Delivering Extension Using The Living Integrated Pest Management Field Lab Robert Hochmuth Multi-County Extension Agent Suwannee Valley

Florida farmers, gardeners, and landowners today are more interested than ever in learning how to implement integrated pest management (IPM) techniques on their land. Extension agents also have a keen interest in teaching IPM. To put thoughts into action, the Extension agents in the NE Extension District along with several statewide specialists were able to secure USDA Integrated Pest Management grant funding for a three-year project to transform the farm at the Suwannee Valley Extension Demonstration Unit in Live Oak 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, garden or other land ecosystem. 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. 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.

The UF farm serving the Suwannee Valley 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 tenacre 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 foliages. 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.

The field laboratory will include but will 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.