

## **Making Integrated Pest Management Part of Your Farm Every Day**

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Have you ever wondered what you could do to get rid of the bugs on your fruits or vegetables without spraying all the time? Well, so have the faculty and staff at the UF/IFAS North Florida Research and Education Center- Suwannee Valley (NFREC-SV) in Live Oak. To put thoughts into action, the Extension faculty at the Center, on campus and surrounding county Extension offices were able to secure USDA Integrated Pest Management grant funding for a three year project to transform the research center farm into an integrated battleground against pests. The overall goal of this project is to create a unique, hands-on, whole farm “Living Extension IPM Field Laboratory.” This specialized IPM learning environment will be used to interactively demonstrate how to enhance a farm’s ecosystem for Suwannee Valley crop farmers. The specific objectives are to: 1) Create a field laboratory by transforming an existing traditional research center farm into a model that can be used to teach IPM principles and techniques beyond the classroom, 2) Teach clientele whole farm approaches to adopting IPM systems, and 3) Build a sustainable education infrastructure and networking capacity for future IPM information delivery. We think the demonstrations will be interesting not only to area crop producers, but also to other county Extension Agents, Master Gardeners, students, IPM volunteers, youth, rural land owners and decision makers.

NFREC-SV is a perfect venue for transforming an existing beautiful 330-acre farm into a living, hands-on IPM teaching laboratory. It is well-known for its small farm, hydroponic, alternative enterprise, water and nutrient management Extension programs. The Center has recently developed an exceptional specialty crop demonstration capacity, including a five-acre demonstration fruit crops orchard, a two-acre organic vegetable production area, three demonstration hydroponic greenhouses, one open shade structure, a ten-acre area for drip irrigated vegetable production, two center pivot irrigated areas for vegetables and other specialty crops, thirty acres of forage crops (including specialty forages, such as perennial peanut for ornamental uses), and a small planting of cut flowers and foliage. The farm also has border areas in a hardwood and pine forest and a seven-acre natural spring-fed lake that will serve as key ecological habitats.

Recently, Extension activities at the Center have focused on the development of an outreach program targeting alternative enterprises for small and medium-sized farms. This has been very successful and led to the development of the UF Small Farms Academy (<http://nfrec.ufl.edu/smallfarmsacademy>). The Academy focuses on business planning, marketing, crop selection and culture, food safety, irrigation, and nutrient management. Workshops have been very popular largely because they have incorporated a substantial hands-on component. Participants ranked IPM as a high priority and want it to be a major component of the Academy. Many Academy participants are new to farming, as evidenced by the 2007 census data showing an 8% increase in the number of farms in Florida from 2002 to 2007. All of this

increase was in the small farm category and, in Florida; approximately 90% of all farms are small farms.

This escalation of small farms and beginning farmers and ranchers provides an excellent opportunity to expand the Academy by adding a comprehensive Living Extension IPM Field Laboratory. The Laboratory will include but is not limited to: maintaining annual and permanent plantings that attract beneficial organisms and provide year round habitats, demonstrating strategic trap cropping systems, providing beneficial vertebrate habitats (e.g., bat houses, bluebird houses, and chickadee houses), utilizing banker plant systems (especially in greenhouse programs), demonstrating how to increase pollinators, and enhancing the ecological contribution of the lake and surrounding forest. For instance, sunflowers and buckwheat plantings are used to increase pollinators (bees, flies and wasps) and natural enemies in a field and also are good at attracting pests like stink bugs which can then be killed before they attack the crop. Even one more IPM benefit is tall sunflowers provide protection and perching points for insect eating birds. A five acre vegetable planting at the Center this spring has been interplanted with a row of mixed sunflower and buckwheat every 40 feet. This field has been scouted weekly for pests and the integrated approach has resulted in a reduction of 4-5 insecticide applications in just the first two months of the project alone. Stay tuned for the full impact of the newly implemented approach as we build the field laboratory to teach IPM and be on the lookout for upcoming educational programs.