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I. FROM THE DIRECTOR

We think of winter as a quiet time, but it never seems to be that. It's a time to summarize and reflect on last year's activities, and be looking forward to and planning for the next year. It goes fast....

On December 16th we hosted a stakeholder meeting at CEFS with 47 people attending. We were very appreciative for the great insights and input from our stakeholders. We had a diverse crowd with many farmers and representatives from area NGOs attending, and good participation from NC State, NC A&T SU, and NCDA&CS. We provided an update on Center activities and then discussed and received feedback on several key strategic issues. These included: strengthening our outreach programs to more broadly serve farmers and extension; prioritizing the expansion of our educational programs; developing adequate infrastructure and a diversified and stable funding base to support ongoing programming; and expanding new partnerships. Following lunch, many stakeholders visited and held further discussions at the various CEFS units according to their personal interests. The day was informative and we continue to use the feedback as we strategically look to the future.

Bengal Dayflower (Tropical Spiderwort), the federally noxious weed that is at CEFS, continues to be a challenge. We are working with the Plant Industry division of NCDA&CS to develop a compromise eradication plan that preserves the ongoing CEFS research and education programs. All parties have a great deal at stake, which makes compromise difficult, but we recently worked out a plan to guide us over the next two years that is acceptable to all.

We continue to host international visitors at CEFS. In mid-March two Swedish Scientists, Guennela Gustafson and Eva Solomon, visited CEFS and met with CEFS researchers and area farmers about animal integration into organic farming systems. After learning about our new alternative swine program, they wrote a grant that funded them to visit for the week. We see many opportunities for future collaboration and learning between our programs. We also continue to host local groups and area universities for CEFS visits.

For example, in April, Duke University's Divinity School is bringing students from its Ecology and Christian Ethics class to tour and participate in discussions about agriculture with CEFS faculty. Also in April, we will host the Geography of Agriculture/Global Restructuring of Agro-Food systems class from East Carolina University.

Keith Baldwin from NC A&T has been hosting a monthly training at CEFS for extension agents on "Building Sustainable Soil Systems." The Southern SARE has provided funding for this Professional Development Program (PDP) training opportunity for extension educators and other agricultural professionals across North Carolina. Faculty from North Carolina A&T State University (Baldwin, Raczkowski) and North Carolina State University (Wagger), and staff from the Natural Resource Conservation Service (Brock) are leading the training sessions. The training is being offered as a graduate level Soil Science class through both North Carolina A&T and North Carolina State Universities. Four, two-day sessions are being held at Center for Environmental Farming Systems (CEFS) and include both classroom and "hands-on" field activities. Extension agents are: 1) learning the importance of soil quality and management practices to improve it; 2) learning about nutrient cycling and how to construct a nutrient budget for a crop; 3) learning the advantages and disadvantages of conservation tillage and how to match conservation tillage strategies with particular crops, soils, and other regional conditions; 4) becoming familiar with the soil food web and soil microbial processes that affect plant growth; 5) becoming familiar with cover crops and cover cropping strategies; and 6) learning how to create an integrated soil management plan for a diversified farming operation. Dr. Baldwin especially wants to thank Bill Perry at CEFS for his help in implementing all of the field demonstrations.

In early March, some of the CEFS leadership team (Paul Mueller, Steve Washburn, Eddie Pitzer, and Nancy Creamer) participated in a Shared Leadership Workshop in Monterey, California. Alton Thompson, Dean of the School of Agriculture and Environmental Science at NC A&T, was also in attendance at the workshop and was able to participate in discussions with the CEFS team. This is the second of a series hosted by the Institute of Conservation Leadership and CAST (Council for Agriculture Science and Technology) that the CEFS team has participated in. The workshop is designed to help organizations work effectively together, strengthen and broaden their support base and membership, identify effective leadership approaches for challenging times, identify how to make strategic choices, set and follow through on priorities, and explore diverse perspectives on the future of agriculture. The training was helpful as we plan for future growth and expansion of CEFS activities.

--DR. NANCY CREAMER

2. NEWS FROM THE FARM

We are still in the process of developing a deep-bedded swine hoop facility at the CEFS facility. On February 10, 2005 we held a formal bid opening for the swine hoop facilities. There were several bids received but the cost for the base bid was higher than we had budgeted. The base bid included three finishing barns and a gestation barn. There were also two alternate bids that included another finishing barn and a dry storage hoop structure. Additional funds have been made available to meet the higher than anticipated costs, but the transfer has delayed the process of awarding the project. We are hoping that the project will be awarded in the next month with construction to begin shortly after. The swine hoop facility will be located at the same site of the previous confinement facility. The confinement buildings and lagoon have all been removed. A dry liter Animal Waste Management Plan Certification was issued by DWQ in September 2004.

There has been some effort to update the milking equipment at the dairy. Our grass-based dairy facility was dedicated in 1998. Part of the design included a low cost, minimum design, mid-line swing milk parlor. With the input of Dr. Steve Washburn, Floyd Wiggins

and Andy Meiers, we are considering another milking system that will improve our ability to collect individual data on production at the dairy. We are considering several potential systems to replace the current equipment with the goal of expanding our ability to conduct research at the dairy.

On February 1, 2005, an in service training in beef production was held for extension agents from across the state. We have had several agents to contact us about additional tours in the upcoming months. We encourage and welcome visitors and tours to showcase the projects at our facility.

--EDDIE PITZER, STATION SUPERINTENDENT

3. CEFS RESEARCH GROUPS AWARDED SARE GRANTS

Sustainability indicators as management tools to guide farmers, scientists, policy makers and the general public. 2005-2008. Southern Region SARE. PIs Wossink, Brownie, Mueller and O'Sullivan \$250,000.

At CEFS we have a unique systems experiment where we have collected a wide range of parameters since 1998. Using these data as a starting point, we seek to develop an approach to relate our data back to the guiding concept of agricultural sustainability. Crucial to our approach is that the development and selection of sustainability indicators needs to be integrated with the research of improved farming systems and with input from farmers and other stakeholders. The proposed project will enable an integrated evaluation of all the data collected at CEFS and is a logical step toward the assessment of sustainability of the various agricultural systems under study. A comprehensive list of attributes of economic, social and ecological sustainability will first be identified and then ranked by using the perceptions of different stakeholders and experts. Data collected at CEFS will be used to quantify the selected indicators. Next, graphical and numerical comparisons will be employed for an overall assessment and evaluation that can be adapted to natural conditions and socio-institutional constraints. Additional co-operators in this projects: Carolina Farm Stewardship Association, Rural Advancement Foundation International and a farmer panel.

Microarray analysis and functional assays to assess microbial ecology and disease suppression in soils under organic or sustainable management. 2005-2008. Southern Region SARE. PIs Louws, Hu, Mueller. In cooperation with J. Zhou of Oakridge National Lab, TN. \$200,000.

In the SARE-funded farming systems experiments currently in place at CEFS, we archived soils at the start of the long-term experiment (baseline samples, Spring 1999) and at each sampling date (~4/yr). Corresponding soil samples have been analyzed by soil scientists, microbial ecologists, entomologists, and nematologists, providing a fairly comprehensive analysis of the samples. Our archived soils represent an irreplaceable repository and resource to ask fundamental questions about the impact of farming systems on microbial communities. Parallel to this opportunity, is the need to develop methods and knowledge about the mechanisms and links between these communities and impacts on plant health. Therefore, the objectives of the proposed project are: (1) to utilize micro-array technology to assess structure and function of microbial communities associated with nutrient cycling and (hopefully) disease suppression. Baseline soil samples will be compared to fresh samples to be collected in 2005 to ascertain the impact of selected farming systems on microbial communities; (2) to elucidate mechanisms of disease suppression in long term SARE organic and farming systems projects. Soils from the different farming systems will be sampled, analyzed, and manipulated to discover components that contribute to disease suppression (primarily plant pathogen invasion and colonization); and (3) to develop functional plant assay(s) to assess plant disease suppressive mechanisms and plant growth promoting effects. These objectives

seek to link knowledge about the soils, microbial communities, soil borne pathogen fitness, and plant response as impacted by long-term farming systems and management of “soil health”.

4. SPRING ACTIVITIES AT THE SMALL FARM UNIT

Although the weather is still cold in Goldsboro, the organic farm is up and running. Phil and Busha are currently interviewing candidates for our new apprenticeship program. One apprentice is already on site and we are looking for a second. The farm apprentices will be working with us through November. We are happy to be able to offer apprentices housing and a small stipend of \$400.00/month. It’s a great learning experience and we encourage people to inform others of this opportunity.

In addition to the apprenticeship, we are already receiving intern applications for the 2 month program starting June 6. Again students will be provided housing, an excellent educational program in sustainable farming and 6 academic credits for completing the program. Please let anyone who might be interested know that the application period is happening now and ends the beginning of April.

We will again be offering folks in Raleigh an opportunity to purchase some of our organic vegetables, fruits and cut flowers at the Brickyard farm stand. This year we will be focusing more on making this an educational experience in addition to offering our farm products for sale. Please stay tuned for announcements and come enjoy the food, learn with us and support good, healthful eating. Our first appearance will be at the Earth Day Celebration on April 22 on the Brickyard. If time and produce permit, we will be on the Brickyard every Friday throughout the summer. We’ll post announcements with our schedule on the CEFS list and the Brickyard announcement list. To be sure your name is on the announcement list contact Phil Rzewnicki at phil_rzewnicki@ncsu.edu.

There are several new areas that we are going to be developing this summer. We are bringing three students from the Agroecology Program in Chapingo, Mexico to study with us for three months. We look forward to developing this relationship with our southern neighbors. Additional items we’re discussing:

- Designating a small portion of the farm for demonstrating home gardening centered on nutrition education for the greater Goldsboro area.
- Collaborating with CFSA’s Save Our Seed Project
- Integrating some of our production with pastured poultry and meat goats

We welcome the public to come visit the farm. It’s supported by public funds and it exists for your viewing and education!

--DR. PHIL RZEWNICKI, ORGANIC UNIT COORDINATOR

5. GROWING ORGANIC GRAINS PROJECT

Four extension educational meetings were organized and held in the past two months in various locations (Plymouth, CEFS, Lumberton, and Carthage) reaching nearly 100 farmers and Extension agents. Information on organic grain production, certification and marketing was presented by Phil Rzewnicki, Molly Hamilton, and Myron Fountain. Evaluations received were for the most part very positive and appreciative of the information provided. Roughly 20 to 25% of those in attendance indicated they were seriously considering starting some organic grain production. Currently there are approximately 345 acres of certified organic grains, and 120 acres of transitional, being grown in North Carolina.

Molly is currently constructing a web site. You’re welcome to review and send Molly or Phil comments (not all pages are complete): <http://www.cropsci.ncsu.edu/organicgrains/> We’re hoping to attain a second round of funding from Z. Smith Reynolds Foundation to continue our efforts in getting organic grain production and marketing established in NC.

In related news, as a result of recently promised funding from the NC Crop Improvement Association and NC Foundation Seed Producers, we will have soybean

performance variety trials in 2005 and 2006 on food grade and feed grain soybeans at CEFS. Co-PIs for the project are Phil Rzewnicki and Jim Dunphy from Crop Science.

--DR. PHIL RZEWNICKI, ORGANIC UNIT COORDINATOR

6. INTERN REPORT FROM THE DAIRY AND BEEF UNITS

The following are excerpts from a final report written by Claudia Sevillano, a CEFS dairy intern from January 25 to March 11, 2005. Claudia is an undergraduate Animal Science major at Universidad Agraria la Molina in Lima, Peru.

My experience at CEFS was very complex. I didn't just learn about livestock, but also about working on a farm and how to interact with people with a different culture. This has also been the first time I've worked with cows and I really enjoyed it. Working with cows that are part of research programs made this experience even more rich; besides just learning how the livestock industry works, I also learned how a project works and how important data collection is.

Milking was great experience. Helping with the evening milking, I learned how to use the milking machine and all the procedures to do it properly and avoid milk contamination and mastitis. First you need to prep and strip each teat, to see if the milk is normal and to stimulate oxytocin release. Then you have to dry each quarter with a new paper towel for each cow and then attach the machine. Preparing teats properly prior to milking and post-milking teat dipping are the most effective practices to reduce the rate of new mastitis infection. All the milk that is collected at the Dairy Unit is sold to Dairy Farmers of America; they are really concerned about milk quality, thus, they send a supervisor every month to pick up milk samples and send it to the lab to test for qualities such as percent butterfat, true protein, and percent lactose, among others.

The time I spent at the dairy unit was breeding season, so, detecting when animals were in heat was another of my jobs. Proper detection is one of the most important factors in getting good results at the end of the season. Spending as much time as possible watching them was necessary. I learned to understand cows behavior when they are in heat. I also learned how useful is to paint their tailsheads, you can detect heats even if you missed when she was standing, because the tail chalk is removed. I was trained to work with the PCDART for recording and looking information of individual cow. Using this program, I could check if the cow I saw in heat needed to be bred, based on the number of days since she was last bred and her reproduction code.

On my last day at CEFS I helped the vets who came to work with the calves at the Old Dairy. They vaccinated them against BVD and brucellosis. Brucellosis causes great losses due to abortions, low fertility, loss of replacements and drop in milk production, and it also can infect people, thus, they are very concerned about this disease. To recognize which cows have been vaccinated they tattoo their ears with a code and date. I also had the opportunity to watch how they dehorn.

At the beef unit, I helped with the babies because they were in calving season, and I had the chance to watch a birth. I learned how to tag calves, take body measures, castrate, and take ear skin sample to see if they have BVD. The body measures (head, foot and thorax) are important, because they are trying to find out if big sizes are related with distocia. Sampling to see if the calves are carrying BVD is necessary because BVD is one of the most costly diseases in beef cattle.

This is an experience that other students should have the opportunity to participate in. There are a lot of international students who will like to come but they have no idea about this internship or how to contact CEFS. I believe the program is very good, though it could be better if students were given a schedule or a list of things to do. Participating in conferences and group visits was a really good way to learn about diseases, management problems and how to avoid or manage those problems. It was useful to listen to questions that the other

people ask which I wouldn't have imagined to ask because I was just learning about so many topics. It would be great to have students participate in conferences or group visits as much as possible. After writing this report I realize that the 45 days that I spend at CEFS were very productive days; some days I learned a lot, other days not too much, but everyday I learned something. I am glad to have had this opportunity of working with livestock in my early years of college; it's going to be very useful in my future as I make decisions about work I am interested in.

--CLAUDIA SEVILLANO, DAIRY INTERN

7. BEEF UNIT ACTIVITIES

The winter feeding period is almost over at the CEFS beef unit, and we will all be glad to see the cattle back out on grass. The ryegrass will explode as soon as the weather turns warm, and we will be able to move cattle back to grass. It has been a fairly mild winter, and while it has been windy, cool and wet at times, we have had little snow or ice.

The calves started hitting the ground in mid-January, and we were all done by mid-March. We will have to work on the records some, but it looks like a little better than half the calves were from the superior sires we used by artificial insemination. We had 27 calves born that were sired by several of the top Senepol bulls in the breed, and the rest are Angus-sired. The mature cow herd is going to be used again this year in the second year of an experiment evaluating a new estrous synchronization program. This experiment is also going on at three other experiment stations and is led by Dr. Joe Cassady.

In the last newsletter I reported on the dystocia study we were conducting this year. The idea was to test and see if grazing high quality ryegrass during late pregnancy would result in higher birthweights and more calving difficulty (dystocia). As it turned out, we had the fewest troubles with dystocia this year that we have ever had, with only two first-calf heifers having problems. One first calf heifer was taken to the NCSU Vet School teaching hospital for a caesarian section because she had an odd shaped pelvic opening. She survived and is back at the farm and doing very well. Other than that we had no major problems.

The 31 cows that grazed on ryegrass had access to very high quality forage during November and December, but their calves were only about 3 lbs heavier than cows that had been fed on hay. This was despite the fact that they gained a lot more weight and were considerably fatter than the hay-fed cows. Because of the large numbers of animals needed, and the possible influence of a variety of environmental factors, we will probably continue this study for two more years.

Forty-two steer calves from the 2004 calf crop are on feed at the Butner Beef Cattle Field Laboratory. Fourteen of these are $\frac{1}{2}$ Senepol, 7 are $\frac{1}{4}$ Senepol, and the rest are predominantly Angus. The steers were put on a finishing experiment comparing three optional diets. The control diet is composed of corn and soybean meal, and the other two diets are based on the locally available byproduct corn gluten feed. One of the experimental diets includes wet corn gluten feed, and the other dry corn gluten feed. Corn gluten feed is a byproduct of wet milling corn to produce corn syrup that is used primarily in soft drinks. We just did the 56-day weighing on these animals, and their rate of growth is really good so far, and we would expect them to be ready for harvest by sometime in May. They will be shipped to Pennsylvania and enter the commercial beef trade.

Most of the heifers from the 2004 calf crop have been saved either as replacement animals, or for our grass-based finishing program. The replacements are undergoing an estrous synchronization program, and will be bred using artificial insemination early in April. The grass finished heifers will be maintained on the best quality pasture we can provide them until we feel that they are ready to market, probably late next fall.

On February 1, we held a livestock agent training session that focused on calving management, primarily at the beef unit, although we did have some activities at the dairy as

well. Dr. Mark Alley from the College of Veterinary Medicine was our primary instructor, and he discussed several topics including how to deal with calving difficulties and management of two emerging disease problems, BVDV (bovine viral diarrhea virus) and Johnes disease. We had 41 livestock agents to attend from all across the state and the program received very good evaluations. This is the largest agent training session ever held at CEFS, and it goes to show that we have a very good resource that will attract a large audience if the timing and planning is right. This event has already stimulated visits from two producer groups during the month of March, and additional activities are being planned.

One event worth mentioning is that the National Senepol Field Day which will be held in North Carolina this summer. The group will come for a tour of CEFS on June 23. We are excited to host this national group, and expect considerable interest in our project evaluating the use of the Senepol breed in commercial cattle herds in Eastern North Carolina.
--DR. MATT POORE, BEEF UNIT COORDINATOR

8. SPRING PLANTING IN THE FARMING SYSTEMS UNIT

Much activity is brewing on the FSRU this spring with corn planting just around the corner. This year due to the eradication plan for *Commelina benghalensis* L., Tropical Spiderwort, we have decided to plant corn in at least one sub-plot of the three agro-ecosystems (BMP, Organic and Crop/animal). The same hybrid, Pioneer 32D99, will be



grown in all of the aforementioned systems. In addition, we will replace sweet potato with grain sorghum in the crop/animal system. The tall fescue pastures that were planted last fall in the crop/animal system are doing reasonably well and the warm-season pastures will be planted in April. We will be soil sampling the systems unit this spring and will need help from any “volunteers” that we can identify. Please consider pitching in with this job!

--DR. PAUL MUELLER, FARMING SYSTEMS UNIT COORDINATOR

9. NEWS AND NOTES FROM NCA&T

As 2005 kicks into gear, NCA&T State University is involved in much of the goings-on at CEFS and in sustainable agriculture in North Carolina. We have garnered support from our state legislature and other funding partners so that those of us in Cooperative Extension at NCA&TSU, under the leadership of our new ANR Program Leader, Dr. Keith Baldwin, have been able to make progress on a number of fronts. We have on-going organic research on our farm on McConnell Road in Greensboro, NC, and have applied for organic certification. We are initiating a small scale grass fed dairy program at the same site and already have a pasture poultry research project going. Keith is conducting a SARE Professional Development Program (PDP) training on soil health at CEFS with NRCS.

With the support of the Dean Dr. Alton Thompson and Dr. Ray McKinnie, the Administrator of the NCA&TSU Cooperative Extension Program, we are stepping up our involvement at CEFS. We have been involved in strategic planning for the small farm unit

and are looking to create an educational outreach center for Wayne County Schools, similar to what we have functioning at our farm in Greensboro. Recently, we provided resources for post harvest handling and preparation for direct sales. This adds to the support for educational outreach provided last year (a computer and projector).

We are active in the Kellogg Foundation-funded swine project (North Carolina CHOICES). We are supporting a field Agricultural Program Technician, Mike Jones, in his work in the eastern part of the state to help small farmers develop quality swine production practices. Mike will also help with the North Carolina CHOICES program.

With our SARE PDP funded project on developing “Producer managed marketing of livestock products”, we are building a program to assist Extension field faculty help producers in this frequently challenging and sometimes discouraging matter of getting through the regulations of livestock marketing. There will be a Southern regional workshop on this project in Greensboro June 21-23, 2005.

We are discussing another agriculture literacy project to complement the Farm and CEFS projects, at the Children’s Home in Winston-Salem, tentatively scheduled to be available to Forsyth Co. school children in the fall of this year. Our field day this year will be in October and will coincide with the National Small Farm Conference which we are hosting October 16-19 in Greensboro.

--DR. JOHN O’SULLIVAN, FARM MANAGEMENT & MARKETING SPECIALIST

10. A NEW FACE AT CEFS, DR. HAROLD RACHUONYO

Dr. Harold Anindo Rachuonyo was recently hired to coordinate research activities at the future site of alternative swine production facility at CEFS. The new site will feature four large hoop houses for research and demonstration of antibiotic-free hog production in deep-bedded systems. Groundbreaking on the new hoop houses is currently scheduled for early summer. In addition to research at the hoop facility, Dr. Rachuonyo will coordinate and conduct research on pastured pigs and integration swine in cropping systems.

A native of Kenya, Africa, Dr.

Rachuonyo joins the CEFS Program and NC State from the University of Illinois, Urbana-Champaign, where he worked as a post-doc in swine nutrition. He was a member of a multi-disciplinary research team conducting integrated studies on animal and cropping systems aimed at achieving maximum input efficiency, minimum adverse environmental impact, and increased ecological sustainability in use of swine manure. Research was primarily focused on management and production strategies that could mitigate potential negative impact of nitrogen and phosphorus from swine manure in the environment.



Dr. Harold Rachuonyo, CEFS Swine Unit Coordinator

Dr. Rachuonyo holds MS and Ph.D. degrees in Animal Sciences (with a minor in Plant and Soil Science) from University of Hawaii at Manoa and Texas Tech University, respectively. While at Texas Tech, he worked on a multi-disciplinary project at the Sustainable Pork Farm that investigated impacts of producing high-quality pork outdoors in a manner friendly to the environment and community that safeguards animal and human welfare and accounts for economic profitability of the farm enterprise. His responsibilities were to oversee investigation of plant, animal, and nutrient interactions, with emphasis on environmental integrity and sow management.

--SUSAN MELLAGE, NC CHOICES PROJECT MANAGER

I 1. NORTH CAROLINA CHOICES FINDS FARMERS, LOOKS TO EXPAND PROCESSING OPTIONS

Eleven farmers will work with the North Carolina CHOICES small-scale hog producers program this year. Susan Melage and Dr. Harold Rachunoyo, along with other project partners, spent three weeks traveling throughout the state meeting with interested farmers and learning more about their operations. The farmers selected to participate represent a diverse group with varying experience in direct marketing and livestock production. With small pockets of farmers across the state, the CHOICES program hopes to encourage future producers in the Mountain, Charlotte, Triangle, and coastal regions.

Mountain Region

Hickory Nut Gap Farm, Buncombe County
Red Tail Ridge Farm, Buncombe County
Green Toe Ground, Yancey County
Flying Cloud Farm, Buncombe County

Triangle Region

Parker Farms, Orange County
Triple B Farms, Granville County
Brinkley Farm, Wake County
Moore Farms, Randolph County

Coastal Region

Dogwood Nursery Farms, Pender County
Beech Ridge, Allen & Sons, Beaufort County

Charlotte Region

Apple Orchard Farm, Gaston County

North Carolina CHOICES has also focused on expanding processing options for small-scale livestock farmers. Partnering with CFSA's Sustainable Livestock Initiative and Dana Hanson, NCSU meat extension specialist, the project hopes to encourage more independent processors to provide quality labeling, packaging, and value-added services.

This February Oran Hesterman and Ricardo Salvador from the Kellogg Foundation came to CEFS to meet with project partners and university administrators. It was a great opportunity for them to learn more about CEFS and the status of the North Carolina CHOICES project. They were very impressed with our progress and have great confidence in future success.

--SUSAN MELLAGE, NC CHOICES PROJECT MANAGER

I 2. UPCOMING EVENTS IN SUSTAINABLE AGRICULTURE

April 13-14, 2005: Developing A Food Business Workshop at A-B Tech Enka Campus in Asheville. The purpose of the workshop is to help participants explore the possibilities of starting their own food business. The intended audience includes producers and prospective producers, extension, lenders, and agribusiness leaders. There is an \$85 registration fee due by April 6 that covers meals, notebook, and other reference materials. Workshop is sponsored by NCSU, N.C. Cooperative Extension Service, and the NC Tobacco Trust Fund. Please contact Cathy Hohenstein at 828.255.5522 or email Cathy_Hohenstein@ncsu.edu for more information.

April 23-24, 2005: 10th Annual Piedmont Farm Tour from 1:00-5:00 pm, sponsored by Carolina Farm Stewardship Association (CFSA) and Weaver Street Market. Visit www.carolinafarmstewards.org for more information. Don't forget the kick-off on Thursday, April 21 at Weaver Street.

May 14-15, 2005: Franklin County Farm Tour. 2nd Annual Franklin County Farms & Crafts Tour. Volunteers needed! For more information contact Martha Mobley at 919-496-3344 or email martha_mobley@ncsu.edu.

June 15, 2005: Totally Local Dinner to benefit CFSA at Panzanella in Carr Mill in Carrboro. 5:30 to 9 pm. 10% of sales will benefit CFSA. Parties of 6 or more call 919-929-6626 for reservations.

June 21-23, 2005: Southern Regional Livestock Marketing Workshop sponsored by NCA&TSU. Contact John O'Sullivan johno@ncat.edu for more information.
June 25-26, 2005: Mountain Farm Tour sponsored by CFSA.

Additional information about these and other programs can be found at:
www.ces.ncsu.edu/chatham/ag/SustAg/index.html
www.carolinafarmstewards.org/calendar.html

13. NCSU CAMPUS LECTURES OF INTEREST

Tuesday, April 12 3:00 PM

Plant Pathology Graduate Student Association Rosie Perez Memorial Seminar
Dr. Cameron Currie, University of Wisconsin, Madison, Department of Bacteriology
"Agricultural Pathology of Ant Fungus Gardens"
Ruby McSwain Education Center, JC Raulston Arboretum

Thursday, April 14 4:00PM

Crop Science Graduate Student Association Earl A. Wernsman Seminar
Andrew Kimbrell, Center for Food Safety & International Center for Technology Assessment
"Fighting for a New Food Future"
222 Dabney Hall

14. THE ART OF FARMING

submitted by Joel Gruver

Scribbling Hoe
by Niyi Osundare

The farmer
pens the pages of earth
with the nib
of a forge-fresh hoe
scribbles mounds
between margins of blooming corn
cursives paragraphs of legumes
in ruled furrows
his barn is a library
of nourishing seasons

*Congratulations to Molly and William Hamilton on the birth of their
daughter, Anne, on March 20!*

*CEFS News is the quarterly newsletter of the Center for Environmental Farming Systems in
Goldsboro, NC, and is edited by Denise Finney, demckinn@ncsu.edu. The next edition of
CEFS News will be published June 30, 2005; the submission deadline is June 15, 2005.*

Suggestions for a catchy newsletter name are still being accepted!