

**ACCESSION NO:** 0219850 **SUBFILE:** CRIS

**ROJ NO:** FLA-AGR-004953 **AGENCY:** NIFA FLA

**ROJ TYPE:** OTHER GRANTS **PROJ STATUS:** TERMINATED

**CONTRACT/GRANT/AGREEMENT NO:** 2009-49400-05941 **PROPOSAL NO:** 2009-03894

**START DATE:** 01 SEP 2009 **TERM:** 31 AUG 2012

**GRANT AMT:** \$596,219 **GRANT YR:** 2009

**INITIAL AWARD YEAR:** 2009

**INVESTIGATOR:** Koenig, R.; Zhao, X.; Wysocki, A.; Mcavoy, E.; Roberts, G.

**PERFORMING INSTITUTION:**

UNIVERSITY OF FLORIDA

022 MCCARTY HALL

GAINESVILLE, FLORIDA 32611

***ROWING MORE SMALL FAMILY VEGETABLE FARMERS IN FLORIDA***

**NON-TECHNICAL SUMMARY:** Agriculture in Florida is one of the largest contributors to the states economy generating .785 billion dollars of products according the US Census of Agriculture. According to the census, the number of Florida farms increased by 7.7 percent, from 44,081 in 2002 to 47,463 in 2007. About 32,000 Florida farms, or approximately 70 percent, have 50 acres or less. The market value of agricultural products sold by Florida farmers hit \$7.8 billion in 2007, the highest recorded level in the state's history (McElroy, 2009). Concurrent with this increase has been an increase in the demand for local agricultural products and municipalities requesting farmer's markets. This increase in demand for local products is a challenge in Florida because historically it has developed as a state that shipped its products to other places in the winter and relied on major supermarkets to supply local consumers. With an average farm size of approximately 237 acres, the majority of growers are too big in many cases to be interested in local farmers market. The economies of scale simply do not work. Furthermore, many large producers focus on a few cash crops and do not have the diverse set of products needed to be successful in most direct marketing venues. The result of this disconnect between demand for local farmers markets and the dominance of large scale producers of fresh fruits and vegetables creates a challenge for Florida's growing presence of local farmers markets. There are simply not enough farmers who direct market their produce to meet consumer demand. This project takes a long-term, holistic, and comprehensive approach to the education, training and resource acquisition constraints of beginning small family farmers. The project team is multidisciplinary and consists of individuals with a diversity of experiences which will enable us to accomplish our overall goal of increasing the number of successful small family farmers in Florida. The projects objectives are designed to change the behavior of our target audience and are measurable because of our novel approach. Social science theory and methodologies will be utilized in the early phases of the project to assess the needs of our diverse target audience and determine the most effective and efficient ways to meet them through developing or enhancing formal and informal educational curriculum. Incorporating a survey instrument that will measure changes in knowledge, behavior and confidence will enable us to test the effectiveness of our materials and make improvements based on sound data before they are released for use by others. This approach will produce results that are scientifically valid and measurable outcomes that can be supported by data that has been statistically analyzed. Furthermore, our project utilizes and builds on previous research funded by the USDA's SREES which have identified the primary constraints and secondary of Hispanic and Latino farmers which were similar to those of other small farmers typologies (Swisher et.al. 2007).

**OBJECTIVES:** The overall goal of this project is to increase the number of small family farms in Florida. Our major regions of impact will be Central and Southwest Florida. In Southwest Florida our target audience will be comprised primarily of retirement farmers, limited resource farmers, and residential/lifestyle farmers. Our target audience in Central Florida will primarily focus on future farmers who comprise the farming occupation/low-sales or farming occupation/high-sales classifications. We plan to accomplish our overall goal by developing an innovative, multi-faceted program that links non-

overnmental organizations, the University of Florida's teaching and extension programs, established farmers willing to mentor new farmers and beginning small family farmers. The objectives of this project are: 1) Beginning small family farmers will be able to access and understand information relating to vegetable production practices and marketing 2) Beginning small family farmers will be able to access and understand information related to government programs and regulations impacting vegetable producers 3) Beginning small family farmers will learn about asset based farming opportunities through referrals, targeted focus groups and non-formal training and learn how to access land resources available through individuals interested placing their farmland under a conservation easement and 4) Beginning farmers will learn how access a variety of direct marketing opportunities. Expected Outcomes: 1) We anticipate that over 1,000 students will be enrolled in the courses that are part of the beginning farmer curriculum. We anticipate that approximately 100 students wishing to become beginning farmers will take at least four courses within the curriculum. The University of Florida will increase its capability and capacity to educate and train beginning farmers in agricultural enterprises that provide economic stability and security; 2) Two three-week courses will be conducted per season (mid-October- early December) and (mid-February-early April) with a maximum of 25 attendees per session. The first session will be held mid-February, 2011 and the final session will be held in April, 2012. Based on full attendance, a total of 100 beginning farmers will be trained. An additional outcome will be an increase in UF's extension capability and capacity to educate and train beginning farmers in agricultural enterprises that provide economic stability and security; 3) At least 200 landowners and beginning farmers will participate in the conservation easement trainings. Conservation Trust for Florida will build its capacity to serve land owners interested in keeping their farms in production; 4) A referral system will list at least 25 experienced Florida vegetable producers willing to mentor beginning farmers or provide internships and 15 landowners interested in partnering with beginning farmers; 5) Results of the research conducted as part of this grant will be submitted to at least two refereed professional journals for publication.

**APPROACH:** Our beginning farmer curriculum will be based on the knowledge based constraints previously identified by Wisner et al (2007) for Hispanic and Latino farmers which were similar to those constraints identified by all types of small family farmers. We have chosen to focus our curriculum on sustainable vegetable production for small family farmers interested in direct marketing in their communities. Our education modules will be designed to address different learning styles by using varied styles of delivery. They will also focus on experiential learning, which is based on building new knowledge and skills into the participants' existing knowledge and skill base. We will apply the learning cycle model of instruction which provides the active learning experiences recommended by the National Science Education Standards (National Research Council, 1996). Multiple processes and products will be conducted and produced through the different stages of the Beginning Farmer program. It is necessary to conduct evaluations to determine the quality and effectiveness not only of these program's outcomes but of the overall intervention. Therefore, different evaluation forms and approaches (Owen, 2007) will be used to assess the extent at which the Beginning Farmer program accomplishes its overall goal and meets its specific objectives at each phase of the project. Quantitative and qualitative methods will be combined to evaluate this program (Greene, Benjamin, & Goodyear, 2001). The data collection methods will include quantitative surveys (Dillman, 2000) and focus group interviews (Israel & Galindo-Gonzalez, 2008). A needs assessment (Witkin, 1984) will be conducted. The results from this exercise will be used to develop logic models (Israel, 2001) to guide the development of educational modules aimed to meet the identified needs. A judgment of the quality of the modules, including a cognitive evaluation (Willis, 1999), will be also conducted during this phase. The proposal includes the enhancement of experiential learning components in undergraduate course offered by the Departments of Agronomy, Horticultural Sciences, and Food and Resources Economics, the development of at least two new courses and creating a three week intensive beginning vegetable production course. The quality and effectiveness of all these courses will be determined using appropriate methodologies to explore their impacts (Israel, 1992) and the satisfaction of the participant (Israel, 2000). The impacts of these courses may include changes in knowledge, skills, attitudes, aspirations, and practices. The quality and effectiveness of the referral system database implemented in Phase III will be evaluated by exploring the

atisfaction of its users (Israel, 2000). During Phases IV and V, summative and impact evaluations (Owen, 2007; Rossi, Ippsey, & Freeman, 2004) will be conducted with a focus on the utilization of results (Patton, 2008) for making the final refinement of the curriculum.

**PROGRESS:** 2009/09 TO 2012/08

**OUTPUTS:** 31 comprehensive lessons in Water, Soils, Plant Nutrition, Breeding and Genetics, and Marketing for beginning farmers were developed for the Beginning Farmer (BF) Undergraduate lessons. Materials include instructor guides, student guides, and PowerPoint slides for each lesson. Each lesson underwent a review process consisting of a pedagogy and technical review. This evaluative process included reviews by 2 educational pedagogy experts and 2 technical experts in the content area of each lesson. We developed evaluation rubrics for both the pedagogy and technical reviews which included a comment section for suggested changes for each lesson. We used this feedback to make changes that improved each lesson. Many lessons were used in undergraduate courses at UF by the PD and 4 other instructors in Fall, Spring and Summer semesters in 2011 and 2012. These faculty will likely continue using the lessons in their courses. The BF materials will be published in a DVD format through the UF/IFAS Extension Bookstore. This will make the materials available for faculty at other universities to use in their courses. The PD presented at four conferences about the BF undergraduate materials and Process Oriented Guided Inquiry Learning (POGIL) methodology: UF Teaching Symposium in August 2010, POGIL SE Conference in June 2011, Sustainable Agriculture Education Association in August 2011, and POGIL SE Conference in June 2012. 21 BF Extension Trainings and 3 field days attended by 250 beginning farmers were held July 2011-August 2012 in three different locations in Florida. The content of the workshops were selected based on opinions and recommendations gathered through three different focus groups with County Extension Faculty. Faculty identified basic knowledge, planning, marketing and networking as the most important things a beginning farmer needs to know to operate a farm operation. We developed curriculum for 6 workshop modules intended to provide beginning farmers with basic knowledge on crop selection, soil management, pest management and marketing. Each workshop emphasized the importance of developing and following a plan. Extension evaluated the training packages and suggested modifications. These modules will be available to extension personnel on UF websites that target beginning farmers. 163 landowners attended 9 Conservation Trust for Florida (CTF) Conservation Easement Trainings held in 6 different counties in FL. The CTF developed an interactive curriculum based on the POGIL methodology that they will continue to use during their trainings. The curriculum includes comprehensive instructor and student manuals. The modules were reviewed for pedagogy by an outside contractor and technical quality by staff and board members. The CTF will provide the final modules of the curriculum and power points on a DVD and will provide the DVD for UF IFAS to include on the website. CTF also developed an online database, Farmfinder ([www.floridafarmfinder.org](http://www.floridafarmfinder.org)) that connects beginning farmers to existing farmers in which 8 beginning farmers and 8 landowners have signed up for. **PARTICIPANTS:** Rosalie Koenig, PD: managed and directed all aspects of project; Al Wysoki, CoPD: attended project meetings and worked with Curriculum Assistant on Business and Marketing module, implemented curriculum; Grady Roberts, CoPD: Attended meetings and coordinated and conducted pedagogy and technical reviews; Xin Zhao, CoPD: Attended meetings and implemented curriculum; Juan Carlos Rodriguez, Evaluation and Extension Assistant: created instrumentation for curriculum evaluation and focus groups, conducted focus groups, created curriculum for and conducted Extension Trainings; Sebastian Galindo, Evaluation Assistant: Applied for IRE created evaluation instrumentation and plan, analyzed evaluations; Wendi Bellows, Curriculum Assistant: Managed curriculum process, designed and reviewed lessons; Jessica Palenchar, Curriculum Assistant: Designed Pest Management module; Nick Greenwood, Curriculum Assistant: Reviewed lessons, created images, evaluated trainings; Nic Johansen, Curriculum Assistant: Designed Irrigation lesson; Malini Ram, Curriculum Assistant: Designed Business and Marketing module; Lindsay Iglesias, Curriculum Assistant: Managed image permissions; Lynne Schreiber, Extension Assistant: Took notes at focus groups, organized logistics for trainings. Marianna Riehm, Curriculum Assistant: Conducted image permissions; Jared Sweat, Curriculum Assistant: Helped Extension Faculty to create curriculum, conducted technical reviews, helped create student guides and slides for curriculum; Maggie Paxson, Curriculum Assistant: Reviewed

Curriculum, incorporated changes from pedagogy and technical reviews. Partner Organizations: Conservation Trust for Florida, UF IFAS Extension. TARGET AUDIENCES: 500 students in College of Agriculture and Life Sciences undergraduate courses at UF attended classes in which instructors used inquiry based teaching methodologies developed for the Beginning Farmer undergraduate lessons. 163 landowners attended Conservation Trust for Florida Workshops that used OGIL inspired innovative teaching methodologies used developed for the Conservation Easement Workshop Curriculum. Through the workshops, beginning farmers and landowners learned about asset based farming opportunities, succession planning, and the tax benefits of conservation easements. They also learned how to access land resources through the online database. 18 beginner farmers and 8 landowners who use the Florida Farmfinder database ([www.floridafarmfinder.org](http://www.floridafarmfinder.org)) to connect with one another. 250 adult beginner farmers who are either thinking about farming or have been farming for less than 5 years attended Extension Workshops that used Inquiry based teaching methodologies developed for the Beginning Farmer Extension Training Curriculum. PROJECT MODIFICATIONS: Nothing significant to report during this reporting period.

**IMPACT: 2009/09 TO 2012/08**

We conducted four focus group interview sessions with students who participated in courses in which instructors used different lessons from the Beginning Farmer (BF) Undergraduate Curriculum. The purpose of the interviews were to explore the students' perceptions of the quality and effectiveness of the lessons. The preliminary findings from these focus group interview sessions suggest that attributes of the learner and the instructor may affect the quality and effectiveness perceived by students exposed to this type of educational materials. Four more focus groups are scheduled to be held with students in Fall 2012 courses. We will also conduct a focus group with faculty in Fall 2012 to gauge the opinions and attitudes of faculty using these materials. We intend to publish the results of these assessments in academic journals. Pre and post-tests of knowledge gain and confidence were given to all participants at the BF Extension trainings. The information delivered during workshops, as well as the different materials and other resources provided to beginning farmers not only resulted in gains in knowledge, as reflected by pre and post test scores and reaction sheets completed by participants, but also more confidence to perform the activities associated with the topics covered in the workshops and field days. We will follow up with participants in Fall 2012 to assess knowledge gain months after their training. Conservation Trust of Florida staff developed a survey instrument to "pre-test" the information presented before the workshops started and then a "post test" after the workshops, which showed about a 33% improvement in the participant understanding of the information provided and conservation easements. This demonstrates that the workshop attendees obtained a very clear understanding of why a conservation easement helps keep land in agricultural production. The pressures of development were addressed and the permissible uses of water and range resources for use on the farm were also made clear. A mock easement was presented that addressed the actual required and negotiated items in a conservation easement document.

**PUBLICATIONS (not previously reported): 2009/09 TO 2012/08**

. Farmfinder Online Database. (2012). Conservation Trust for Florida. [www.floridafarmfinder.org](http://www.floridafarmfinder.org).  
. Beginning Farmer Comprehensive Curriculum. (2013). UF/IFAS Extension Bookstore.

**PROGRESS: 2010/09/01 TO 2011/08/31**

OUTPUTS: Outputs in Year 2 centered on finishing the curriculum design phase, pilot testing a sample of materials from each module in the PD's courses at UF and at conferences, planning for implementation of curriculum in courses at UF and FL county Extension sites in Spring 2012, and planning for evaluation. The PD and Curriculum Assistants advanced in the design phase of the Beginning Farmer (BF) Curriculum creating 7 modules with 40 lessons that include 145 different activities. These lessons are currently in the midst of a rigorous internal and expert review process before 4 instructors pilot test them in undergraduate courses at UF in Spring. The PD pilot tested 75 activities in her Spring and Fall courses with 160 students. 25 lessons with 90 activities completed the internal review process. 11 lessons have been submitted for the expert review process. The PD and Dr. Rodriguez conducted a 6 hour BF training called The Science of Farming at the

Florida Small Farms Conference (FLSFC) in July with 60 Beginning Farmers. The training was assessed by a team of 6 evaluators and refined for further use. Ms. Ram conducted a 3-hour Business and Marketing training for 15 beginning farmers at the FLSFC. Planning for BF Extension Trainings included securing 3 county Extension sites throughout the state to implement 18 two-hour BF trainings Jan-Mar 2012, securing 3 field day locations to conduct full day workshops in April 2012, creating a template for the curriculum, and conducting 3 focus groups with 16 Extension agents and farmers to determine content of extension curriculum. Curriculum will focus on the behaviors and knowledge BFs will need to master to farm successfully. Evaluation activities and products for the formal education and extension trainings included development of instruments for evaluating educational materials, a data analysis plan, publication plan, evaluation plan and obtaining approval from IRB. Outreach activities included recruitment of farmers for BF Extension trainings during a BOG field day in Sept., recruitment of 4 undergraduate instructors at UF to pilot test curriculum in their Spring 2012 courses, outreach that led to the recruitment of 60 beginning farmers to attend FLFSC training, and a presentation about the BF curriculum at Sustainable Agriculture Education Association conference and UF Teaching Symposium in August. The PD conducted 2 biannual Grant Team meetings to create and discuss work plans and hired 5 new Curriculum Assistants to design the BF curricular modules and an Extension Curriculum Coordinator to organize BF informal education trainings. BFRDGP Grant partners, Conservation Trust for FL (CTF) promoted the Florida Farm Finder Program at FLSFC, produced a draft of the Conservation Easement Training Curriculum and conducted 2 pilot trainings with 46 landowners in April 2011 at FWCC Landowner Meeting, and began to develop the FarmFinder website database. PARTICIPANTS: Rosalie Koenig: PD managed and directed all aspects of project; Al Wysoki: CoPD attended project meetings and worked with Curriculum Assistant on Business and Marketing module; Grady Roberts: CoPD Attended meetings; Xin Zhao: CoPD Attended meetings; Juan Carlos Rodriguez: Evaluation and Extension Assistant Created instrumentation for curriculum evaluation and focus groups, conducted focus groups; Sebastian Galindo: Evaluation Assistant Applied for IRB, created evaluation instrumentation and plan; Wendi Bellows: Curriculum Assistant Managed curriculum process, designed and reviewed lessons; Jessica Palenchar: Curriculum Assistant Designed Pest Management module; Nick Greenhood: Curriculum Assistant Reviewed lessons, created images, evaluated trainings; Nic Johansen: Curriculum Assistant Designed Irrigation lesson; Malini Ram: Curriculum Assistant Designed Business and Marketing module; Lindsay Iglesias: Curriculum Assistant managed image permissions; Lynne Schreiber: Extension Assistant Took notes at focus groups, organized logistics for trainings. TARGET AUDIENCES: Target audiences and efforts included pilot testing 75 formal education activities in the Beginning Farmer Curriculum with 160 aspiring beginning farmers in undergraduate agricultural classes at UF; Pilot testing of 10 informal education activities with 60 adult beginner farmers who are either thinking about farming or have been farming for less than 5 years at the Florida Small Farms Conference; Pilot testing of Conservation Trust for Florida Conservation Easement Curriculum with 46 landowners at the Florida Fish and Wildlife Conservation Commission and Annie's Project. PROJECT MODIFICATIONS: Nothing significant to report during this reporting period.

**IMPACT: 2010/09/01 TO 2011/08/31**

2010-2011 focused on developing curriculum, designing and pre-testing evaluation instrumentation, conducting focus groups, and pilot testing materials that we will evaluate in Spring 2012 courses at UF and trainings at strategic county extension sites throughout Florida. 60 beginning farmers (BFs) attended a pilot informal education training at the Florida Small Farms Conference (FLSFC). BFRDGP Grant partners Conservation Trust for Florida (CTF) conducted conservation easement trainings for 46 landowners at Florida Fish and Wildlife Conservation Commission Landowner Meeting and Annie's Project to pilot test a draft of their new curriculum. The PD pilot tested 75 activities from the BF formal education curriculum in her Spring and Fall 2011 courses at UF with 160 undergraduate students, many of whom aspire to become future farmers. Other than the numbers of attendees at pilot trainings and in courses that used the BF and CTF curriculum in formal and informal educational environments, there are no other outcomes/impacts to report at this time, the final report will include a synopsis of changes in conditions, actions and knowledge based on intensive evaluations.

**PUBLICATIONS: 2010/09/01 TO 2011/08/31**

o publications reported this period

**PROGRESS:** 2009/09/01 TO 2010/08/31

**OUTPUTS:** The PI and UF Beginning Farmer Grant Team completed the following activities between October 2009 and October 2010. Dr. Koenig: Conducted four Grant Team Meetings. Hired four Curriculum Assistants to design specific modules for the BF curriculum; Curriculum Assistants and PI attended POGIL Southeast Regional Workshop in June 2010 to better understand the Process Oriented Guided Inquiry Learning (POGIL) pedagogy and process of designing curriculum using this framework; Developed a framework and template for a Student Guide and Instructor Facilitation Guide of the Beginning Farmer (BF) Curriculum using pedagogy such as POGIL, Blooms Taxonomy, Piaget's learning cycle, experiential learning methods, reusable learning objects, and VAK Learning Styles. Created a database to track development of BF curriculum; Developed framework and 90 activity titles for 8 formal and informal educational modules: 1. Soils 2. Water and Irrigation 3. Plant Nutrition 4. Pest Management 5. Crop Biology 6. Physiology and Ecology 7. Genetics, Seeds and Breeds 8. Business and Marketing. Created learning objectives for approximately 90 activities within the BF Curriculum module headings; Informally tested the effectiveness of 14 activities in Dr. Koenig's Fall 2010 Crop Science course with an enrollment of 45; Attended SARE Advisory Board Meeting in September 2010 to receive input about BF Curriculum framework, content and survey instruments. Conservation Trust of Florida Team: Developed 3 modules using framework described above for Conservation Easement Trainings: Unit 1 - My Land My Legacy with four activities is geared to landowners with no prior knowledge; Unit 2 - Individual Viability of a Conservation Easement with 6 activities is geared to landowners considering an easement; and Unit 3 - Taking the Next Step with 4 activities geared to land owners pursuing an easement; Met with Dr. Koenig to receive feedback about several activities. Dr. Roberts and Dr. Galindo: Developed a survey instrument to assess the needs of beginning farmers; Attended Small Farms Conference - BF Grant Team administered the survey instrument and publicized future Extension and Conservation Trust of Florida Trainings; Still need more responses for a statistically valid analysis; Developed an assessment protocol for the preliminary evaluation of the BF curriculum that includes 3 tiers of assessment: Tier 1 includes a rigorous review of activities by the PI. Tier 2 includes a review of activities by Dr. Galindo, Dr. Roberts and a panel of content area experts to assess accuracy of content and validity of each activity. Tier 3, will be conducted in courses at UF taught by Dr. Koenig, Dr. Zhao, and Dr. Wysoki in Fall 2011 and Spring 2012, and includes the measurement of project outcomes, evaluation of knowledge gained by learners and their perceptions of the learning experience. 14 formal education activities are currently ready for Tier 1 reviews. Nine activities are ready for Tier 2 reviews. During our October 2010 Team Meeting, we developed an action plan for each team member for Year 2. **PARTICIPANTS:** Rosalie Koenig PI/PD organized team members, supervised workers, create and implement modules; Grady Roberts-Co-PI assist with evaluation instruments; Gene McAvoy-Co-PI provide input and advice on extension curriculum/training; Sebastian Galino-development and implementation of survey instruments; Wendy Bellows-Curriculum/grant assistant; Pepe Clavijo-Curriculum assistant; Jesse Palanchar-Curriculum assistant; Xin Zhao-Co-PI advice on curriculum modules; Alan Wysocki-Advice on curriculum modules; Ellen Huntley Dube-Conservation Trust Partner working on development of training; Busy Kislig-Shires Byerly- Conservation Trust Partner managing project for CTF; **TARGET AUDIENCES:** Nothing significant to report during this reporting period. **PROJECT MODIFICATIONS:** Not relevant to this project.

**IMPACT:** 2009/09/01 TO 2010/08/31

Considering this was just year one of a three year project, the outcomes/impacts identified in the proposal were not yet achieved. In years two and three of the project, the assessment and evaluation team (Dr. Roberts and Dr. Galindo) will collect the following data to document change in knowledge and actions associated with the project: **Size of target audiences:** Data for measures of target audience size will be collected using survey instruments during each educational opportunity listed. Formal educational audience attending courses at UF - 1,000 students will be enrolled in courses at UF that are part of the BF Curriculum during the Fall 2010, Spring 2011 and Fall 2012 semesters, approximately 30 of whom aspire to become farmers. Informal education audience attending Extension Trainings - 150 beginning farmers will attend

one of four trainings. Informal education audience attending Conservation Easement Trainings - 200 landowners and beginning farmers will attend trainings. Web-Referral System and Mentoring audience -25 experienced vegetable producers will mentor beginning farmers and 15 landowners will partner with beginning farmers. Changes in knowledge, attitudes and behaviors: Data for outcome measures will be collected using survey instruments, and individual activity assessments to gauge knowledge gains, attitude and behavior changes in students in Dr. Koenig's, Dr. Wysoki's and Dr. Hao's Fall 2011, Spring 2012 and Fall 2012 courses, during each conservation easement training and Extension trainings. The targeted measure indicators include: % who are currently farming, % change in knowledge, % planned change in behavior, % who plan to protect their land with a conservation easement, and % who plan to start farming as a result. Increased confidence and applicable skills: One year after students complete Fall 2011 courses at UF, Extension trainings and conservation easement trainings that implement the BF Curriculum, the Grants Team will send a survey instrument to students who participated to measure the following indicators: % who started farming, % who understand how to farm as a result of this project, % who followed through with the conservation easement process, and % who continued attending classes or trainings that are part of this BF project.

**PUBLICATIONS:** 2009/09/01 TO 2010/08/31

no publications reported this period