

Focus Team Year in Review

January –December 2009

G1F5 – Bio-energy

Faculty (as of 2/11/10-data are preliminary; do not distribute as final or use in reporting)

	Faculty Name	Unit	Effort*
1	Alleyne, John C	Highlands County - South	20%
2	Beckford, Fitzroy B	Lee County - South Central	10%
3	Breman, Jacque W	Union County - Northeast	10%
4	Comerford, Nicholas B	North Florida REC - Quincy	1%
5	Crane, Jonathan H	Tropical REC - Homestead	10%
6	De Vries, Albert	Animal Sciences	2%
7	Evans, Edward A	Tropical REC - Homestead	20%
8	Gaver, Timothy P	St. Lucie County - South	20%
9	Goodchild, Michael J	Walton County - Northwest	10%
10	Hanlon, Jr, Edward A	Southwest Florida REC - Immokalee	10%
11	Hodges, Alan W	Food & Resource Economics	20%
12	Hogue, Patrick J	Okeechobee County - South	5%
13	Kirstein, Arthur	Palm Beach County - South	15%
14	Lamb, Graham C	North Florida REC - Marianna	5%
15	Mahan, Jr, William T	Franklin County - Northwest	2%
16	Minogue, Patrick J	North Florida REC - Quincy	10%
17	Monroe, Martha C	Sch Forest Resources & Cons	20%
18	Newman, Yoana C	Agronomy	1%
19	Olson, Clay B	Taylor County - Northeast	15%
20	Pullammanappallil, Pratap C	Ag & Bio Engineering	40%
21	Rosenthal, Stanton	Leon County - Northwest	3%
22	Taylor, Jennifer	FAMU	10%
23	Teixeira, Arthur A	Ag & Bio Engineering	20%
24	Thomas, Martha E	Lake County - Central	1%
25	Tyree, Allen B	Hamilton County - Northeast	2%
26	Vansickle, John J	Food & Resource Economics	10%
27	Walter, Joe H	Brevard County - Central	1%
28	Ward, Bruce H	Walton County - Northwest	10%

* Represents the faculty member's estimated time spent in this focus area as a portion of all programmatic effort expended during the year.

Clientele Contacts (as of 2/11/10-data are preliminary; do not distribute as final or use in reporting)

Comparison Group	Educational Materials	Field Visits	Office Visits	Group Participation	Phone Consults	Email Consults	Web Visits*
G1F5	93	333	410	6,569	1,674	2,542	445,605
Goal 1	6,299	20,346	43,721	326,427	86,486	110,463	47,907,902
All Goals	44,435	133,548	280,856	3,252,463	446,001	754,832	83,948,086

*Web Visits may contain duplicated counts.

Volunteers (as of 2/11/10-data are preliminary; do not distribute as final or use in reporting)

Comparison Group	Volunteer Headcount	Volunteer Hours
G1F5	61	1,919
Goal 1	2,672	63,535
All Goals	34,724	1,343,061

Multi-State Activity (as of 2/11/10-data are preliminary; do not distribute as final or use in reporting)

State	Faculty Headcount
Alabama	2
Arkansas	1
Georgia	1
Kentucky	1
Louisiana	1
North Carolina	1
South Carolina	1
Tennessee	1
Texas	1
Virginia	1
Southern Regional	2
Puerto Rico	1
Unduplicated Headcount	4

Outcomes (as of 2/11/10-data are preliminary; do not distribute as final or use in reporting)

Comparison Group	Number Evaluated for Change in Knowledge	% Who Changed	Number Evaluated for Change in Behavior	% Who Changed	Number Evaluated for Change in Condition	% Who Changed
G1F5	912	97.0%	702	76.8%	382	23.3%
Goal 1	67,597	87.4%	40,250	63.8%	27,301	58.3%
All Goals	397,547	86.7%	283,225	75.9%	109,293	63.4%

Impacts (as of 2/03/10-data are unedited and preliminary; do not distribute as final or use in reporting)

Faculty (Author)	Unit	Impact/Outcome/Success Story
Beckford, Fitzroy B	Lee County - South Central	Working with key stakeholders, the SustainabLEE Community Partnership meetings provides education on sustainable policies and practices and serves as the central forum for sustainability interaction planning in Lee County, effectively identifying IFAS as the catalyst agency with which to consult on matters of sustainability education. The value of this program was highlighted by the public mention by two county commissioners in different commission meetings that Lee County Agents working in sustainability are 'agents of change who brought alternative energy education to the attention of policy-makers'. During the year, staff was invited to sit on two assessment boards for companies competing for a contract to build a bio-refinery in Lee County. The winning bid was rewarded in the summer of 2009 and the facility will be constructed at a cost of \$7,000,000, to produce 2,000,000 gallons of biodiesel per year from waste oils and yellow grease in the early stages of the project. Once operational, the biorefinery will provide 14 full time jobs in Lee County.
Breman, Jacque W	Union County - Northeast	Two cultivars and one accession of sweet sorghum have been found to be adapted to the wet entisols of the tri-county area surrounding Hastings (approximately 30,000 acre region. These cultivars have the potential of being used as cover crops following cabbage and potatoes for ethanol production. Grain sorghum hybrid demonstration showed potential for that crop as a cover crop for grain or ethanol production.
Crane, Jonathan H	Tropical REC - Homestead	A new program to evaluate the suitability and feasibility of bio-fuel was initiated.
De Vries, Albert	Animal Sciences	Frequent questions regarding our spreadsheet to evaluate the economics of digesters on dairy farms. Many people find that it clearly lays out the economics involved.
Goodchild, Michael J	Walton County - Northwest	45 landowners attended a Farm Field Day at the West Florida Research and Education Center and evaluations showed they gained knowledge on using certain oil crops to produce bio-diesel.
Hodges, Alan W	Food & Resource Economics	Our study "Clean energy for Florida transportation: assessment of greenhouse gas emissions for selected renewable fuels" (Final report to the Florida Energy and Climate Commission, 68 pages, August 2009) will assist policy-makers and regulators to make informed decisions regarding global climate change impacts of transportation fuels.
Kirstein, Arthur	Palm Beach County - South	Ag-Oil, LLC. Jatropha curcas Biodiesel Project. Agronomic and Import seed assistance. Secured Palm Beach County Property Appraisers renewable fuel land use designation.
Minogue, Patrick J	North Florida REC - Quincy	Working with other faculty at the NFREC, I organized an IFAS Biofuels Planning Meeting in August 2009 which was attended by four bio-energy companies developing plants in North Florida, the three largest forest industry companies in Florida, the three largest industrial forest landowners, the largest forest seedling producer in the Southeast, two consulting firms working in bio-energy, and nine Extension faculty to identify common needs regarding production of fuel stocks to support the bio-energy industry. The facilitated discussion identified key Extension needs as well as research needs and priorities, which have cost-efficiency and sustainability as a common theme. As a follow-up to this meeting we met with Buckeye Cellulose in Perry, FL which is expanding their electricity generating capacity and building a cellulosic ethanol/plastic research and

		production facility in collaboration with University of Florida faculty working with cellulosic ethanol technologies. This meeting brought together business professionals, engineers, agronomists, foresters, soil scientists, tree genetics scientists, scientists from the UF Carbon Center, and hydrologists to determine and prioritize research and educational needs.
Monroe, Martha C	Sch Forest Resources & Cons	The Wood to Energy Outreach Program raised awareness and knowledge about the use of wood for energy in communities across the South. In Missouri, Kentucky, and Florida our program materials were used to inform discussions and contribute to decisions about resource utilization. We trained 75 Biomass Ambassadors who report using our materials as a reference guide when writing press releases, as a source of handouts when conducting workshops, and as a template for magazine articles. One respondent said, "It's a fabulous resource. It's one of the best collections of information in one place and with the back up support from the web pages too. It's just a fantastic resource that you normally don't have for trying to put on programs like this, especially for emerging issues." Our materials were also used successfully in Idaho, even though that isn't exactly the South!
Olson, Clay B	Taylor County - Northeast	In 2008, Federal and State governments have taken an interest in alternative energy. As a result Taylor County Extension has partnered with a local small business and a local broiler poultry farm to apply for funding to generate electricity (heat and power) from poultry litter using gasification technology. The state funded a 475K request to develop this demonstration project, contracts are being signed, ground breaking should be sometime in early 2010.
Pullammanappallil, Pratap C	Ag & Bio Engineering	Successful operation of St. Johns County Biodiesel facility through close interaction with operator for diagnosing operational problems. Impact- St. Johns County Public Works department now operates its vehicles on biodiesel.
Taylor, Jennifer	FAMU	Capacity Building: Building a Sustainable Alternative Energy Model for Small Farms: The FAMU Whole Farm Sustainable Biofuels Demonstration Project began in 2006 when the first hands-on Using Alternative Fuels Workshop was held on an organic methods farm in Sopchoppy. At this workshop the small farmer and participants gained skill and knowledge to make biodiesel fuel from used/recycled vegetable oil, and to make processor. Small farmer produced biofuels to run all on-farm equipment, tractor, backhoe, and truck. Alternative energy workshops have ranged from beginners through intermediate/advanced levels. 2009 Provided a workshop on "Biofuels" and the success and impact of the active FAMU Small Farm Sustainable Biofuels Research and Demonstration Project to participants at the 2009 North Florida Fair. The FAMU Biofuels Small Farm Project success story was published in USDA Small FARM Digest on Bioenergy/Winter 2009. Over 300 people have participated in the hands-on workshops. 2009 Participatory planning and development of upcoming 2010 capacity building sessions with state and regional collaborators.
Ward, Bruce H	Walton County - Northwest	Agents at the Walton County Extension Office have been involved in renewable energy programming for 5 years. This program has produced a working biodiesel production unit. The unit has been used to demonstrate the potential energy production from peanuts, soybean, canola, sunflowers and other oil seeds. As the need for domestic energy is projected to be even increasing the knowledge associated with the developments in this program will become more important. This office is recognized regionally for the work we have done in the area of renewable energy.