

FLORIDA EXTENSION INITIATIVE 3:

ENHANCING AND CONSERVING FLORIDA'S NATURAL RESOURCES AND ENVIRONMENTAL QUALITY

STATEWIDE EDUCATIONAL PROGRAMS IN **NATURAL RESOURCES OPERATIONS**

SITUATION

Florida's natural resources and environment are vital to a strong economy and sustainable communities. The natural environment is directly connected to tourism, sustainable community development, human health, and jobs. Natural resources must be conserved and enhanced to develop and support a strong local economy. For communities to flourish, Florida must actively manage finite natural resources and develop strategies to minimize environmental impacts.

PROGRAM OBJECTIVES

- (1) Prevent economic loss from nuisance and invasive non-native species, and
- (2) Change land use practices that degrade natural resource values and promote income-generating activities that do not degrade natural resource values

EDUCATIONAL METHODS

#1 ECONOMIC LOSSES AND OPPORTUNITIES OF INVASIVE SPECIES

(The following Programs are listed by order of priority as determined by the committee)

Program area 1A - Strengthening partnerships through CISMA (Cooperative Invasive Species Management Areas)

Maximize use of existing partnerships: Keep Florida Beautiful, Farm Bureau, FLEPPC-Florida Exotic Pest Plant Council, FISP-Florida Invasive Species Partners (state level), CISMA (Cooperative Invasive Species Management Areas), Center for Aquatic & Invasive Plants (Luke Flory-IFAS Assessment of Non Native Plants) other UF/IFAS departments/RECs, Forest Stewardship, WMDsFVMA, FWC, NOAA

Maximize use of existing programs: Aquatic Weed Control Short Course, IFAS Assessment of Non-Native Plants in Florida's Natural Areas by S. Luke Flory and Deah Lieurance

Challenges:

1. You can't eradicate invasives, only reduce potential impacts
2. Provide economic impacts to convince legislature to invest in this program.

Audience: landowners, cities, county government, management or control specialists, nurseries that sell exotic plants, Small Business Administration

Activities:

1. CISMA (15 in the state) needs leadership - have a more formalized IFAS leadership to help with the CISMAs coordination and other concerted efforts
 - a. Funded positions (propose 5 FTEs - one per extension district (preferred) or % of job duties of existing county faculty. The duties will include:
 - i. coordinate CISMA in each district
 - ii. identify & seek grants to manage "hot listed" species
 - iii. conduit of info from IFAS to CISMA *Timeline-asap or when logistically possible*
 - iv. Liaison to Center for Aquatic and Invasive Plants in Gainesville
Immediate concern - do now.
 - v. coordinate people to control invasives
 - vi. keep records of land/acres impacted and treated
 - vii. maintain a list of pesticide applicators for exotics by county
2. Get big stakeholders to express the need of the 5 FTEs and emphasize the need for economic impact

3. Bring a CISMA partner to talk at district faculty meeting
4. Create new position for a non-tenure tract economist to focus on the value of natural resources and impact of invasives
5. Generate easy-to-read fact sheets that identify CISMA's functions
6. Identify funding to pay for contractors to eradicate
7. Train more volunteers
8. Identify funding for chemicals
9. Increase funding for biological control
10. FWC - herbicide bank for public lands (educate our local government on this)
11. 4-H programming
12. GPS markers for farmers
13. Master gardeners

Evaluation/outcomes:

1. Knowledge gained
2. Better coordination resulting in more management of invasives
3. Increased acres treated over baseline acres and species type
4. Increased number of volunteers and participating/hours
5. One on one consultations/educational opportunities sharing info on control measures (how many phone calls did you address when private owner management an exotic)
6. Economic values of the improvements (need help from FRED or district economist)

Suggested Team members to move this program forward: Brooke Saari, Chris Demers, Brent Sellers, John Atkins

Program area 1B - Utilizing invasive species for economic purposes or to reduce economic losses

(e.g., mealeuca, cogongrass) – technology transfer from UF to private contractors or entrepreneurs

Audience: counties, townships, and landowners

Activities:

1. Economic feasibility analysis

Timeline: July 1, 2013

2. What are current regulatory issues on collection, propagation, re-sale

Timeline: July 1, 2013

3. Develop guides/bulletins including possible consequences of various uses, e.g., food safety for consumptive uses of exotic animals and plants; plants for biofuels, mulches (background needed - what are other states doing, are there any fact sheets

Timeline: October 1, 2013

Evaluation/outcomes:

1. Knowledge gained
2. Practices adopted
3. Economic gains or loss reduction (need help from FRED or district economist)

Suggested Team members to move this program forward: Pat Minogue

Program area 1C - Enhancing nuisance wildlife trappers practices:

Audience: entrepreneurs and existing wildlife trappers

Activities:

1. Teach most effective and humane methods of capturing, euthanizing, etc.
2. Provide information regarding uses/deposition, e.g., hog and lion fish recipes
3. Education on exotic animal amnesty days
4. Identify funding to support these activities
5. Feasibility needs & people to coordinate > IFAS partner with FWC

timeline: planning meeting – July 1

Evaluations/outcomes

1. Knowledge gained
2. Practices changed/adopted
3. Economics of businesses impacted by practice changes (need help from FRED or district economist)

Suggested Team members to move this program forward: Barton Wilder, Bill Giuliano, Holly Ober, John Atkins

Program area 1D –Enhancing cottage/incubator industries for IPM (business plan/models including permitting)

Audience: landowner, weed control/pest control applicators, college students (career days), EG/innovation square

Activities:

1. Disseminate information to public to create awareness/demand for the training program.
2. Economics of potential business opportunities – e.g., Enterprise budgets, return on investments, and projected business plans
3. Identify market opportunities – gov’t contracts, state, county and local
4. Partnerships to develop training – economist, business development specialist, biologists
5. Conduct trainings sessions – ie. Mass rearing of biological control agents
6. Look for opportunities for funding to provide bricks and mortar facilities
7. Conduct feasibility studies as first step for each endeavor (need help from FRED or district economist)

Evaluations/outcomes

1. Knowledge gained
2. Number of potential entrepreneurs who make good business decisions based on information received during trainings
3. Economic gains or losses reduced

Suggested Team members to move this program forward: Jim Cuda

#2 CHANGING LAND USE PRACTICES DEGRADES NATURAL RESOURCE VALUES

Program area 2A: Stopping the degradation of natural resource values caused by changing land use practices.

Developing additional income streams & savings that provide incentives to conserve ecological values of private lands. Additional income streams can include:

1. Hunting leases
2. Nature-based tourism
3. Business plans
4. Liability
5. Habitat enhancement
6. Fee fishing
7. Multi-cropping
8. Aquaculture
9. pine straw and timber
10. campground

Partnerships: FWC, Longleaf Alliance, Southern Pine Forestry Regional Research Station, Gulf Coastal Plain Ecosystem Partnership (GCPEP, Hillsborough College), WMDs

Audiences: landowners

Challenges:

1. Liability (2013 statute reduces liability for landowners)
2. Creating matrices for measuring profitability
3. Regulations
4. Landowner's reluctant to divulge information
5. Cost of running operations & fees
6. Customer services - different way of life
7. Lack of interpretation skills

Current programs:

1. Florida Stewardship (statewide)
 - pinestraw, agro forestry, silvipasture, habitat enhancement, forest health, hunting leases, non-consumptive uses
2. Forest Vegetation Management Program (regional)
 - silviculture, fire mgmt, wildlife mgmt, opportunities for hunting leases, wildlife non consumptive use, fuels mitigation
3. Hardshell Clam Production - Leslie Sturmer; Tropical Fish - Craig Watson in Ruskin; IRREC - Courtney OHS saltwater baitfish & Geoff Wallat
4. Freshwater Plant Production - Lyn Gettys; tilapia, catfish - food fin fish; Gator fish

Activities:

1. Needs assessment –!!! to determine if information that will produce profitability for these venues (review the aquaculture review council research priorities; need help from FRED or district economist)

Timeline - needs to be done first

2. Create linkages with small business administration and other partners

Timeline: step 2 after needs assessment

3. Identify the partners and identify successful models

Timeline: after needs assessment

4. Look at Apalachicola oyster businesses as potential models

Timeline: after needs assessment

5. Look at Leslie Sturmers' hard clams model
6. Better coordination of more business related focus within IFAS for forested lands

Timeline: after needs assessment

7. Small farms academy - add NR business training to agenda.

Timeline: step 3

Evaluations/outcomes:

1. Knowledge gained
2. Profitability of the enterprise - what are the bottom line sales (any increased income from the new enterprises)
3. Determine long term adoption/practices that affect the bottom line
4. Number of new jobs produced by these additional income streams

Suggested Team members to move this program forward: Holly Abeels, Scott Jackson, Chris Demers, Jeff, Barton Wilder, Chuck Cichra, Pat Minogue, Brook S., Lisa Hickey, Christa Kirby, Libby Johnson

NEEDS

Compile/develop consistent statewide evaluation strategy for documenting program impacts

SUPER ISSUES

- ❖ Resource sustainability and conservation in Florida communities.