty-six percent of the land shown in this map may qualify as prime farmland.

Soil Types, North Hayesville Soil Map			
Soil Code	Description	Acres	% of Map
AkA *	Arkaqua loam, 0 to 2 percent slopes, rarely flooded	33.8	9.20%
BdB *	Braddock loam, 2 to 8 percent slopes	52.8	14.40%
BkB2*	Braddock clay loam, 2 to 8 percent slopes, eroded	2.9	0.80%
BkC2	Braddock clay loam, 8 to 15 percent slopes, eroded	52.5	14.30%
BrC	Braddock-Urban land complex, 2 to 15 percent slopes	1	0.30%
BsC	Brasstown-Junaluska complex, 8 to 15 percent slopes	0.8	0.20%
DrB *	Dillard loam, 1 to 6 percent slopes, rarely flooded	19.8	5.40%
EvB *	Evard-Cowee complex, 2 to 8 percent slopes	0.1	0.00%
EvC	Evard-Cowee complex, 8 to 15 percent slopes	4.7	1.30%
EvD	Evard-Cowee complex, 15 to 30 percent slopes	16.9	4.60%
EvE	Evard-Cowee complex, 30 to 50 percent slopes	1.9	0.50%
FrA	French fine sandy loam, 0 to 3 percent slopes, frequently flooded	4.8	1.30%
JbD	Junaluska-Brasstown complex, 15 to 30 percent slopes	4.8	1.30%
JtE	Junaluska-Tsali complex, 30 to 50 percent slopes	0.3	0.10%
LoC	Lonon loam, 8 to 15 percent slopes	1.1	0.30%
RnA*	Rosman fine sandy loam, 0 to 2 percent slopes, rarely flooded	80.9	22.00%
RsA *	Rosman fine sandy loam, 0 to 2 percent slopes, frequently flooded	7.2	2.00%
SoE	Soco-Stecoah complex, 30 to 50 percent slopes	0	0.00%
SvB *	Statler loam, 1 to 5 percent slopes, rarely flooded	32.9	8.90%
ThB *	Tate loam, 2 to 8 percent slopes	6.8	1.90%
ToA *	Toxaway loam, 0 to 2 percent slopes, frequently flooded	8.7	2.40%
Ud	Udorthents, loamy	22.6	6.10%
W	Water	10.4	2.80%
Totals for Area of Interest		367.9	100.00%

*designated as prime farmland or prime farmland if protected from flooding

Conclusion: Clay County farms possess a high percentage of prime farmland. These soils are ideal for cultivation of high value crops including vegetables. As discussed, most farmland is being used for cattle or hay production, neither of which is highly profitable. However, these soils can be put to more intensive work on crop cultivation, provided that farmers in the area have the inclination to do so.

The Farmland Preservation Committee is recommended to use the NRCS web soil survey when prioritizing land for conservation easements or other preservation measures. While other characteristics of farmland, including proximity to developments and historical significance, must also be considered, prime farmland designation should be a major consideration when ranking farmland for preservation activities.

The Committee is also recommended to continue widely publicizing the NRCS web soil survey to land owners to better help them identify parcels of their land that should be kept in farming. Soil quality may have an impact on family decisions about land transfer, ability to lease or sell land for continued agricultural use, and identification of lower quality soils where non-farm development may have a lower impact on future farming activities. The Committee may also consider generating soil maps for all farmland being enrolled into Voluntary Agricultural Districts (VADs) or Enhanced Voluntary Agricultural Districts (EVADs).

Appendix B: Prioritizing Preservation

Clay County's Farmland Preservation Committee is recommended to adopt objective criteria for ranking farmland in order of priority for preservation. While preservation of prime farmland is an obvious priority, other factors must weigh in the ranking. The Agricultural Development and Farmland Preservation Trust Fund (ADFPTF) website hosts a risk assessment model to assist in prioritizing lands for preservation. Farmland is scored according to two broad criteria: Viability and Threat level. Viability of lands are prioritized using a complex scoring system that includes proximity to other types of agricultural assets such as feed mills, farmers markets, tractor supply stores, livestock markets, slaughter houses, etc., and whether such land is enrolled in a VAD or in close proximity to other protected lands. The threat level assessment is determined by proximity to sewer and water lines and defined urban areas. County leaders should refer to this model to prioritize lands as it is further developed. The model, including GIS maps and a description of rankings, can be found at: <http://www.ncadfp.org/FarmlandPreservation.htm>

While the ADFPTF model provides some useful ranking criteria for farmland, it remains incomplete. Furthermore, the criteria do not appear to adequately consider land pressures unique to mountainous areas of the state, where level land is scarce and is optimal for the needs of housing, roads, utilities, and public works, as well as its most natural use as farmland. In Clay County, prime farmland is situated along waterways and in close proximity to residential areas. Land that may appear close on a map may be separated by high ridges.

The ADFPT model designates 18 parcels of farmland adjacent to the downtown Hayesville area as having a medium or high threat level for development. On a value scale of 1 to 5, with 5 being of highest value, farmland in Clay County is all designated at a value level of 2. While the value level and threat level is useful for ranking criteria, further objective criteria are needed to differentiate farm land within Clay County.

Several counties in North Carolina have developed similar comprehensive farmland ranking systems that are used to identify and prioritize lands for purchase of agricultural conservation easements. This model includes a soil assessment and a site assessment, and scores for each are added to arrive at the total score. In Buncombe and Forsyth counties, these two parts are described as follows:

(1) *Site assessment criteria.* This part of the system consists of ten factors, most of which are related to development pressures and development capability/suitability of a particular farm parcel and its surrounding area. Each factor is assigned a point value based on its relative importance to other factors.

(2) *Soil assessment criteria.* All soils in the county have been rated and placed into groups ranging from the most productive farmland to the least productive. A relative value has been determined for each group. The best group is assigned the highest value and all other groups are assigned lower values.

For site assessment scoring, the following criteria are used. Point values are listed in parentheses below:

1. Farm Size (weight - 100 Points). A score of one point per acre is given up to a maximum of 100 points.
2. Percentage of Farm in Agricultural Use (weight - 100 points) A score of one ranking point per percentage point of land in production compared to total farm size is given up to maximum of 100 points.
3. Proximity to Public Water and Sewer (weight - 100 points)
 - a. Existing service area adjacent 100 points
 - b. Existing service area within ¼ mile 80 points
 - c. Planned service area within ¼ mile 70 points
 - d. Existing service area within ½ mile 60 points
 - e. Planned service area within ½ mile 50 points
 - f. Existing or planned service area within 1 mile radius 30 points
 - g. No existing or planned service area within 1 mile radius 10 points
4. Probability of Conversion (weight - 100 points)
 - a. Property subject to potential forced sale 100 points
 - b. Property subject to estate settlement sale 75 points
 - c. Property actively marketed for voluntary sale 50 points
5. Proximity to Planned Development (weight - 50 points)
 - a. Non-Agricultural development planned adjacent 50 points
 - b. Non-Agricultural development planned within ¼ mile 40 points
 - c. Non-Agricultural development planned within ½ mile 30 points
 - d. Non-Agricultural development planned within 1 mile 20 points
 - e. Planned agriculture within 1 mile 10 points
6. Proximity to Voluntary Agricultural Districts (weight - 50 points)
 - a. Included in or adjacent to APA 50 points
 - b. Within ¼ mile 40 points
 - c. ¼ to ½ mile 30 points
 - d. More than ½ mile 20 points
7. Capital Investment in Farm Operation (weight - 200 Points. Dwellings are not included in this determination other than employee housing.)
 - a. Substantial capital investment within past 5 years 200 points
 - b. Substantial capital investment within past 10 year 100 points

- c. Substantial capital investment within past 15 years 50 points
- 8. Conservation Program (weight - 200 points). A score of two ranking points per percentage point of land meeting the “T” formula of conservation is given up to a maximum of 200 points. This formula is designed to mitigate loss of soils on highly erodible land and may give opportunity for conservation easements on soils that are not considered prime or otherwise preferred.
- 9. Historic, Scenic, Environmental Qualities (weight - 50 points). This scoring give weight to lands with any of the following: Exceptional features favorable to preservation (National Register of Historic Places, exceptional scenic contribution on major highway corridor, exceptional or special environmental circumstances); Significant features favorable to preservation (Historic Site Survey, significant scenic contribution of rural roads, significant environmental circumstances); Features favorable to preservation (Significant, but undocumented historic features, moderate localized scenic contribution and/or limited but recognized environmental features favorable to preservation).
- 10. Specialty Products (weight - 50 points). A score of one-half a ranking point per percentage point of land used for production of a locally unique crop or product up to a maximum of 50 points. 50 points

For soil assessment ranking, most counties have adopted a system whereby prime soils are given much higher scoring than other soils. For Clay County, a reasonable approach to ranking lands by soil type is to give 5 points for each soil type listed as prime farmland, multiplied by the percentage of farmland containing such soils on a given farm. Using the same system, farmland of local and statewide importance can be given 3 points, with 1 point assigned to all other soils.

As an example, a 150 acre tract of land with 75 acres in prime soils, 25 acres of farmland of local importance, and 50 acres of other soils would have the following soil assessment score:

Soil Type	Total Acres	% of total farm	Score
Prime (5 points)	75	50	250 (5 x 50)
Soil of local importance (3 points)	25	17	51 (17 x 3)
Other Soils (1 point)	50	33	33 (33 x 1)
Total	150	100	334

Clay County may choose to designate values higher than 1 to the following soil types:

Prime and Other Important Farmlands, Clay County North Carolina			
Code	Description	Designation	Score Value
BdB	Braddock loam, 2 to 8 percent slopes	All areas are prime farmland	5
BkB2	Braddock clay loam, 2 to 8 percent slopes, eroded	All areas are prime farmland	5
DrB	Dillard loam, 1 to 6 percent slopes, rarely flooded	All areas are prime farmland	5

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EvB	Evard-Cowee complex, 2 to 8 percent slopes	All areas are prime farmland	5
HaB	Hayesville loam, 2 to 8 percent slopes	All areas are prime farmland	5
HbB2	Hayesville clay loam, 2 to 8 percent slopes, eroded	All areas are prime farmland	5
LoB	Lonon loam, 2 to 8 percent slopes	All areas are prime farmland	5
RnA	Rosman fine sandy loam, 0 to 2 percent slopes, rarely flooded	All areas are prime farmland	5
SvB	Statler loam, 1 to 5 percent slopes, rarely flooded	All areas are prime farmland	5
ThB	Tate loam, 2 to 8 percent slopes	All areas are prime farmland	5
DgB	Dellwood gravelly fine sandy loam, 0 to 5 percent slopes, frequently flooded	Farmland of local importance	3
EdD	Edneyville-Chestnut complex, 15 to 30 percent slopes, stony	Farmland of local importance	3
EvC	Evard-Cowee complex, 8 to 15 percent slopes	Farmland of local importance	3
EvD	Evard-Cowee complex, 15 to 30 percent slopes	Farmland of local importance	3
FaD	Fannin fine sandy loam, 15 to 30 percent slopes	Farmland of local importance	3
HaD	Hayesville loam, 15 to 30 percent slopes	Farmland of local importance	3
HbD2	Hayesville clay loam, 15 to 30 percent slopes, eroded	Farmland of local importance	3
JbD	Junaluska-Brasstown complex, 15 to 30 percent slopes	Farmland of local importance	3
JtC	Junaluska-Tsali complex, 8 to 15 percent slopes	Farmland of local importance	3
JtD	Junaluska-Tsali complex, 15 to 30 percent slopes	Farmland of local importance	3
LoD	Lonon loam, 15 to 30 percent slopes	Farmland of local importance	3
PwD	Plott fine sandy loam, 15 to 30 percent slopes, stony	Farmland of local importance	3
SoD	Soco-Stecoah complex, 15 to 30 percent slopes	Farmland of local importance	3
TgC	Tate gravelly loam, 8 to 15 percent slopes, stony	Farmland of local importance	3
TgD	Tate gravelly loam, 15 to 30 percent slopes, stony	Farmland of local importance	3
ThD	Tate loam, 15 to 30 percent slopes	Farmland of local importance	3
TsC	Tuckasegee-Cullasaja complex, 8 to 15 percent slopes, stony	Farmland of local importance	3
BdC	Braddock loam, 8 to 15 percent slopes	Farmland of statewide importance	3
BkC2	Braddock clay loam, 8 to 15 percent slopes, eroded	Farmland of statewide importance	3
BsC	Brasstown-Junaluska complex, 8 to 15 percent slopes	Farmland of statewide importance	3
FaC	Fannin fine sandy loam, 8 to 15 percent slopes	Farmland of statewide importance	3
HaC	Hayesville loam, 8 to 15 percent slopes	Farmland of statewide importance	3
HbC2	Hayesville clay loam, 8 to 15 percent slopes, eroded	Farmland of statewide importance	3
HmA	Hemphill loam, 0 to 3 percent slopes, rarely flooded	Farmland of statewide importance	3

LoC	Lonon loam, 8 to 15 percent slopes	Farmland of statewide importance	3
ThC	Tate loam, 8 to 15 percent slopes	Farmland of statewide importance	3
AkA	Arkaqua loam, 0 to 2 percent slopes, rarely flooded	Prime farmland if drained	3 to 5
ArA	Arkaqua loam, 0 to 2 percent slopes, frequently flooded	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	3 to 5
FrA	French fine sandy loam, 0 to 3 percent slopes, frequently flooded	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	3 to 5
ToA	Toxaway loam, 0 to 2 percent slopes, frequently flooded	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	3 to 5
RhA	Reddies loam, 0 to 3 percent slopes, frequently flooded	Prime farmland if protected from flooding or not frequently flooded during the growing season	3 to 5
RsA	Rosman fine sandy loam, 0 to 2 percent slopes, frequently flooded	Prime farmland if protected from flooding or not frequently flooded during the growing season	3 to 5

Conclusion

At present time, neither the state nor the county has sufficient resources to contribute to the purchase of conservation easements. However, adoption of clear objective criteria now will set the stage for proper allocation of resources towards conservation easements in the future. Clay County is recommended to amend its existing voluntary farmland preservation ordinance to include a formal ranking system for prioritizing farmland for purchase of agricultural conservation easements.

Appendix C: Potential Funding Sources

The Clay County Farmland Preservation Committee is recommended to continue pursuing grants for programs that will support the vitality and continuance of agriculture. In addition to seeking further support from the Agricultural Development and Farmland Preservation Trust Fund, the committee should consider the following funding agencies:

The Community Foundation of Western North Carolina

P.O. Box 1888
Asheville, NC 28802
www.cfwnc.org
(828) 254-4960

CFWNC has two grants programs that may be of most interest for farmland preservation efforts: Strategy grants are for up to \$25,000 and Opportunity grants are for up to \$7,000.

The Resourceful Communities Program

The Conservation Fund
Post Office Box 271
Chapel Hill, NC 27514-0271
www.resourcefulcommunities.org
(919) 967-2223

Resourceful Communities has worked for the past 15 years in distressed communities throughout North Carolina to build successful working partnerships with more than 165 grassroots organizations. This program focuses on a triple bottom line approach that addresses sustainable community economic development, environmental conservation and social justice. A major emphasis is on capacity building for local organizations in rural communities. The program is now expanding its activities in western NC.

The Z. Smith Reynolds Foundation

147 South Cherry St., Suite 200
Winston Salem, NC 27101-5287
1-800-443-8319
www.zsr.org

ZSR focuses on program areas that include community economic development and the environment. It is one of the oldest and most well-established foundations in North Carolina.

The North Carolina Rural Center

4021 Carya Drive
Raleigh, NC 27610
919-250-4314
info@ncruralcenter.org
www.ncruralcenter.org

The NC Rural Center manages several grant programs focusing on economic development in rural parts of the state. Contact Rural Center staff to discuss potential funding opportunities.

The NC Tobacco Trust Fund Commission

1080 Mail Service Center
Raleigh, NC 27699-1080
Phone: 919.733.2160
Fax: 919.733.2510
Email: info@tobaccotrustfund.org
www.tobaccotrustfund.org

The NC Tobacco Trust Fund supports programs that impact individuals who have been adversely affected by changes in the tobacco economy of North Carolina. With several landowners having previously farmed tobacco, Clay County may have programs that would be eligible for Tobacco Trust Fund support.

The NC Golden LEAF Foundation

301 N. Winstead Avenue
Rocky Mount, NC 27804
Phone 252-442-7474
Fax 252-442-7404
Email info@goldenleaf.org
www.goldenleaf.org

As a tier one county as ranked by the NC Department of Commerce, Clay is eligible for up to \$2 million in grant support from Golden LEAF each year under its Community Assistance Initiative. Other grant programs, including the regular cycle and special initiatives such as the local food initiative, may be of interest to the committee.

In general, the first three funders listed above are good starting places for securing support for building organizational capacity for the Clay County Farmland Preservation Committee. The next three are suitable for larger levels of support for outcomes-based projects that will increase incomes or jobs for landowners in the County. The Committee is recommended to contact each of these funders by phone or email to learn more about their opportunities.

The N.C. Rural Center has compiled a comprehensive rural funding directory that lists the vast majority of local, state, federal, and private foundation sources of grant funds. This resource can be accessed online at www.ncruralcenter.org/images/PDFs/Publications/2009fundingguide.pdf.