

AGRICULTURAL PRESERVATION PLAN

FOR

HENDERSON COUNTY, NC



Prepared for the Henderson County

Agricultural Advisory Board

January 4, 2010



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EXECUTIVE SUMMARY

The purpose of this plan is to present a set of recommendations to assist government leaders in preserving agriculture in Henderson County by promoting agricultural economic development and farmland protection. To accomplish this purpose, an assessment of the agricultural industry in Henderson County was made and its challenges and opportunities identified. The assessment was made by compiling information from statistical reports, by holding a series of public input meetings and through individual interviews.

Farming and farmland are important to Henderson County for the contributions they make to the economy, rural heritage, the health of the environment and the overall quality of life. There are more than 500 farm businesses that utilize 16 percent of the County's land base. Farms are one of the predominant land uses in the rural areas; they generate income for families, provide scenic beauty for residents and visitors, retain and filter storm water, and harbor wildlife.

Assessment of the Agricultural Industry - Highlights

- average annual cash receipts of \$141,579,982 between 2000 and 2007 (page 5)
- 1,645 employees and \$18.5 million payroll in 2007 (page 5)
- ranked 3rd in the state in 2007 in cash receipts from crops (page 8)
- 557 farms in 2007 (page 16)
- 37,947 acres of active farmland in 2007 (page 16)
- 10,672 acres of farmland lost between 2002 and 2007 (page 16)

Revenues may appear high at the county level, but many farmers are operating with high production costs pared with low wholesale prices. Farms in Henderson County face those and other challenges that threaten the long-term viability of the industry. The challenges to the agriculture industry vary within the business enterprise and depending on location within the county.

Challenges to Agriculture (page 18)

- low profitability due to ever increasing input costs, weather and foreign imports
- need for infrastructure (machinery and equipment for the business enterprise) and capital improvements
- residential growth and demand for farmland to be developed for housing
- labor shortage
- aging farmer population and concerns about the lack of future farming generations
- high land prices and limited land availability for purchase or lease
- cumbersome food safety rules
- unsafe road conditions for farm equipment

Despite the challenges, Henderson County has been endowed with natural resources that are favorable to agriculture and has developed a knowledgeable and resilient population of farmers who are poised to take advantage of rising opportunities.

Strengths and Opportunities for Agriculture (page 22)

- favorable climate, productive soils and a abundance of clean water
- proven knowledge of the farmer, national reputation for growing quality products and accessibility to large markets (within a day's drive of 50% of the US population)

- Access to research and experimental farm operations at the Mountain Horticultural Crops Research Station, Mills River and the Mountain Research Station in Waynesville.
- Tourism and the growth in direct sales
- Growing interest in local food (tailgate markets, Curb Market)

To address the challenges and seize the opportunities, Henderson County's farmers need help from the non-farm community. Farmers and farms must be recognized as valuable assets and supported through political, economic and social investment.

Recommendations (page 27)

- increase enrollment in the Agricultural Districts
- increase the inventory of rental land
- invest in agricultural economic development
- expand the role and membership of the Agricultural Advisory Board
- educate the public about farmers' rights, issues and opportunities
- establish an Agricultural Development Director
- improve driving conditions for farm equipment
- perform an Agricultural Impact Assessment on proposed policies and plans
- advocate for the industry
- develop an agricultural information website
- follow the recommendations of the 2020 Comprehensive Plan and Community Plans

This Agricultural Preservation Plan has been approved by the Henderson County Agricultural Advisory Board, which will provide leadership in its implementation. By adopting this plan, the Henderson County Board of Commissioners commits itself to consider the actions requested by the Agricultural Advisory Board and to implement those determined to be feasible.

AGRICULTURE IN HENDERSON COUNTY – A NEED FOR ACTION

The purpose of this plan is to present a set of actions to assist government leaders in developing and protecting agriculture in Henderson County. To accomplish this, an assessment of the agricultural industry in Henderson County was made, and its challenges and opportunities identified. The recommendations of this plan are intended to encourage long-term policy formation in support of agriculture, while providing a specific guide to programs that promote agricultural economic development and farmland protection.

Agriculture means many things to Henderson County: jobs, revenue, cultural heritage, scenic open space, environmental services and fresh food. Farmers and non-farmers can take pride in the fact that Henderson County is one of North Carolina's top producers of apples (1st), nursery, sod and greenhouse products (2nd) and dairy products (8th). These products, along with tomatoes, peppers, beans, squash, berries, corn and beef, generate over \$100 million in revenue for the county's farmers each year.

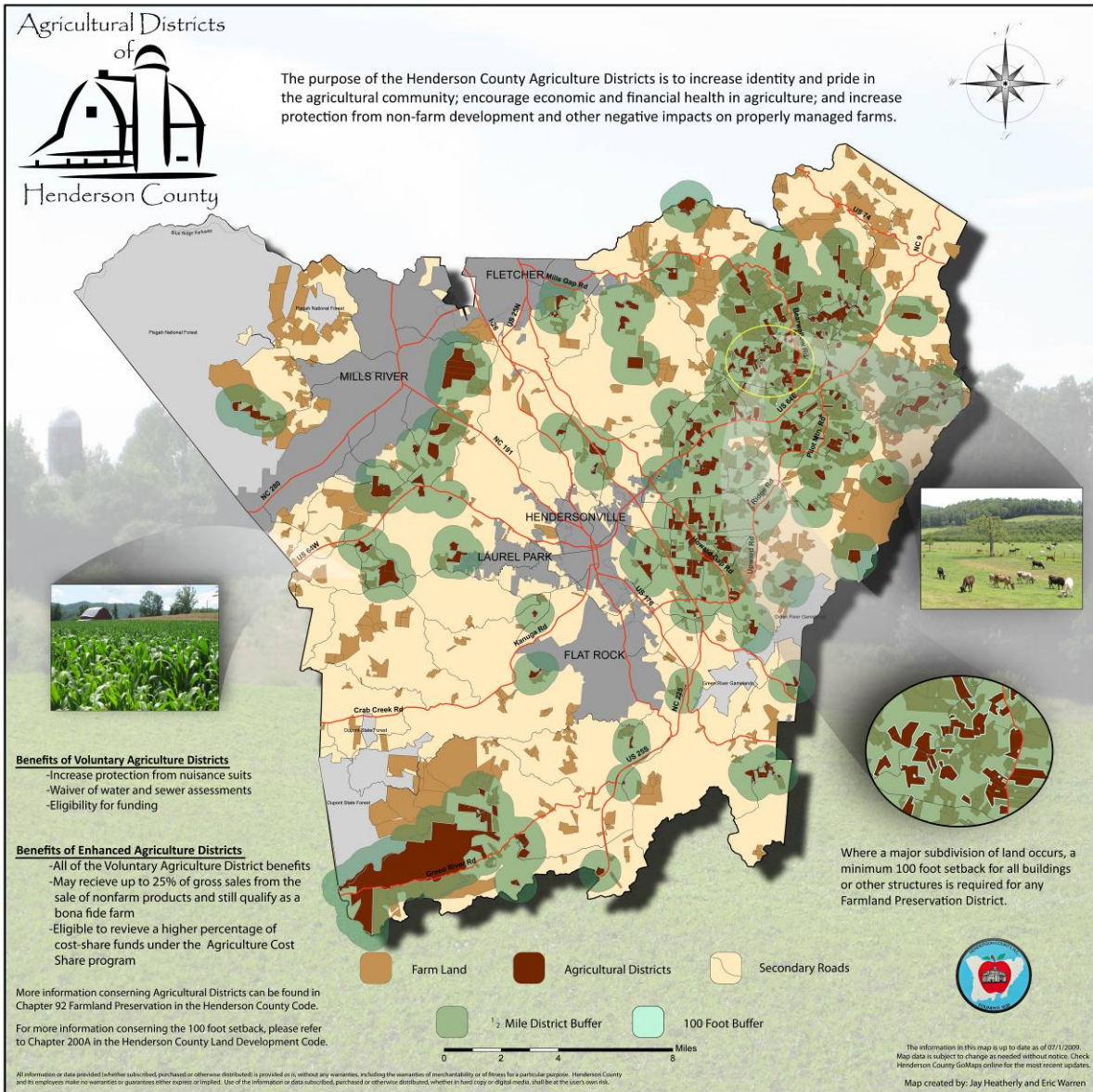
Unfortunately, large revenues do not always translate into large profits, and farmers in Henderson County, as well as others throughout the United States, are struggling to make ends meet in a market that is characterized by high production costs and low wholesale prices. In addition to low or non-existent profits, farmers are facing challenges from residential growth, a shrinking inventory of farmland, labor shortages, aging infrastructure, disinterest from young potential farmers, and regulations that unnecessarily impede a grower's ability to operate a successful farm business.

Despite the challenges to Henderson County's farms, opportunities exist for the growers to maintain a viable industry. The county is endowed with high quality soils, clean water, a favorable climate, and is located near the intersection of three interstate corridors that lead to 50 percent of the U.S. population within one day's drive. The farmers themselves can boast knowledge, heritage, reputation and the ability to adjust to changing markets.

To address the challenges and seize the opportunities, Henderson County's farmers need help from the non-farm community. County leaders must expand current farmland protection programs, invest in economic development, educate the public about farmers' rights and advocate for the industry at the state and national levels. Residents must support county investments and embrace the agricultural community and all of the benefits it provides. To help themselves, farmers must work together cooperatively and participate in community affairs.

The following map illustrates the County's Voluntary Agricultural District program, which is described in detail on page 22. Although only a portion of farms are in agricultural districts, the map illustrates the areas of the county where farms are clustered.

Henderson County Agricultural Districts



Henderson County Agricultural District maps are created from data records maintained by the Soil & Water Conservation District and the County Tax Department (PUV Appraisals and Land Records). A special “thank you” to Eric Warren (Land Records) and Jay Heatherly (IT) that developed the map during a summer internship with Henderson County.

DATA SOURCES

Data for this plan were collected from numerous sources. Statistical data related to non-timber activities were collected from three sources: the Census of Agriculture, which is published every five years by the USDA National Agricultural Statistics Service (NASS) and is compiled from surveys completed by farmers, an annual report published jointly by NASS and the N.C. Department of Agriculture and Consumer Services (NCDA) that is also compiled from surveys completed by farmers, and from a report published every three years by the N.C. Cooperative Extension Service and N.C. State University, which are estimates generated by county extension

agents. Each of these sources provide estimates and are believed to be low in general since many farm operators do not participate in the surveys and/or Cooperative Extension programs. Moreover, these estimates apply for only one year and both production and revenue figures are subject to variability due to market and climate conditions. In addition to these and other technical reports, public input meetings were held in Fruitland, Dana, Mills River, Crab Creek and Green River in March and April of 2009. The meetings were held to gather information from farmers and other concerned citizens. Information was also gathered through interviews with individual farmers, business owners, county staff and community leaders.

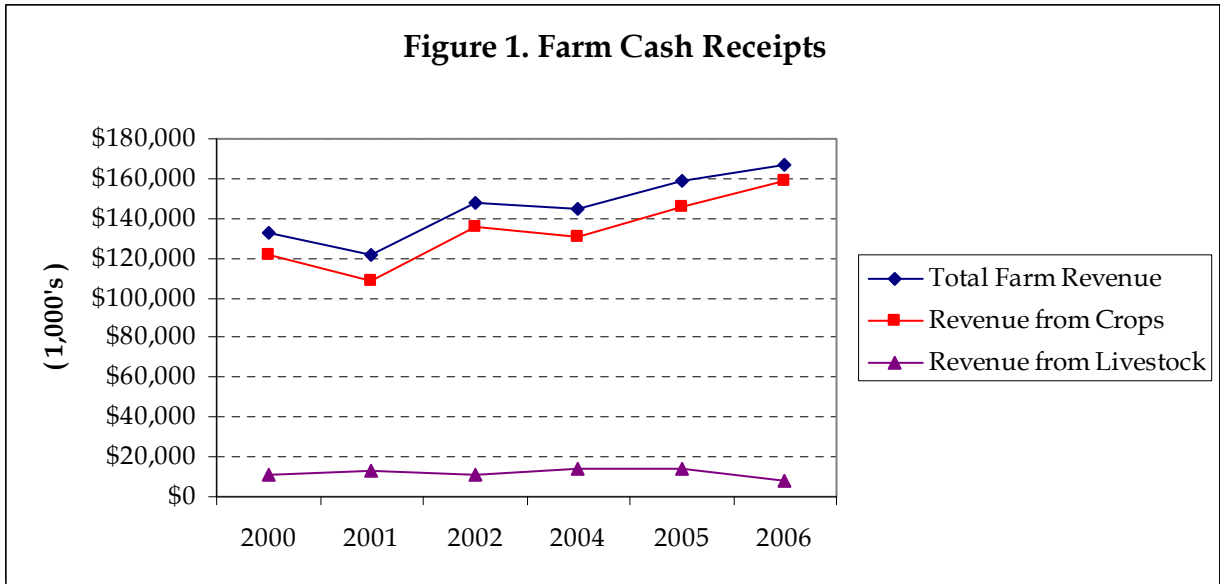
IMPORTANCE OF AGRICULTURE TO HENDERSON COUNTY

Economic Impact of Agriculture

Agriculture is a diverse industry characterized by hundreds of individual businesses of varying size and enterprise spread throughout the county. Though most individual operations may alone appear insignificant, taken together Henderson County's farms and the businesses they support contribute significantly to the local economy. Farms and agribusinesses provide jobs, generate sales and property taxes and bring revenue to the county that is spent through the households they support. There are over 500 farms that, together, generate over \$100 million in cash receipts every year (see Figure 1) and spend over \$80 million on expenses, much of it locally. In 2007, Henderson County farms employed 1,645 workers and had a payroll of \$18,542,000 (USDA, 2009). In terms of cash receipts, Henderson County farms have generated an average of \$128,902,239 in revenue each year since 1995 and \$141,579,982 since 2000.

Dr. Michael Walden of N.C. State University used economic data and models from IMPLAN, an economic research firm, to evaluate the economic impact of agriculture on North Carolina counties. In 2006, Henderson County businesses added \$2,562,411,000 of value to the economy. This figure reflects the value of sales minus the cost of non-labor inputs and is also called gross product. Farming operations contributed \$181,677,795 to the county's total gross product, representing seven percent of all value added by businesses in the county. Agribusiness includes the manufacturing, wholesaling and retailing of food, fiber and forest products. The combined value of farming and agribusiness in 2006 was \$428,516,787, or 16.7 percent of the county's gross product.

In 2006, Dr. Mitch Renkow of N.C. State University conducted a Cost of Community Services study for Henderson County and found that agricultural lands contribute \$1.03 in property taxes for every \$1.00 in County services they receive, even under the Present-Use Value program. In contrast, residential properties contributed only \$0.86 in property taxes, while commercial properties contributed \$2.52 for every \$1.00 in services they receive. The implication is that although residential expansion may be beneficial to the county for many reasons, when evaluating the impacts on the tax base, policy makers need to be aware that agricultural land use provides a net increase, whereas residential land use provides a net decrease.



Source: NCCE & NCSU

Rural Character and Heritage

Farms and forests are the primary land uses in rural areas, providing scenic beauty and relief from urban sprawl to residents and visitors. But more than just being scenic, rural landscapes provide a connection to the history and foundation of the county's communities. Today the remoteness and quietness of rural areas are serving to form a comparative economic advantage over urban and suburban areas as retirees and professionals who can work from home are seeking refuge from the confinements of large cities. Farmland is an invaluable asset in this regard. A study (Mathews) conducted at the University of North Carolina at Asheville investigated the importance and value of farmland to residents and visitors of Henderson, Buncombe, Haywood and Madison counties. The study revealed that farmland is important to both residents and visitors because of its contribution to scenic beauty, rural heritage and the environment, in addition to being a source of food. Using two economic methods, the study discovered that both residents and visitors were willing to pay higher prices for goods purchased, in order to pay for the protection of farmland.

Ecological Benefits

Farm and forestland provide many environmental benefits to the public: storm water retention and filtration, flood control, air filtration and wildlife habitat. In the past, agriculture was a source of air and water pollution, but today farmers employ numerous Best Management Practices (BMPs) to protect soil, water and air quality. The Natural Resource Conservation Service and the Soil and Water Conservation District provide financial and technical assistance to farmers to implement BMPs that protect streams from erosion and pollution from farming operations. Cropland BMPs include agriculture road stabilization, cover crops, no-till planting, and Agrichemical Handling Facilities that provide a safer means for mixing agrochemicals. Livestock are managed using a system of practices that includes exclusion fencing, watering tanks, heavy use area protection, feed/waste storage buildings, stock trails, stream crossings and cross fencing for rotational grazing. Other practices like road stabilization, stream bank stabilization and pasture renovation are directed at controlling erosion. There are other BMPs used to protect water quality from the effects of agricultural operations. Some practices, such as riparian buffer enhancement, also improve wildlife habitat. This is not to say that agriculture

does not contribute any pollution, but when a stream turns red during a rainstorm, the erosion point is more likely to be a road or construction site than a farm.

REVIEW OF EXISTING COUNTY PLANS

Henderson County 2020 Comprehensive Plan

Section 3 of the *Henderson County 2020 Comprehensive Plan*, adopted July 6, 2004 and as amended through April 7, 2008, is dedicated to agriculture and provides recommendations and action strategies to protect farmland and maintain the competitiveness of the county's agricultural enterprises. The two most important points identified in the Agriculture Element are: (1) farmers are interested in continuing to practice agriculture, but they desire marketing and economic development assistance and (2) farmers would like to protect farmland, but most do not want protection to occur through regulation, and they cannot afford to "give away" the development value of their land without proper compensation. The Agriculture Element identifies the following recommendations and strategies:

- Recommendation A-01. Reduce Farmland Loss
 - Consider the costs and practicality of establishing a farmland protection fund for Henderson County.
 - Promote and expand voluntary agricultural districts to minimize land use conflicts and to protect farmers' right to farm.
 - Ensure that county-funded economic development programs and projects support farmland protection.
- Recommendation A-02. Expand access for agricultural enterprises to economic development and tourism promotion programs and support services.
 - Explore ways to make county economic development incentives more readily available to agriculture-related businesses.
 - Provide maximum benefits under Present Use Valuation Taxation program.
 - Provide ongoing training and technical assistance to farmers.
 - Promote agricultural products that are produced in Henderson County.
- Other Action Strategies
 - Identify an agricultural proponent or facilitator.

Many of the recommendations of the 2020 Plan require ongoing implementation. Only two (2) recommendations have established target dates and have been or will be considered by the Board of Commissioners. Beyond the recommendations of the 2020 Plan, the county has provided various types of support to agriculture:

- The Board of Commissioners, since the adoption of the 2020 Comprehensive Plan, has adopted an ordinance establishing an Enhanced Voluntary Agricultural District Program.
- The Henderson County Partnership for Economic Development maintains they will support and assist with projects involving agriculture, and the county budget has included \$50,000 for agricultural development. Most farmers do not know about the allocation but agricultural leaders are becoming aware of its existence. Funds from the agricultural allocation have been used for equipment that enabled C.L. Henderson Produce to start producing a line of sliced apples, and to provide a 10% match to a \$300,000 grant from the N.C. Agricultural Development and Farmland Preservation Trust Fund to expand a cold storage building for Apple Wedge Packers.

- The County Tax Department administers the Present-Use Value Tax program and has worked with local farmers and property owners to help them meet the program's requirements. The current county assessor has been actively involved in the administration of the PUV program since 1984, serving on several working committees, and since being appointed the assessor in August 2003, has been the only North Carolina assessor serving as a voting member of the Use-Value Advisory Board. Farmers receive training and technical assistance from N.C. Cooperative Extension and the Soil and Water Conservation District, both of which receive operating funds from the county. Owners of woodland can also receive assistance from the North Carolina Division of Forest Resources in the preparation of their individual Forestry Management Plans.
- The county also provides the Henderson County Tailgate Market space (a County-owned parking lot) on Saturdays for the market.

The County has not engaged in any formal marketing of agricultural products since 1999, when the position for such activities was eliminated due to an evaluation which indicated the position had not produced enough impact.

Community Plans

To implement the recommendations of the *Henderson County 2020 Comprehensive Plan* (all elements, not only the agricultural element), the county's Planning Department is developing a series of community-specific planning documents for the unincorporated areas of Henderson County. No community plans were complete at the time this plan was written, but the plan for Etowah and Horse Shoe was under consideration by the Board of Commissioners and a draft of the plan for Edneyville had been written. Each of those plans contains a section on agriculture and the residents of those communities have indicated a desire to protect farmland and the farming heritage.

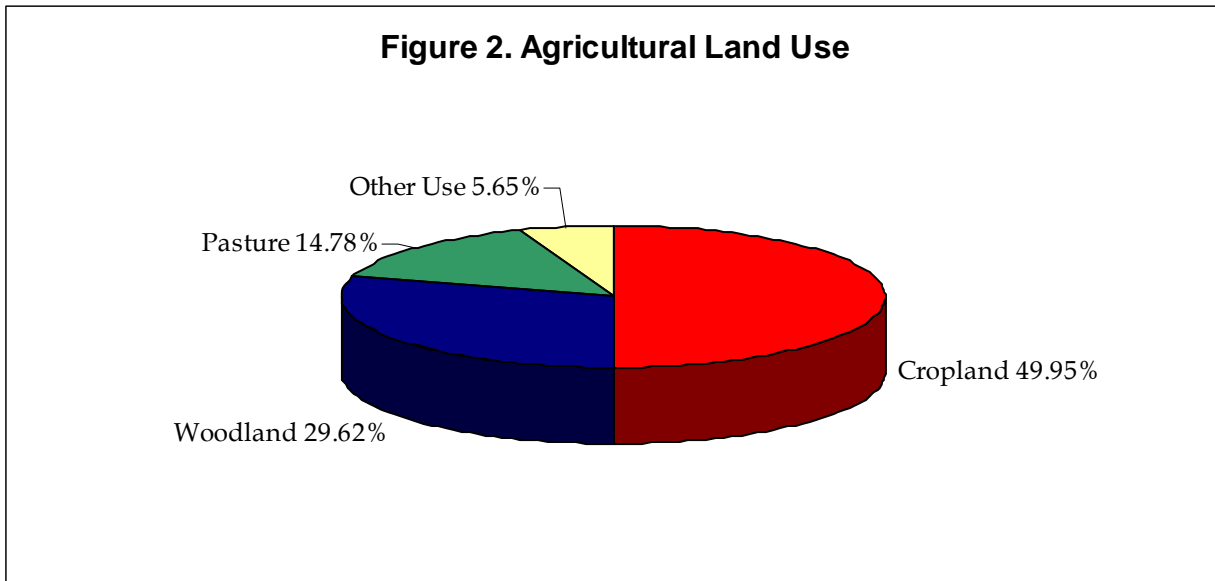
THE STATE OF AGRICULTURE IN HENDERSON COUNTY

Agricultural Production

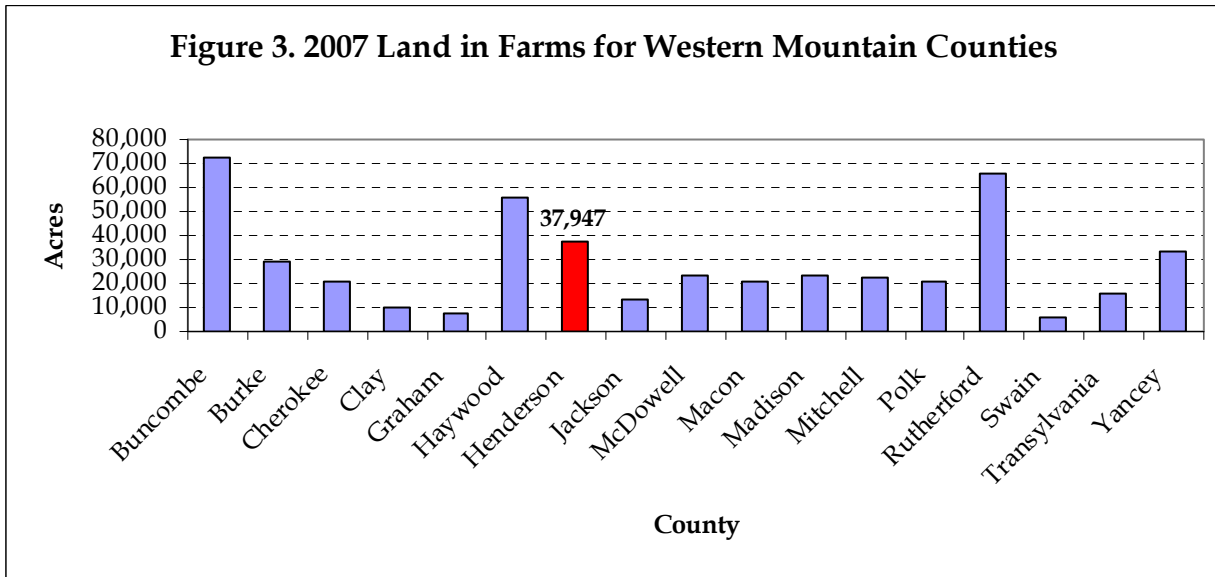
Henderson County has a diverse agricultural industry and is the leading producer in Western North Carolina. Although some data shows that we have fewer overall acres in production, and the actual number of farms is lower than some surrounding counties, Henderson is by far the leader in total farm receipts. This is an excellent measure of the sound management, efficiency and good health of our farm industry. Farms are found throughout the county and are especially prevalent in the communities of Mills River, Edneyville, Fruitland and Dana. Although the uplands are good locations for orchards and pastures, much of the county's prime farmland is located along the floodplains of the Green, Mills and French Broad rivers and their tributaries. Farming utilizes 16 percent of Henderson County's 375-square mile land base. Of the 37,947 acres (59 square miles) of farmland active in 2007, 49.95 percent were used as cropland, 29.62 percent as woodland and 14.78 percent as pasture (see Figure 2). In the 17-county Western Mountain¹ region, Henderson County ranked fourth in acres of farmland (see Figure 3); fifth in the number of farms (see Figure 4) and first in farm cash receipts (USDA and NCDA) (see Figure 5). In 2007 Henderson County ranked third in the state in cash receipts from crops (see Figure 6), second in receipts from vegetables, fruits and nuts and second in

¹ As designated in the 2008 *Ag Stat Book* (USDA and NCDA)

receipts from greenhouse and nursery products (Ibid). Table 1 lists the top crop and livestock items produced in 2007. Apple orchards and forage are the leading crops in terms of land use, followed by corn and vegetables. Cattle, including beef and dairy, is the primary livestock activity in the County.

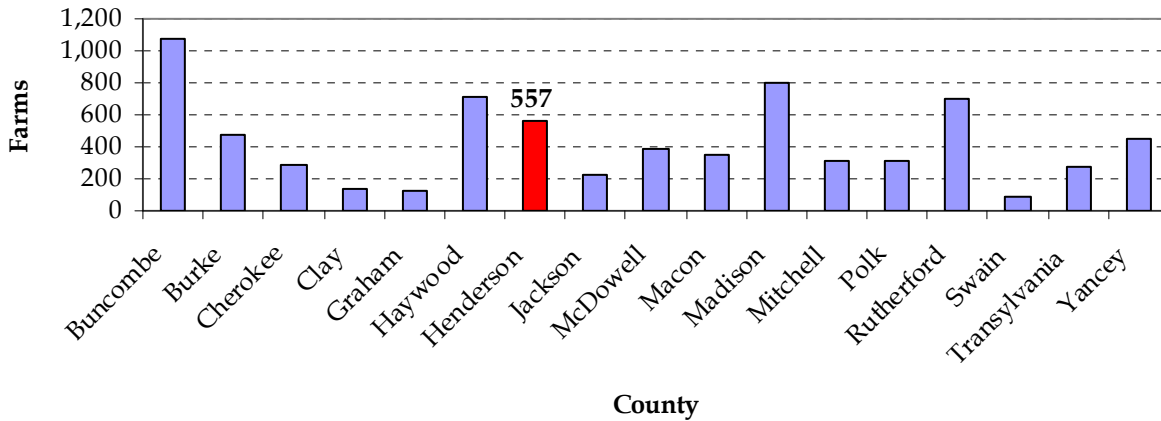


Source: 2007 Census of Agriculture (USDA)



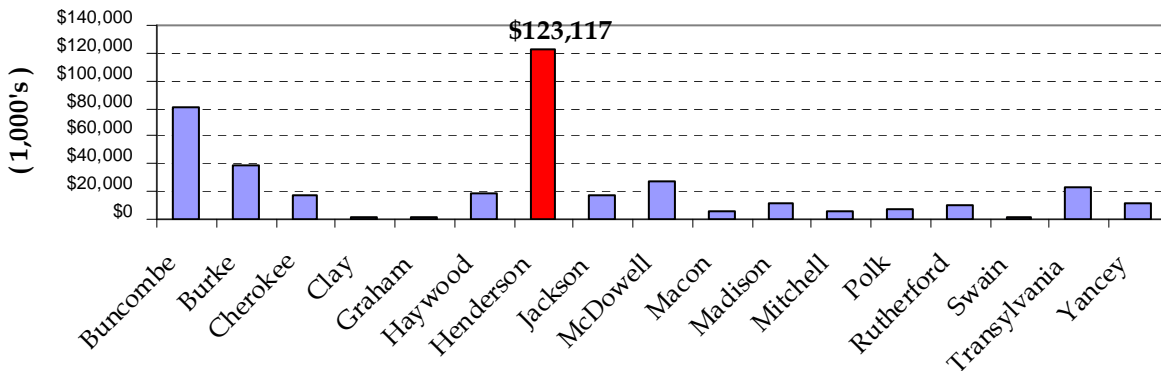
Source: USDA and NCDA 2009 Ag Stat Book

Figure 4. 2007 Number of Farms for Western Mountain Counties

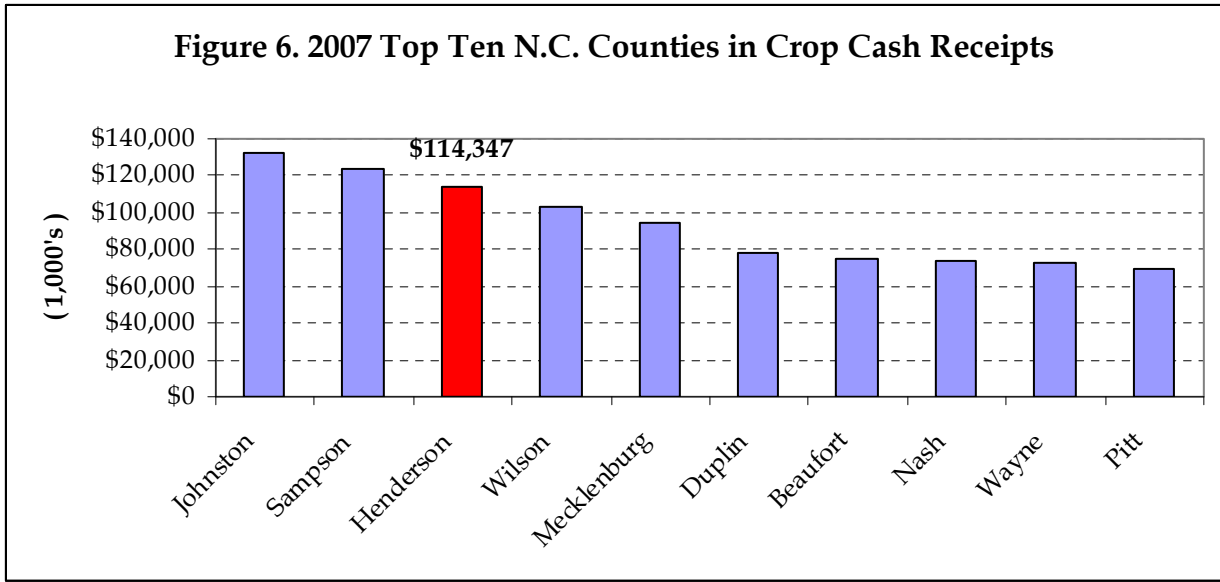


Source: USDA 2007 Census of Agriculture

Figure 5. 2007 Total Farm Cash Receipts for Western Mountain Counties



Source: USDA and NCDA 2008 Ag Stat Book



Source: USDA and NCDAs 2008 Ag Stat Book

Table 1. Top Agricultural Items in 2007

Top Crop Items	Acres
Apples	5,660
Forage land	5,273
Corn for Grain	1,850
Vegetables	1,817
Corn for Silage	1,129

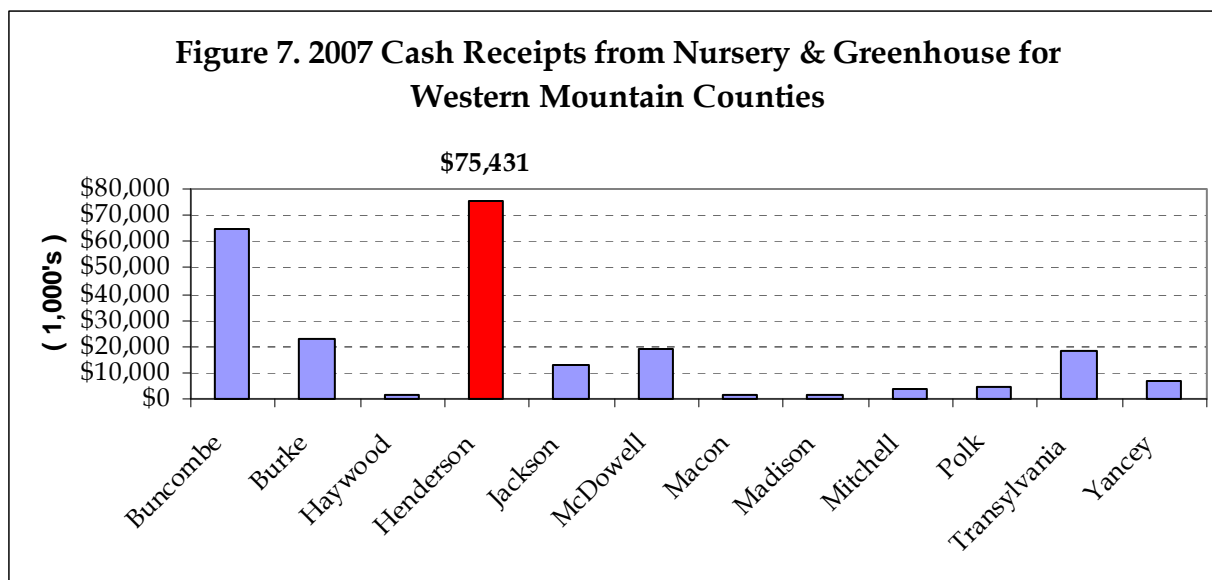
Top Livestock Items	Number
Cattle & calves	5,390
Horses & ponies	1,151
Layers	1,127
Broilers	880
Goats	538

Source: USDA Census of Agriculture

Nurseries, Greenhouses & Sod Ornamentals, which include nurseries, greenhouses and turf sod, have become Henderson County’s leading agricultural sector in terms of revenue. Operations vary widely in terms of size and product, from one-acre nurseries to 300-acre sod fields and from bamboo to poinsettias. One operation might provide supplemental income to a retiree while another employs nearly 300 individuals. Ornamentals got their start in Henderson County in the 1950s and early 1960s when gladiolas were produced in abundance on the French Broad River floodplain. Unfortunately, the area was hit by bacterial disease and most production ended; only a couple of growers remain. Other nurseries and greenhouses were around in small numbers during the 1950s and 1960s, but it was not until the 1970s that the larger operations came on the scene. The largest greenhouse operation is Van Wingerden

International, which built its first three-acre facility in 1972. In 1987 Fred Pittillo left the dairy business and began growing sod under the name Turf Mountain Sod. Today, sod producers Turf Mountain Sod and SuperSod collectively grow 1,000 acres of turf sod in Edneyville, Mills River and Horse Shoe.

Henderson County is an ideal location for the ornamentals sector because of its climate and transportation corridors. The climate is characterized by abundant winter sunshine and relatively cool summers. The county is at a geographical crossroads of continental ecosystems that allows the plants grown here to adapt to the ecologies, climate and day-length attributes of three-fourths of the states in the continental US. The sector benefits from the region’s transportation infrastructure, which includes Interstate 26 and its connections to Interstates 85 and 40, Asheville Regional Airport and its connections to Douglas International Airport in Charlotte and Atlanta International Airport. Producers grow a wide variety of turf, shrubs, trees and flowers for landscapers, retail outlets and environmental remediation. Ornamentals led the county in cash receipts, earning \$75,431,000 in 2007 (USDA and NCDA) (see Figure 7) and \$120,327,600 in 2006 (NCCE and NCSU). Henderson County is the second-largest producer of ornamentals in North Carolina, behind Mecklenburg County (USDA and NCDA).

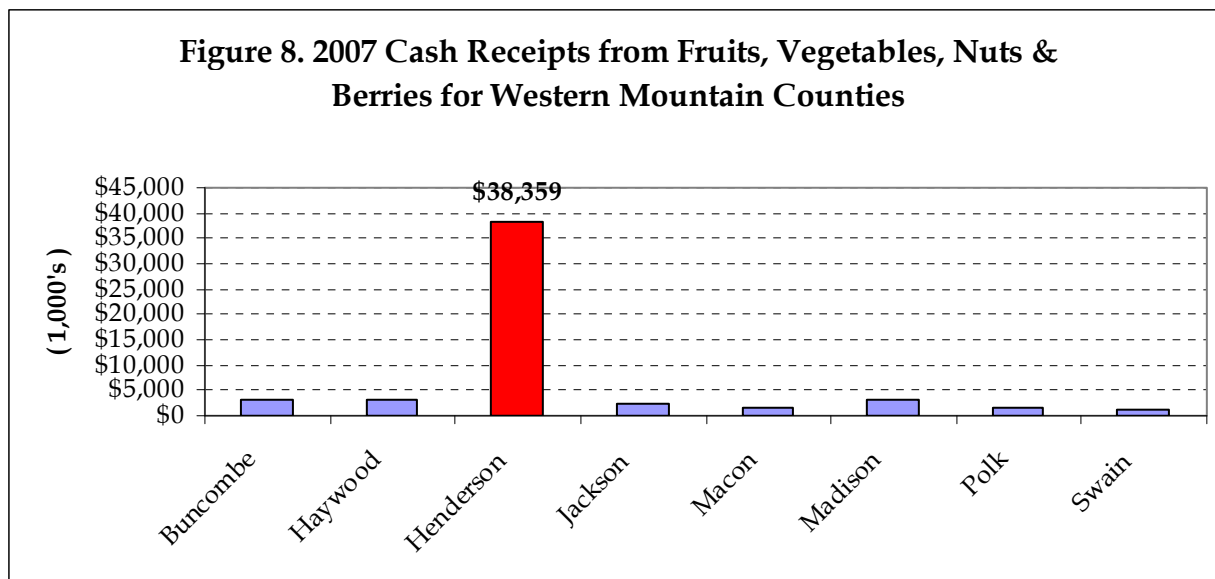


Source: USDA and NCDA 2008 Ag Stat Book

Apples & Other Fruit Henderson County is the largest producer of apples in North Carolina and the 7th largest producer in the United States (Owings). Apples also represented the largest crop in the county in terms of acreage, with 5,718 acres of orchards on 131 farms in 2007 (USDA, 2009) and is second to ornamentals in cash receipts with average annual revenue of approximately \$24 million (Owings). Although apple growers are faced with the challenges described below (e.g. encroachment from new developments and few young replacement farmers), they have been investing in their orchards and operations, a signal that farmers are optimistic about the future. Apples were first grown for the fresh fruit market before a transition was made to the processing market in the 1960s and 1970s. Since three local processing plants closed, many growers have returned to the fresh fruit markets (wholesale and direct sale) by planting newer varieties such as Pink Lady, Fuji and Gala. Not only do these varieties bring higher prices than processing varieties, but they are grown on smaller trees and

can be planted at higher rates of density, thus increasing yield per acre. In addition to the resurgence in the fresh fruit market, some leading growers have invested in more storage and upgraded packing facilities. Furthermore, growers continue to maintain good relationships with processing companies such as Gerber Foods, Knous Foods and National Fruit Company.

Apples are not the only fruit grown in Henderson County. Farmers also grow peaches, pears and strawberries. Recently, there has been an increase in commercial grape and blackberry production—over 100 acres. Current data shows that there are 12 commercial blackberry producers totaling 81 acres. There are also two producers with recently-planted vineyards totaling over 47 acres of production. The county ranks second in the state and leads the region in cash receipts for all fruits, vegetables, nuts and berries combined (see Figure 8) with \$38 million earned in 2007 (USDA and NCDA).

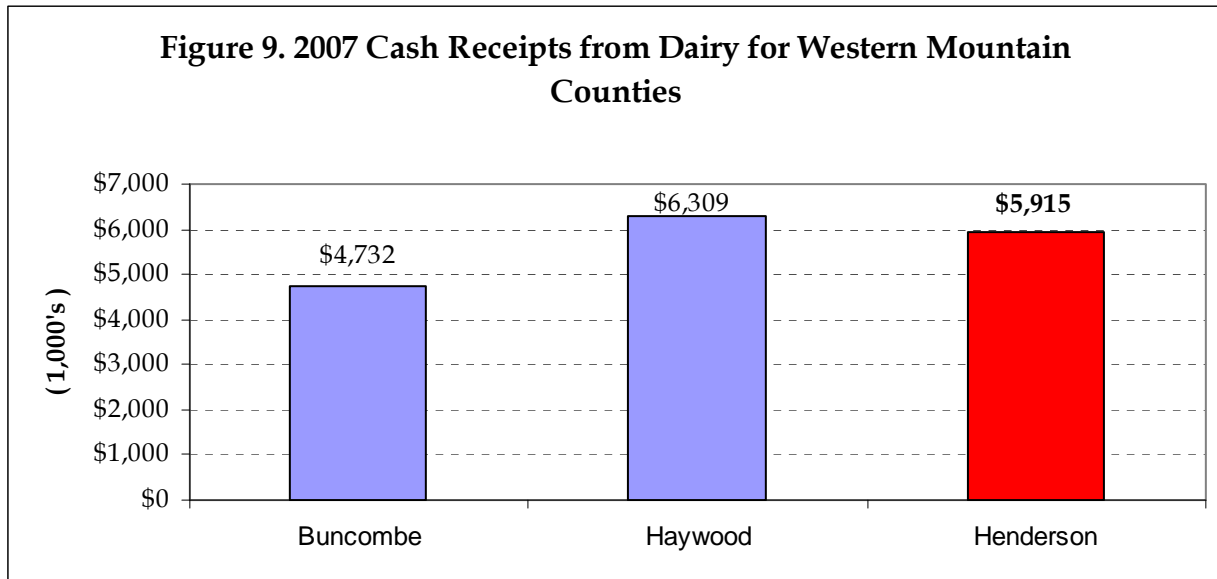


Source: USDA and NCDA 2008 Ag Stat Book

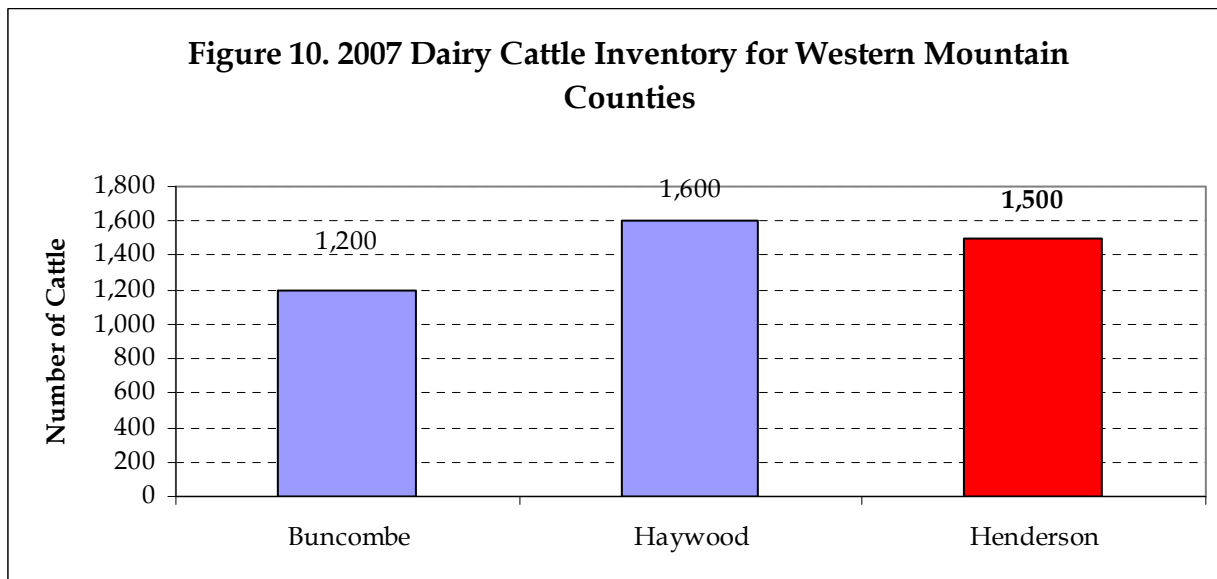
Tomatoes & Other Produce Henderson County ranks third in the state in harvested acres of tomatoes (USDA and NCDA). The rich soils of the river bottoms and mild climate produce excellent tomatoes, peppers, beans and other produce. The 2007 Census of Agriculture reported that Henderson County farms grew produce on 1,817 acres, though the figure is probably low. Revenue figures in the data combine fruits and vegetables, but considering that the two groups averaged approximately \$36 million in cash receipts over the past ten years and that apples average approximately \$24 million in revenue each year, it can be estimated that the vegetable sector generates an average of \$12 million in cash receipts each year.

Dairy Henderson County’s dairy sector formerly included 20 to 30 farms in the Mills River area. Milk prices are influenced by global supply and demand for cheese and other dairy products, and a complex system of government programs. Small, family-run dairies have struggled over the last 20 years as large agricultural companies in the western United States and foreign imports greatly increased the supply of US milk and milk products, putting downward pressure on prices. Today, high commodity and input prices and a severe drop in milk prices threaten the county’s three remaining dairies, one of which is one of the largest dairies in North Carolina. There were 1,500 milk cows in the county in 2007, and at the present time, Henderson

County remains a top producer of dairy products in the state, ranking eighth in cash receipts in 2007 with \$5,915,000 (USDA and NCDA) (see Figures 9 and 10).



Source: 2008 NC Ag Stats Book (USDA/NCDA)



Source: 2008 Ag Stat Book (USDA/NCDA)

Beef Cattle & Other Livestock Beef cattle receive little attention in Henderson County, but there were 1,553 cows in the County in 2007 and cattle operations generated \$1,593,000 in revenue (USDA, 2009). Cow-calf operations are an important enterprise to the county because they can be operated on a part-time basis to bring supplemental income to a family while pastures and hayfields provide many of the scenic and environmental benefits favored by non-farm residents and visitors. Beef prices are cyclical and down times can force smaller operators out of the business, but a new sales venue has been proposed for Western North Carolina that will reduce hauling distances for cattlemen. An increasing number of cattlemen in the region are raising cattle to slaughter weight, having them processed, and then selling the consumer-

ready products directly to consumers and retailers. In addition to beef cattle, farmers in Henderson County are raising hogs, sheep, goats, llamas, alpacas, rabbits, chickens (broilers and layers), turkeys and other poultry. Additionally, there are 20 farms keeping 283 colonies of bees. Although most of those operations are small-scale, they provide supplemental income to families and contribute to the diversity of the agricultural community.

Corn, Hay & Other Crops Interspersed among the orchards, nurseries, tomato fields and pastures, farmers grow an array of commodity crops and forages. Forage was the second largest land use in 2007 after apples with 5,273 acres (USDA, 2009) and Henderson County was the sixth largest producer of corn silage in North Carolina (USDA and NCDA). Following forage in 2007 was corn for grain with 1,850 acres (USDA, 2009). Corn for silage was the 5th highest land use with 1,129 acres (Ibid). Other crops grown include soybeans, sunflowers and wheat for grain. Hay grown for sale is an enterprise that benefits a farmer and horse owners who cannot grow and bale hay themselves. In addition to these and the products described above, Henderson County farmers grow a number of specialty crops, demonstrating the diversity of products and entrepreneurship of the growers.

Farm Statistics and Trends (USDA, 1999, 2004, 2009²)

During the ten years from 1997 to 2007, Henderson County has lost 6,564 acres of farmland, or 15 percent of 1997 levels. Although the amount of farmland has decreased, the number of farms has increased over the same period. Farms have become smaller in size and earn less income, but have become more valuable as land prices throughout the county have risen. Table 2 summarizes figures on farm size and value for the years 1997, 2002 and 2007. The number of farms has increased between 1997 and 2007, but the total area of land in farms has decreased. In 1997 there were 488 farms in Henderson County, in 2002 there were 525, and by 2007 the number of farms had grown to 557, a 14 percent increase from 1997. However, the total land in farms decreased 14 percent from 44,511 acres in 1997 to 37,947 acres in 2007. There had been an increase in the area of land in farms from 1997 to 2002, up to 48,619 acres, so Henderson County experienced a decrease in farmland of 22 percent from 2002 to 2007. With more farms but less farmland in 2007 than in 1997, it follows that the median farm size also decreased, which it did by 25 percent, from 40 acres to 30 acres. Even though the median size of farms dropped, the average value of farms increased from 1997 to 2007. The average value of land and buildings per farm increased 78 percent to \$702,488 and the average value per acre increased 114 percent to \$10,311.

Table 3 shows the distribution of farms by annual revenue and Table 4 shows the distribution of farms by size. Both distributions indicate that farming is becoming a part-time venture or secondary source of income for operators. Although there had been a net increase of 69 farms from 1997 to 2007, there was a much larger increase in the number of small and low-revenue farms. There were 113 more farms earning less than \$10,000 in 2007 than in 1997 and 99 more farms with less than 50 acres. Conversely, Henderson County lost 20 farms that earned more than \$100,000 and 27 farms with 180 to 499 acres in that ten-year period.

² Unless cited otherwise.

Table 2. Farm Statistics

Year	2007	2002	1997
Number of farms	557	525	488
Land in farms (acres)	37,947	48,619	44,511
Median farm size (acres)	30	46	40
Average value of land & buildings (per farm)	\$702,488	\$572,415	\$394,121
Average value of land & buildings (per acre)	\$10,311	\$5,243	\$4,808

Source: USDA Census of Agriculture

Table 3. Distribution of Farms by Income

Year	2007	2002	1997	Change from 1997 to 2007
Less than \$2,500	252	214	164	88
\$2,500 to \$4,999	75	52	58	17
\$5,000 to \$9,999	57	58	49	8
\$10,000 to \$24,999	69	64	85	(16)
\$25,000 to \$49,000	36	33	44	(8)
\$50,000 to \$99,999	23	41	30	(7)
\$100,000 or more	45	63	58	(13)

Source: USDA Census of Agriculture

Table 4. Distribution of Farms by Size

Year	2007	2002	1997	Change from 1997 to 2007
1 to 9	84	74	58	26
10 to 49	292	232	219	73
50 to 179	145	164	147	(2)
180 to 499	23	38	50	(27)
500 to 999	10	12	10	0
1,000 or more	3	5	4	(1)

Source: USDA Census of Agriculture

Farm Operators (USDA, 1999, 2004, 2009³)

Given the large number of farms earning less than \$5,000, it is not surprising that 277 of the 557 farm operators list farming as a secondary occupation. Table 5 summarizes occupation and age figures of the farm operators for the years 1997, 2002 and 2007. Not only are nearly half of the operators part-time farmers, but the number of operators listing farming as their primary occupation has decreased by 44 since 2002 (though there are still 22 more operators than in 1997). The average age of farm operators rose from 55.4 years old to 57.2 years old between

³ Unless cited otherwise.

2002 and 2007. An aging operator population is the trend across the United States and North Carolina.

Table 5. Farm Operators

Year	2007	2002	1997
Number of operators with farming as primary occupation	280	324	258
Number of operators with farming as secondary occupation	277	201	230
Average operator age	57.2	55.4	N/A

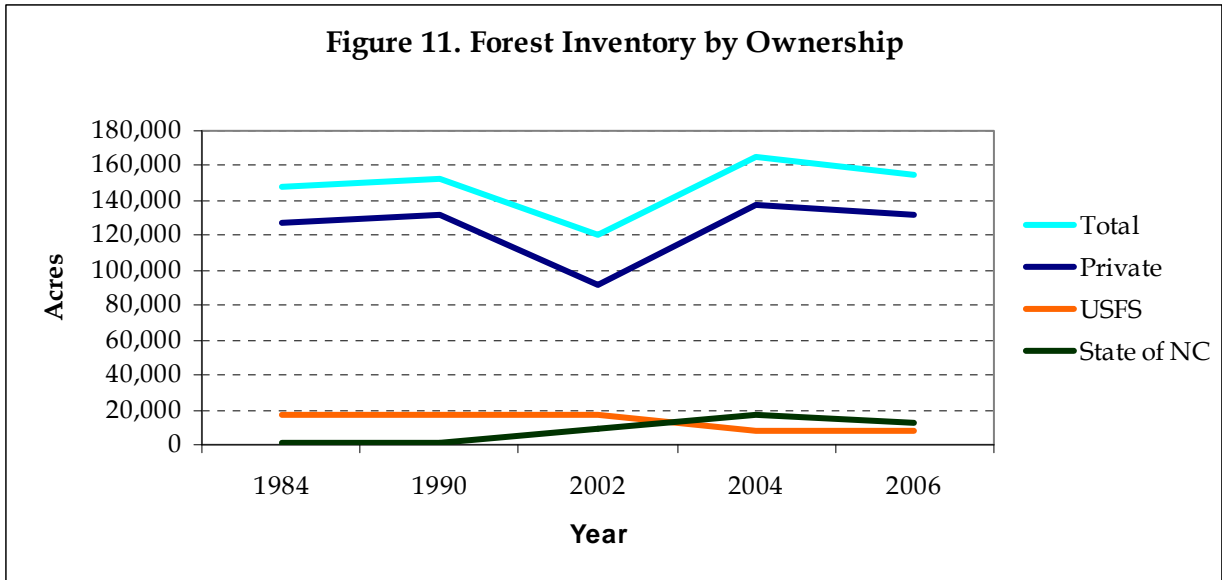
Source: USDA Census of Agriculture

Forestry

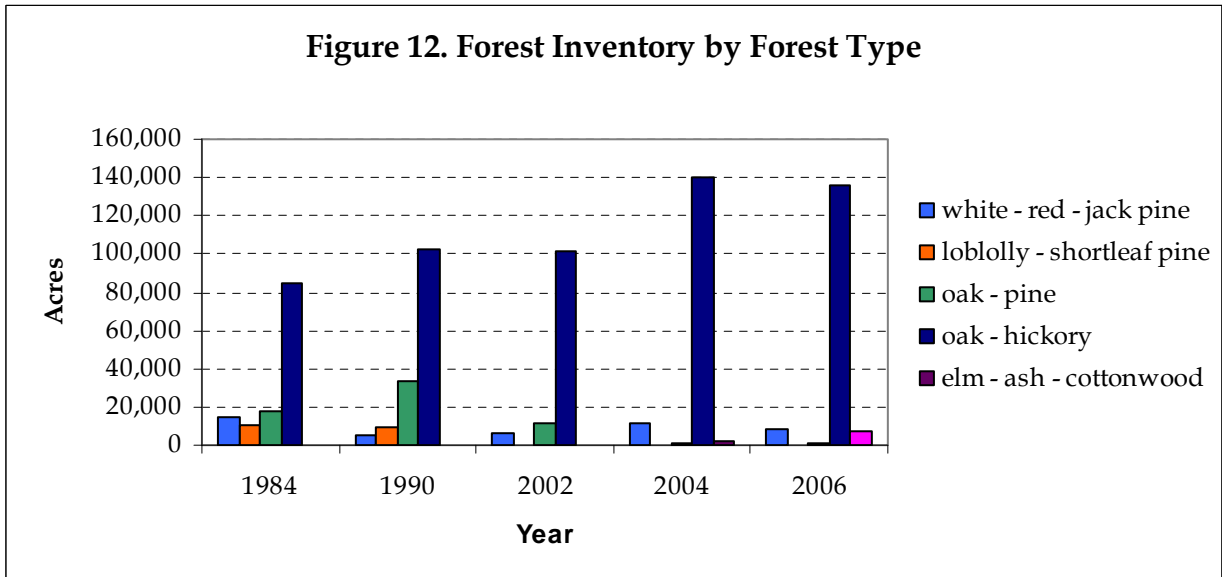
Forestry is a major factor of the agricultural industry in Henderson County, contributing directly to the economy by providing jobs in forest management, logging, trucking and manufacturing. Additionally, each year private landowners receive income from timber sales, hunting leases and the sale of non-timber forest products. In 2008 there were 150,980 acres of forest in the County (Jeuck & Barton), of which approximately 130,344 were privately owned. In 2008 forest landowners received \$2,596,706 in stumpage fees and the timber buyers received \$4,116,034 upon delivery of the timber to mills (Ibid). Figures 11 and 12 display forest inventories for 1984, 1990, 2002, 2004 and 2006. Since 1984, Henderson County has maintained an average of 147,798 acres of timberland, of which 84 percent was privately owned (USFS). The predominant forest-type group in the county has been oak-hickory (80 percent). Other forest-type groups include white-red-jack pine and oak-pine. The majority of timber stands are classified as saw timber (68 percent) followed by pole timber (19 percent) and sapling-seedling (13 percent).

In addition to the direct contributions outlined above, forested acres contribute in less-direct ways. Forested acres provide buffers to cropland by protecting the topsoil and reducing noise, provide significant benefits as habitat for a wide variety of wildlife and meet the desires expressed by the public who wish to preserve the existing aesthetics that forests offer. Attempting to assign a monetary value to these contributions is not possible. But there is no argument that they contribute significantly to the overall quality of life enjoyed by farmers, residents and visiting tourists.

Forestland of 20 acres or more can be approved separately into the Present-Use Value Program and the Voluntary Agricultural Districts. Approval into the PUV Program constitutes an implied contract whereby the land owner agrees to abide by all the requirements of the program in exchange for the benefits of preferential assessments, and the county agrees to continue to provide those preferential benefits against all challenges as long as the land owner abides by the requirements of the program.



Source: USFS Forest Inventory and Analysis



Source: USFS Forest Inventory and Analysis

Challenges to Agriculture

Family farms across the country face numerous challenges including rising prices for land, fuel and fertilizer, competition from foreign imports and an aging farmer population. Henderson County’s family farms face these and other challenges:

Profitability The fundamental challenge to most farmers is profitability, and the typical cause of low profitability is high production costs relative to wholesale prices. The current agricultural systems favor very large farms that can produce the volume necessary to survive on low profit margins. Small farming operations do not have the ability or cash flow needed to survive with low profit margins. Most of the farmers who were interviewed for this plan or who participated in the public input meetings cited profitability as either a direct challenge or the underlying problem to other challenges.

Infrastructure Commercial agriculture requires capital equipment to grow, harvest and process its products. As existing equipment ages, technologies evolve and food safety requirements become more stringent, farms in Henderson County are faced with a need for investment capital. However, because profitability is low, many operations cannot afford to borrow the funds needed to make the necessary improvements. Apple growers use bins to collect and transport the fruit from the orchards. These bins were originally made from wood and had been supplied by processors. Today apple farmers are expected to have their own bins and the processors will likely want them to be made of plastic. It is estimated that Henderson County apple growers will need to purchase 200,000 plastic bins over the next few years at a cost of \$24 million.

After harvest, apples are placed in cold storage until they can be shipped to processors or packed and sold to retailers. The cold storage in eastern Henderson County is quickly becoming antiquated and is of insufficient capacity to handle a bumper crop. Nursery operators are also hampered by a lack of cold storage that would help them protect plants from frost and control blooms to better coordinate with markets. Individual farmers need tractors and other field equipment, as well as buildings and processing equipment to increase production and efficiency.

Residential Growth The popularity of the North Carolina mountains in general and Henderson County in particular as a place to relocate, retire or own a second home has put tremendous pressure on the residential home market. Developers have responded to those pressures by purchasing farms and other tracts in farming communities. The impact has been two-fold. The direct impact has been a loss of farmland, not only those farms that have been developed, but others that are for sale at development prices far out of reach of a farm operator. The indirect impact has been an influx of urban residents into the rural countryside. Many of the new residents were attracted by the pastoral scenery of the farms and mountains, but these new neighbors are unfamiliar with the characteristics of production agriculture and may complain about noises, odors, pesticide applications and slow moving farm equipment on the roads. Conflicts at the very least cause unease to the farmers who wish to be good neighbors as well as good farmers. Other conflicts cost farmers' time and energy as they defend their activities to law enforcement agents responding to the complaint. Lawsuits are rare, but are a legitimate concern that can cost a farmer time and money in defense.

Labor Supply At several of the community meetings, it was discussed that maintaining an adequate labor pool is a significant challenge to Henderson County farmers. Until recently, Henderson County farmers enjoyed a reliable pool of labor. However, the pool was largely filled by immigrants, some of whom are undocumented and are now threatened by arrest and/or deportation because of increased federal regulation of illegal immigrants. Without increases in the number of guest workers to offset the former labor pool, many farms may be forced to scale back production or even leave crops in the field unharvested. The fruit and vegetable operations are especially under threat, because they rely on large labor teams to maintain and harvest the crops. Existing federal labor programs such as H2A have not been viable in Henderson County.

Aging Farmer Population A threat to the long-term viability of agriculture in Henderson County is the lack of young people starting new operations or taking over existing ones. For the

past few decades, young adults have been given more opportunities to attend college and find professional jobs, and those who have not attended college have found more opportunities for service and trade jobs. In both situations the opportunities amount to a lifestyle that involves less work, less risk and more income than farming. Although many children of farmers have sentiment for the family farm and would like to see it remain in operation, they themselves do not want to take over operations. In some situations the farm is sold by the operator to pay for retirement or it is bequeathed to heirs who then sell it. There is interest in farming among some young adults; however, most do not seem to be coming from farming families and thus have no land to start an operation. The challenge now is to increase the interest among children and grandchildren of farmers in taking over their families' farms, and getting the land of retiring farmers into the hands of beginning farmers.

Farmland Availability Farmland, for purchase or rent, is scarce and expensive. In 2007 the net income for all farms in Henderson County was \$355 per acre, and in 2002 it was \$472 per acre (USDA, 2009). Land in the county's floodways, which cannot be developed but is influenced by market prices of developable land, is regularly priced at \$10,000 per acre. Considering a theoretical annual interest payment of \$500⁴ on an acre of floodway, purchasing land at current market prices is clearly not feasible for an agricultural operation. Thus, the price of farmland compounds the problems of the aging farmer population and farm scale because beginning farmers cannot purchase land to start operations, and existing farmers cannot purchase land to expand their operations. As a result, farmers have become increasingly dependent on rental land.

Food Safety Rules Outbreaks of E. coli and salmonella have caused large food retailers and wholesalers (grocers, food service providers, restaurants, etc.) to require produce growers and packers become certified as following Good Agricultural Practices (GAP). In addition to the customer-imposed GAP certification, the US Congress is considering legislation that will require further demands on fruit and vegetable growers and packers. Henderson County farmers have traditionally incorporated safe growing and handling methods, and detection of food-borne pathogens has not been an issue. With an increased national concern with microbial contamination in food, it is fully anticipated that standards will continue to be raised and future recalls are likely to increase, putting greater pressure on farms and packing facilities. Third party audit requirements for fields and facilities are already becoming common for most commercial producers.

The requirements of GAP largely involve writing detailed management plans for each farm and facility. Food safety programs must include: standard practices and operating procedures, organizational structure and flow, employee practices and training, frequent cleaning and maintenance of facilities and equipment, full traceability of the product from the field to the customer, trace-back and recall plans, procedures for managing risky events (e.g. chemical spill, wildlife feces in the field, etc.) and documentation of all activities. These requirements can be burdensome and very costly to the producer. The way the growers operate their farms will not change dramatically, but they will have to spend significant amounts of time completing required paperwork, and the expense of bringing operations up to the standard levels and maintaining them can be significant. Farmers and packers can potentially be forced out of business or simply choose to quit because of the burdensome regulations.

⁴ Based on a 5% interest rate

The extent of the impact caused by federal regulation is not known at this time because the legislation is still being debated. One concern is that the laws and rules will be structured toward large farms found in California, Florida and eastern North Carolina. Farms in Henderson County, and throughout Western North Carolina, are much smaller and are frequently comprised of multiple small fields. The implication is that rules applied at the field level, or that require setbacks, will result in greater loads of paperwork and affect a greater proportion of farmland in the mountains than in other regions of the country. Loss of farmland can also result from setback rules that may be imposed due to food safety regulations.

Food safety also has many positive features. North Carolina is a leader among the states in the area of food safety and in many ways it has become a model. Having a trusted food supply source is very important to the general population. Fortunately, NC grown produce has a reputation of being safe. This not only provides a sense of comfort regarding health concerns, but it gives a marketing advantage to the farmers and packers who can certify their participation in GAP and food safety programs. Since locally grown products are generally perceived as being safer, our area farmers should also see an increased demand for their product. This can be especially beneficial to small farms and those utilizing roadside stands, farmers markets and other direct outlets.

Road Safety The majority of farmers at each of the five public input sessions cited two issues regarding road safety as challenge to their operation. A primary concern among farmers is that drivers are intolerant of slow-moving farm equipment on public roads; this is sometimes displayed by honking, yelling and making obscene gestures. Although those actions may not physically impede farm production, they contribute to the increasing degradation of the farming lifestyle. Impatient drivers also act out in more hazardous ways by speeding and making reckless attempts to pass the slow-moving equipment. A secondary concern of farmers, primarily expressed by farmers in Fruitland and Edneyville, is that some of the roads are too narrow to transport equipment, especially if traffic is encountered. The growth of tourism and urban sprawl will increase the potential of farm and non-farm vehicles crossing paths. Farm equipment cannot travel at normal traffic speeds, cannot stop quickly or pull off the shoulder quickly and safely. These issues involve personal safety and stress, potential damage to equipment and the potential for increased insurance rates.

Other Challenges Individual marketing is a challenge for small-scale growers, while the diversity of products is a challenge to a broad, county-wide marketing campaign. Participants at the public input sessions also cited humidity, regulations, trespassers and the unwillingness of consumers to pay a premium for local products as challenges. Several farmers complained that state laws are written based on the large commodity operations of eastern North Carolina and unfairly impede farms in the mountains. Competition with foreign imports that utilize less stringent regulations and cheaper labor is another challenge. According to the December 17th, 2009 issue of USA Today, China by far out-produces other countries in the world in apple production with 58.8 billion pounds of product. The US is second, with 9.8 billion pounds of apples produced. We must continue to strive to produce better quality fruit in order to complete with foreign imports.

Strengths and Opportunities for Agriculture

Participants at the public input meetings identified numerous strengths with regard to their farms. Climate, soils, water, product diversity, knowledge base, heritage and location were mentioned repeatedly.

Climate & Natural Elements Henderson County receives abundant rainfall and sunshine – winter sun in particular is a strength exploited by greenhouse operators – which combine with rich soils to produce a wide variety of crop and livestock products. Irrigation is also possible because of good groundwater and high quality rivers and streams. Henderson County’s elevation combines with other climate characteristics to produce temperatures that are cooler than other parts of the south but warmer than the north, benefiting apple growers and other crop producers.

Knowledge, Reputation & Location Farmers in the county have adapted to changing markets over the years and have accumulated much knowledge. They have used their knowledge and the natural resources to build a national reputation for growing quality products. A national reputation is possible in large part because Henderson County is within a day’s drive of 50 percent of the US population and is only a three-hour drive from Atlanta, the eighth-largest metropolitan area in the United States. These markets offer opportunities for Henderson County farmers, especially large-scale operators who can produce the volume required to supply the wholesale market.

Research & Experiment Farms N.C. State University and the N.C. Department of Agriculture and Consumer Services operate 18 agricultural research stations around the state. One station is located in Mills River and a second is nearby in Waynesville. Such close proximity of these two research stations allows Henderson County farmers to easily participate in demonstrations and access researchers when new or unique questions arise.

Tourism Henderson County and the surrounding areas are a destination for tourists seeking the area’s cultural offerings. The tourism industry brings customers to farm stands and makes agri-tourism a viable opportunity. The scenic beauty of Henderson County’s farms and surroundings and the rich cultural heritage of the farm families are appealing to visitors seeking fun activities that connect with the earth and community. Enterprises such as farm tours, hayrides, corn mazes and U-Pick are becoming increasingly popular, and other opportunities are available to farmers seeking to supplement or replace traditional agricultural enterprises.

Local Food The growing interest in local food presents an opportunity to many of Henderson County’s farmers and especially to small-scale growers. The Henderson County Tailgate Market has been operating in Hendersonville for 30 years, and new markets have opened recently in Flat Rock, Mills River and at the Hendersonville Food Coop. In addition to these markets, consumers are increasingly able to purchase locally-grown food at restaurants and supermarkets, though availability is limited. The Curb Market is a cooperative in downtown Hendersonville that has been open since 1924 and offers consumers a variety of locally-grown foods and homemade crafts three days a week. The Western North Carolina Farmers Market located in Asheville is another venue for farmers to showcase their products. Research by the Appalachian Sustainable Agriculture Project (Kirby, Jackson and Perrett) indicates that there is more demand for local food than is currently produced and that the region has the capacity to increase the supply of locally-grown food. However, the research also indicates that there are

barriers to local markets like distribution systems, infrastructure, prices and training for farmers. The work being done through groups such as the Blue Ridge Direct Market Association, Appalachian Sustainable Agriculture Project, Apple Growers, etc, needs to be expanded.

Emerging Farm Commodities In recent years our farming community has become very aware of the changing market and has done well to adapt to changes. Some examples are: wine grapes, bamboo products, blackberries, native species, goats for cheese, wool and weed control, organic products and new and different varieties of apples. There are new/local programs similar to the USDA's "Know your Farmer, Know your Food", which are working with some of these emerging markets. However, they too could use expanded assistance.

FARMLAND PROTECTION PROGRAMS

Present-Use Value Tax Program Present-Use Value, or PUV, is a program established in 1973 by N.C.G.S. §§ 105-277.2 to .7 and administered by the county assessor. Through PUV, qualifying property can be taxed based on soil quality and active use as agricultural, horticultural or forest land rather than for its highest and best use. The objective of the program is to keep the family farm in the hands of the family farmer. The NC Use-Value Advisory Board sets the assessment schedule based on the rent a parcel could receive given its soils and its use for agriculture or horticulture. Assessment schedules for forest land are based on the present worth of a future timber harvest. Qualifying property is assessed at its present-use value rather than its market value. Deferred taxes are the difference between the taxes due at market value and the taxes due at the present-use value. Deferred taxes for the current year plus the previous three years will become due and payable with interest when a property loses its eligibility in the present-use value program.

- Basic Requirements
 - Minimum acreage of production land:
 - 10 acres for agricultural use
 - 5 acres for horticulture use
 - 20 acres for forest use.
 - Production must follow a sound management plan.
 - Agricultural and horticultural land must have at least one qualifying tract that has produced an average gross income of at least \$1,000 for the 3 years preceding the application year.
 - Forest land use must follow a forest management plan.
- Benefits
 - Protection from increasing market values, which are based on a property's "highest and best" use, and the resulting increase in property taxes.

For Tax Year 2009

- 1,610 Parcels enrolled in the PUV Program
- \$377,589,075 in assessed value deferred, or
- \$1,744,461.53 in taxes not being paid (the difference between the market value assessment and the PUV assessment, or \$377,589,075 in assessed value deferred times the county-wide tax rate of \$.462 per \$100 assessed value)
- 8,356.15 acres classified as "Agricultural Land"
- 9,022.17 acres classified as "Horticultural Land"

- 34,308.62 acres classified as “Forestland”
- 51,687,12 TOTAL ACRES IN PUV PROGRAM

For additional information about the program, contact the Henderson County Tax Department and speak with Dee Hill, the Exemptions and Present-Use Appraiser or Stan Duncan, the County Assessor and Tax Collector (and a member of the NC Use-Value Advisory Board).

Voluntary Agricultural Districts (VAD) Established by N.C.G.S. §§ 106-737 to 743 and administered at the county level, Voluntary Agricultural Districts are designated areas where commercial agriculture will be encouraged and protected. The purpose of the districts are to increase identity and pride in the agricultural community and to increase protection from nuisance suits and other negative impacts on properly managed farms.

- Requirements
 - Land must be enrolled in the Present-Use Value program or otherwise be determined to meet the qualifications of the program.
 - The landowner must enter into a revocable agreement to limit development for a 10-year period.
- Benefits
 - Notification to buyers of nearby property that they are moving into an agricultural area.
 - Abeyance of water and sewer assessments.
 - Public hearings on the condemnation of farmland
 - Stronger protection from nuisance suits.
 - Representation by an appointed board regarding concerns about threats to the agricultural sector.
- Current Enrollment
 - 600 + parcels
 - 16,000 + acres

For additional information about the program, contact the Henderson County Soil & Water Conservation District and speak with Laurie Brokaw, Educational Coordinator or Jonathan Wallin, Director.

Enhanced Voluntary Agricultural Districts Established by N.C.G.S §§ 106-743.1 to .5, an Enhanced Voluntary Agricultural District is a VAD formed of one or more farms that are subject to an irrevocable 10-year agreement to limit development. In return for the condition of irrevocability, the landowner receives the added benefits of being able to receive 25 percent of gross revenue from the sale of non-farm products while still qualifying as a bona fide farm, and being eligible to receive up to 90 percent cost-share assistance from the Agricultural Cost Share Program. Henderson County has adopted an ordinance establishing an EVAD program, but the application and procedures are still being developed.

For additional information about the program, contact the Henderson County Soil & Water Conservation District and speak with Laurie Brokaw, Educational Coordinator or Jonathan Wallin, Director.

Conservation Easements A conservation easement is a written agreement between a landowner and a qualified conservation organization or public agency under which a landowner may

agree to keep the land available for agriculture and to restrict subdivision, non-farm development and other uses that are incompatible with commercial agriculture.

- General Information
 - Permanently foregoing the right to subdivide or develop the land being conserved. There will be other limitations on activities to preserve the land's productivity, environmental values and rural character.
 - A portion of the property can be left out of the easement, thereby providing an area for future homes and other non-farm activities.
 - Agricultural activities, including forestry, are allowed under the agreement.
 - Despite the term "easement", access to the public is not provided by the agreement.
 - The value of a conservation easement is determined by a licensed land appraiser and is typically between 25 percent and 75 percent of the land's market value.
 - A periodic inspection of the property is required to ensure that development does not occur. This provision will be included in the agreement.
 - The agreement attached to the title and is recorded in the Henderson County Registry and noted on the County's land records. All future landowners must comply with the terms and conditions of the agreement.
- Financial Benefits
 - If the conservation easement is donated, the landowner will likely qualify for a federal income tax deduction and a state income tax credit. The value of these benefits depends on the appraised value of the easement and the income tax situation obligations of the landowner.
 - A conservation easement can also be sold by the landowner through a transaction commonly referred to as a Purchase of Development Rights (PDR), or Purchase of Agricultural Conservation Easement (PACE). Funds to purchase a conservation easement can be raised from private and government sources. North Carolina and the federal government have programs to purchase agricultural conservation easements. Funding through these programs is very competitive and will generally amount to a percentage of the easement's value. The tax benefits described above can be claimed for any of the easement's value above the purchase price.

Term Conservation Easements Also called Agricultural Agreements, these agreements are similar to conservation easements, but apply for a finite period of time agreed to by the landowner and conservation partner.

Transfer of Development Rights A program set up by local units of governments that utilize conservation easements to preserve farmland by providing incentives to increase development density in designated area. The program identifies the "sending area" where conservation is being encouraged and the "receiving area" where development is preferred. A landowner in the receiving area can purchase a conservation easement on a property in the sending area and receive additional density allowances. In North Carolina, counties must receive authorization from the General Assembly to develop and implement a TDR program.

Farm Transition Planning Making careful plans for the transfer of ownership of farm property and assets from the current owner to the next can be enough to preserve a farm for decades. Many options are available when planning an estate or land transfer. Farm owners can increase

the likelihood of a successful transition that maintains the viability of the farm by obtaining professional assistance early in the process. The NC Farm Transition Network provides educational and technical resources to professionals and landowners.

Right-to-Farm Law North Carolina has a state right-to-farm law (N.C.G.S. §§ 106-700 to 701(2006)) protecting farm and forestry operations from being declared a nuisance as long as they have been in operation for at least one year and are operated properly and without negligence.

NC Agricultural Development and Farmland Preservation Trust Fund N.C.G.S. § 106-744(c) established a trust fund to be administered by the Commissioner of Agriculture. The purpose of the trust fund is to provide monies to purchase agricultural conservation easements and fund programs promoting the development and sustainability of farming, and to transition existing farms to new farm families. Counties and nonprofit conservation organizations can apply for grants for these purposes. The General Assembly appropriated \$8 million to the trust fund for the 2008 fiscal year and \$4 million for the 2009 fiscal year.

RECOMMENDED ACTIONS

The actions below are recommended as strategies to address the challenges described beginning on page 18, by promoting farmland protection, agricultural development and increased community awareness. It will be incumbent upon the Agricultural Advisory Board (AAB) to provide leadership and oversight of the implementation of these actions. It will also fall upon the AAB to revise the plan as challenges to, and opportunities for, agriculture in the county change. A proposed schedule for the implementation of the actions is provided in Table 6.

Set enrollment goals for the VAD and EVAD As described above, the VAD can serve to increase identity and pride in the agricultural community and to increase protection from nuisance suits and other negative impacts on properly managed farms. The VAD can also serve to organize the agricultural community, by strengthening solidarity and providing a mechanism for farmers to speak with a unified voice. The EVAD can protect farmland from development for at least ten years. Promoting the VAD and EVAD and setting enrollment goals will expand the programs and improve farmland protection.

Develop a land lease recruitment program Existing farm operators need rental land to expand and/or to replace fields previously rented but lost to development. Beginning farmers need rental land to establish their operations. The Present-Use Value program and other incentives can be used to attract the owners of inactive farmland to lease their properties and put them into production. Educating landowners about the incentives and the potential land stewardship benefits of farming will increase the supply of rental land and slow the conversion of farmland to development.

Continue to allocate funds in the county budget for agriculture Annual investment in agricultural economic development will improve the industry's viability and lead to greater levels of farm enterprise retention and farmland preservation. Grants can be made to individual operators or to non-profit organizations, and can be independent or in conjunction with other grant funds. The two most recent investments – apple slicing equipment and cold storage – were great successes. The Board of Commissioners should consider increasing funding should requests for grants consistently exceed allocations.

Expand the role and membership of the AAB Currently, the description of the AAB is to: "Review and approve applications for qualified farmland and voluntary agricultural districts, and make recommendations concerning the establishment and modification of agricultural districts. To hold Public Hearings pursuant to Article VIII of the Henderson County Farmland Preservation Ordinance. Perform other related tasks or duties assigned by the Board of Commissioners." The AAB is already performing other tasks and duties beyond VAD program administration; for example, the AAB has initiated two grant applications to the N.C. Agricultural Development and Farmland Preservation Trust Fund, requested the Board of Commissioners authorize the EVAD program, and heard concerns from farmers relating to land use and the Henderson County Tailgate Market. The description, charter and bylaws of the AAB should be amended to reflect the increasingly broad responsibility of the AAB in order to address the increasing challenges to agriculture. The AAB's role should be expanded to include: lead and oversee the county's efforts to preserve farmland and the viability of the agricultural industry by exploring government and non-government programs, applying for grants, overseeing grants received, taking comments from residents and making

recommendations to the Board of Commissioners. The AAB charter should be amended to expand the number of members to further diversify the industry's representation on the AAB.

Educate the public about agricultural issues Educating the public of the benefits provided by Henderson County's farms and the threats to them will reduce nuisance complaints and stimulate the market for locally grown products. Particular emphasis should be placed on the rights of farmers to use roads, spray pesticides and operate equipment during early and late hours. Other topics should include the value of farmland as open space, agri-tourism and the history of farming in the county. A public education campaign can take many forms and utilize multiple outlets such as government access television, mass media, schools and civic organizations.

Establish a County Agricultural Development Director Researching and implementing the numerous and diverse programs and activities related to agricultural economic development and farmland preservation is a full-time job. Having county-paid staff dedicated to serving the AAB and managing an integrated agricultural preservation program will increase the likelihood of the program's success. The director's role could include such duties as: promote economic development for agriculture and agribusiness, research issues and programs, assist farmers with marketing, administer tailgate markets, write grant proposals, manage grants received and implement the resolutions of the AAB.

Improve driving conditions for farm equipment The county should work on outreach, education and problem solving with:

- the N.C. Department of Transportation to find solutions to these problems (signage, road widening, shoulder work, etc.)
- the local press to get the word out on farming road safety
- the local FFA student groups to educate the public
- the Farm Bureau/Credit for outreach in their publications
- the DMV to make sure there are farm "Sharing the Road" questions on drivers' exams
- and grantors for funding to establish a program like "Be Seen, Be Safe" found in other agricultural communities in the state.

Agricultural Impact Evaluation County officials have been mindful of agriculture in the past, and their consideration is reflected by the many agricultural exemptions in the Henderson County Land Development Code. Continuing to evaluate the effects of county ordinances, plans and programs on agriculture before they are passed or implemented will prevent adverse impacts and maintain awareness of agriculture's existence and needs.

Advocate for the industry Policies set by state and federal governments and their agencies can have adverse effects on Henderson County farms and businesses. The Board of Commissioners can be proactive in advocating to elected officials and agency leaders on behalf of farmers and business operators both to prevent adverse policies and to promote beneficial policies.

Develop an agricultural information website There are numerous county and non-county departments and organizations that offer an even larger number of programs for the development and marketing of agricultural enterprises. A single website that provides information and links to those organizations, along with announcements about markets, events and grants, would be very useful to existing and potential farmers, landowners, advocates and

consumers seeking information and resources. The greatest challenge of this website will be maintenance, as events and grants are short-term and change frequently.

Follow the recommendations of the 2020 Comprehensive Plan and the forthcoming Community Plans Much work has been done, and will be done, by the county Planning Department to develop the 2020 Comprehensive Plan and successive Community Plans. These plans contain overlapping action strategies for the retention and development of the agricultural industry. The Agricultural Preservation Plan should be used in conjunction with these existing county plans.

Table 6. Recommended Actions & Implementation Schedule

Action	2010	2011	2012	Beyond 2012
VAD/EVAD Enrollment	✓	✓	✓	
Land Lease Recruitment		✓	✓	✓
Economic Development Funding	✓	✓	✓	✓
AAB Expansion	✓			
Public Education		✓	✓	✓
Hire an Agricultural Development Director	✓			
Improve driving conditions for farm equipment			✓	
Agricultural Impact Evaluation	✓	✓	✓	✓
Advocate for the industry	✓	✓	✓	✓
Develop a website		✓		
Implement the 2020 Comprehensive Plan and Community Plans	✓	✓	✓	✓

ACTION STEPS

Henderson County has already taken many steps to maintain the viability of its agricultural community. Prior to the adoption of this plan, the county has: appointed an Agricultural Advisory Board, supported the N.C. Cooperative Extension and Soil and Water Conservation District, made available the benefits of the Present-Use Value tax program, established a Voluntary Agricultural District program, authorized the establishment of an Enhanced Voluntary Agricultural District program, annually provided \$50,000 for agricultural development, sponsored a project that received a grant from the N.C. Agricultural Development and Farmland Preservation Trust Fund, supported the Henderson County Tailgate Market and provided agricultural exemptions from most of its land development regulations.

To continue its efforts to maintain the viability of the agricultural industry, the Board of Commissioners, at the request of the Agricultural Advisory Board, will consider each individual action recommended in this plan, the 2020 Comprehensive Plan and Community Plans and will implement each action determined to be feasible. The Agricultural Advisory Board will

provide leadership on the implementation of this plan and will periodically give a report on the state of agriculture to the Board of Commissioners and a review of the county's agricultural preservation efforts.

SUPPORTING AGENCIES AND ORGANIZATIONS

US Department of Agriculture (USDA) USDA provides a wide range of services to the agricultural industry and farm owners and operators through its 17 agencies. USDA has a service center in Hendersonville that is staffed by agents of its Farm Service Agency (FSA) and the Natural Resource Conservation Service (NRCS). FSA provides farm loans and services, disaster assistance, and conservation programs. NRCS works with private landowners to help them conserve, maintain and improve their natural resources. NRCS also administers several programs that purchase, or provide grants to purchase, conservation easements.
www.usda.gov

NC Department of Agriculture & Consumer Services (NCDA) NCDA provides many valuable services to the agricultural industry and individual farmers. It provides services covering agronomy, animal health, commodity distribution, marketing and promotion, grading, seed and fertilizer inspection, nursery and plant pest eradication, and more. NCDA also operates the five state farmers markets, 18 state research stations and farms, and the two state fairs.
www.ncagr.gov.

Soil and Water Conservation District (SWCD) SWCD provides assistance to private landowners implementing practices to prevent soil erosion and protect water quality. Landowners can receive technical and financial assistance through the Agricultural Cost Share Program. SWCD also conducts several education programs for students and is working with its partners to develop a North Carolina Plan for Working Lands Conservation.
<http://www.hendersoncountync.org/soil/>

NC Cooperative Extension Cooperative Extension provides education programs to farmers based on research conducted at NC State University and NC A&T State University. The Henderson County Extension Center has four agents directly involved in agriculture: apples and other fruit, vegetables, nurseries and greenhouses, and cattle.
<http://henderson.ces.ncsu.edu/>

Mountain Horticultural Crops and Research & Extension Center Faculty and staff from NC Department of Agriculture and NC State University conduct research and extension programs in entomology, forestry, horticulture, plant pathology, soil science and zoology on a 349-acre farm and research center in Fletcher. They disseminate their findings through organized programs and demonstrations, and many of the researchers also make themselves available to individuals seeking technical assistance. Many farmers in the area identify the Center as an invaluable resource. <http://www.ces.ncsu.edu/fletcher/>

Appalachian Sustainable Agriculture Project (ASAP) A non-profit organization located in Asheville, ASAP is working to create and expand local food markets that will preserve agricultural heritage, provide fresh and healthy food, and keep farmers farming. ASAP is working to link family farms to institutional food buyers such as schools and hospitals, has helped to establish tailgate markets, provides marketing assistance through workshops, and publishes a local food guide every year. <http://www.asapconnections.org/>

Carolina Mountain Land Conservancy (CMLC) CMLC is a land trust in Hendersonville that is working to protect natural and working lands throughout Henderson, Transylvania, and

Rutherford counties. CMLC holds a conservation easement on one farm in Henderson County and is in the process of putting an easement on a second farm. www.carolinamountain.org

Henderson County Tax Department The Henderson County Assessor is responsible for administering the Present-Use Value Program. The assessor and his staff (specifically the PUV Appraiser and the Land Records Supervisor) work with farm and forest land owners to access the program and its benefits by ensuring that they meet all of the program's requirements. <http://www.hendersoncountync.org/ca/>

Henderson County Office of Travel and Tourism The Visitors Information Center provides literature and personal service to tourists, seasonal residents and permanent residents about the many retail businesses and events in Henderson County. They are pleased to promote agritourism sites, farm stands, tailgate markets (and the Curb Market), other purveyors of locally grown products, and agriculture related events. <http://www.historichendersonville.org/>

Henderson County Partnership for Economic Development A public-private partnership that serves as the professional economic development organization for Henderson County. Assistance from the HCPED is used to recruit businesses that will increase the number of jobs paying industrial wages or better and the County's tax base. The HCPED has worked in the past to recruit an apple processing facility and has stated its ability and desire to assist in future business development projects for the agricultural industry. <http://www.gohendersoncountync.org/>

North Carolina Farm Bureau Federation (NCFB). NCFB is a non-profit organization that actively promotes farm and rural issues through governmental relations, marketing, field representation, agricultural education, member services and other programs. Transylvania is represented, along with other counties, and is served locally by the Transylvania County office. More information about NCFB's programs can be found on its website, www.ncfb.org.

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