

## FLORIDA EXTENSION INITIATIVE 1:

# INCREASING THE SUSTAINABILITY, PROFITABILITY, AND COMPETITIVENESS OF AGRICULTURAL AND HORTICULTURAL ENTERPRISES

## STATEWIDE EDUCATIONAL PROGRAMS IN **SUSTAINABILITY OF PRODUCTION SYSTEMS AND ALTERNATIVES**

### Animal Systems

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#### SITUATION

##### External Situation:

In FL, animal and animal product-based agriculture on over 5 million acres of pastureland and water area generated over \$1.7 billion product sales, hay sales generated \$60 million, and equine product value generated over \$2.2 billion. However, input costs (including seed, fertilizer, chemicals, and feed) have increased dramatically in recent years while commodity prices (meat, seafood, milk, ornamental species, hay, and silage) have remained stagnant or decreased. Likewise, increasing regulatory requirements, competition for land and water use, and escalating land value challenge the profitability and long-term economic viability of animal production and forage enterprises. It is imperative that we work with local stakeholders to promote strategic production practices that will ensure the future sustainability and profitability of these systems.

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#### PROGRAM OBJECTIVES

- 1) Animal and forage enterprise management:
    - a) Enhance the adoption of technology and management of livestock production enterprises to impact sustainability and productivity of Florida livestock operations. Enhance the adoption of these technologies to 30% of all enterprises within 5 years.
  - 2) Good agricultural practices for natural resource stewardship:
    - a) Increase adoption of management practices that create a natural balance of native plants and animals within animal production systems. Increase the adoption of these practices to 25% of all enterprises within 5 years;
    - b) Increase adoption of best management practices in water quality, air quality, animal health, and invasive species. Increase the adoption of these management practices by 3% annually through implementation of BMPs;
  - 3) Total quality assurance (live animal and animal product quality assurance, food safety, animal well-being):
    - a) Increase adoption of practices that lead to the production of safe, wholesome foods, healthy live animals, and feeds. Enhance awareness of these practices to yield an increase of 25% of enterprises adopting such practices.
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#### EDUCATIONAL METHODS

This priority area will utilize educational methods for a broad variety of stakeholders including youth, producers, industry professionals, and policy makers. Programming areas of focus are as follows:

##### Signature Programs:

- a) Animal and forage enterprise management
- b) Good agricultural practices for natural resource stewardship
- c) Total quality assurance (live animal and animal product quality assurance, food safety, animal well-being)

Supporting Programs will focus on:

- a) Pest management
- b) Animal management
- c) Environmental stewardship
- d) Infrastructure improvement

Educational methods that will be used to implement the objectives are face to face programming, hands-on experiential learning (field days, workshops, reproduction schools), apps, social media, virtual field days and videos, in-service trainings, research updates, agent webinars, on-farm demonstrations, research trials, multi-county programming, agent-specialists relationships, publications and creative works: web-based and newsletters (factsheets, EDIS documents, publications, web-based, newsletters) and exhibits.

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## RESULTS

Long term: Optimize profitability of animal production systems within natural and environmental constraints.

Mid-term: 

- 1) Increase production output per production unit;
- 2) Increase income and decrease cost;
- 3) Improve precision of resource utilization;
- 4) Increased adoption of Good Agricultural Practices (BMP's, BQA, etc.).

Short-term: 

- 1) Increase use by animal producers of more efficient agricultural technologies;
- 2) Increase understanding and engaging producers in local, state and federal regulations that affect the animal industry;
- 3) Increase diversification of animals in production;
- 4) Improve utilization of feed, fuel, and fertilizers, and pharmaceuticals/drugs/chemicals.

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## NEEDS

Critical needs for implementation of objectives:

- 1) Funding for in-service training for county faculty;
- 2) Evaluation support for Extension programs;
- 3) Animal production and forage enterprise budgeting and marketing specialist to assist in assessing impact;
- 4) Resources to discover immediate impact of changes;
- 5) Reliable, current, searchable contact list of animal production, aquatic resource, and forage state and county faculty;
- 6) Agronomic Entomologist;
- 7) Programmatic funding for establishing on-farm demonstrations and graduate assistantships in Extension;
- 8) Educational coordinator/communication to support development of electronic media.

## SUPER ISSUES

What Super Issue does this Priority Work Group relate to? [**Must list at least one.**]

- ❖ Awareness and appreciation of food systems and the environment.
- ❖ Resource sustainability and conservation in Florida communities.
- ❖ Financial management for individuals and enterprises.
- ❖ Science, technology, engineering, and math (STEM) opportunities for youth.
- ❖ Help Floridians develop healthy lifestyles.

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Animal Systems Team Members

<b>Name</b>	<b>Email</b>
Ashley Fluke	afluke@ufl.edu
Bridget Carlisle	bccarlis@ufl.edu
Carrisa Wickens	cwickens@ufl.edu
Christa Kirby	ccarlson@ufl.edu
Cindy Sanders	sanders1@ufl.edu
Courtney Davis	cbdavis@ufl.edu
Dan Fenneman	dfenneman@ufl.edu
Doug Mayo	demayo@ufl.edu
Ed Jennings	edjennin@ufl.edu
Elena Toro	etoro@ufl.edu
G. Cliff Lamb	gclamb@ufl.edu
James McWhorter	jcm0033@ufl.edu
Jed Dillard	dillardjed@ufl.edu
Joao Vendramini	jv@ufl.edu
John Arthington	jarth@ufl.edu
Jose Dubeux	dubeux@ufl.edu
Mark Mauldin	mdm83@ufl.edu
Mark Warren	mwwarren@ufl.edu
Mary Beth Sowerby	meso@ufl.edu
Matthew Hersom	hersom@ufl.edu
Mike Davis	michael.davis@ufl.edu
Mike Goodchild	mjgo@ufl.edu
Nicolas DiLorenzo	ndilorenzo@ufl.edu
Philip Lancaster	palancaster@ufl.edu
Roy Yanong	rpy@ufl.edu
Sharon Gamble	sgamble@ufl.edu
Sydney Hayter	sydneyrh@ufl.edu
Tim Wilson	timwilson@ufl.edu
Joe Walter	jwalter@ufl.edu

## Animal Systems – Logic Model

### Situation

- In Florida, animal and animal product based on over 5 million acres of pastureland and water area generated over \$1.7 billion product sales, hay sales generated \$60 million, and equine product value generated over \$2.2 billion.
- However, input costs have increased dramatically in recent years while commodity prices have remained stagnant or decreased.
- Increasing regulatory requirements, competition for land and water use, and escalating land value challenge the profitability and long-term economic viability of animal production and forage enterprises.
- Numerous programs already exist that focus on education of stakeholders to enhance knowledge and profitability of operations, but additional methods of education are required as the industry changes.
- It is imperative that we work with local stakeholders to promote strategic production practices that will ensure the future profitability of these systems.

### Objectives

#### Animal and forage enterprise management:

- Benchmark the current adoption of technology and management;
- Target programs to increase adoption of technology, practices, management practices with the greatest economic impact.

#### Good agricultural practices for natural resource stewardship:

- Increase adoption of management practices that create a natural balance of native plants and animals with animal production systems;
- Increase adoption of management practices in water quality, air quality, animal health, and invasive species.

#### Total quality assurance (live animal and animal product quality assurance, food safety, animal well-being):

- increase adoption of practices that lead to the production of safe, wholesome foods, healthy live animals, and feeds.



### Inputs

- Extension faculty and staff
- Financial resources
- Educational materials
- Equipment
- Technology
- Partnerships with stakeholders such as:
  - IFAS Units and Extension
  - Industry partners (i.e., commodity groups, Farm Bureau etc.)
  - Federal, state and local government

### Outputs

#### Signature Programs:

- Animal and forage enterprise management
- Good agricultural practices for natural resource stewardship
- Total quality assurance (live animal and animal product quality assurance, food safety, animal well-being)

#### Supporting Programs :

- Pest management
- Animal health management
- Environmental stewardship
- Infrastructure improvement

#### Activities:

- Face to face programming
- Hands-on experiential learning (field days, workshops, reproduction schools)
- Smart phone applications
- Social media
- Virtual field days and videos
- In-service trainings
- Research updates
- Agent webinar
- On-farm demonstrations research trials
- Multi-county programming
- Agent-specialists relationship
- Web-based and newsletter publications
- Exhibits.

### Assumptions

- Faculty will receive the necessary professional development
- Extension is committed to supporting education in animal systems
- Animal systems are critical to the economic and environmental viability of Florida

#### Participants:

- Producers
- Industry personnel
- Extension personnel
- Policy makers
- Consumers



