



Livestock and Horses

**Introducing Florida's
Livestock and Horse Industries**





Livestock and Horses Module

Introducing Florida's Livestock and Horse Industries

Workbook

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www.flsart.org

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About Florida SART

SART, the Florida State Agricultural Response Team, is a multi-agency coordinating group consisting of governmental and private entities dedicated to all-hazard disaster preparedness, planning, response and recovery for the animal and agriculture sectors in Florida.

SART operates at the local level through county SART organizations.

SART utilizes the skills and resources of many agencies, organizations and individuals with its multi-agency coordination group structure.

SART supports the county, regional and state emergency management efforts and incident management teams.

SART Mission

- Empower Floridians with training and resources to enhance animal and agricultural disaster response.

SART Goals

- Promote the establishment of a coordinator in each county responsible for all agriculturally related incidents.
- Provide assistance in the development and writing of ESF 17 plans.
- Promote the establishment of a county SART in each county to serve as a multi-agency group to support emergency management and incident management teams.
- Provide annual training for all SART and agriculturally related personnel.
- Identify county resources available for an emergency or disaster.
- Promote county cooperation at a regional level for mutual aid.

SUBJECT:	Introduce participants to Florida's livestock and horse industries.
GOAL:	To empower SART team members with background knowledge of the breadth, characteristics and composition of the livestock and horse industries in the state.

LEARNING OBJECTIVES

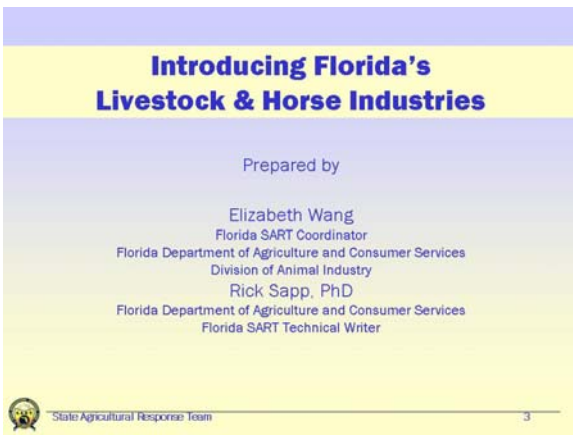
At the end of this training unit, participants will be able to:

1. Briefly describe why livestock and horses create viable industries in Florida.
2. Name locations of industry concentration.
3. List and discuss some of the characteristics of Florida's livestock and horse industries.
4. Name the agencies involved with livestock and horses and describe their roles.
5. Identify key resources available for more information.

Slides 1-3







Slides 4-6


Acknowledgements

- **Photographs and diagrams**
 - Florida Dept. of Agriculture & Consumer Services
 - Institute of Food & Agricultural Sciences, University of Florida
 - Elizabeth Wang, FDACS, Florida SART Coordinator
 - Rick Sapp, PhD
 - United States Department of Agriculture
 - United States Food & Drug Administration
 - United States Geological Survey
 - National Weather Service

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Learning Objectives


- Describe why livestock and horses are viable industries in Florida
- List and discuss characteristics of the Florida livestock and horse industries
- Name the stakeholders involved with livestock and horses and describe their roles
- Identify key resources used to produce this unit that participants can easily access for more information

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Livestock and Horses in Florida

- 26 million poultry
- 1.5 million beef cattle
- 350,000 horses
- 140,000 dairy cattle
- 100,000 swine
- 30,000 goats
- 10,000 sheep




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Slides 7-9

Livestock and Horses in Florida

- Additionally, there are thousands of exotic species (zebra, wildebeest, red deer, etc.) and millions of rabbits and companion animals: dogs, cats, ferrets, hamsters, birds, fish, exotic snakes and spiders and so on.



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Livestock and Horses in Florida

- Sales of livestock: more than \$1.48 billion
- About 22% of cash receipts for farms and ranches
- Florida's horse industry generates \$2.2 billion
- The total horse industry impact is \$7 billion



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About Statistics and Statisticians




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Slides 10-12

Agriculture on the Edge

By the year 2030, Florida will have 30 million residents.



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Agriculture on the Edge

The animal sector of Florida agriculture is strong because it is diverse, with numerous mini-economies, many profit streams, and a diverse base of products and customers.



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Agriculture on the Edge

Uncounted millions of domestic animals – pets!



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Slides 13-15

Farm Size and Land Use

- 44,000 commercial farms using 10,414,877 acres (30.1% percent of the state's total acreage)
- Range and pastureland use another 3,400,193 acres
- Improved pastureland comprises 813,694 acres
- Some land that horses are kept on may be classified as residential



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Florida's Climate is Ideal

- A long state: 700 miles, Pensacola-Key West
- Average highest temperature: Naples 85°
- Average lowest temperature: Gainesville 58°
- Annual rainfall: Highest in Panhandle and on SE Coast
- A humid state: No point is more than 60 miles from salt water or higher than 345' above sea level

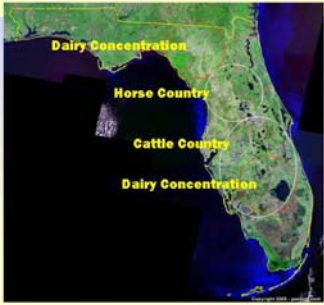


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Location of Farms and Ranches

Throughout the state, but concentrated in

- Horses: Marion County
- Dairy: Suwannee River Valley, Okeechobee Area
- Cattle: South Central Area



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Farm Size and Land Use

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The Farm and Ranch Workforce

A total of 800,000 people are in the farm-and-ranch workforce in Florida: full- and part-time, seasonal and migrant.



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Livestock Product Values

Sales of more than \$1.2 billion in 2003

- \$356 million for dairy products
- \$333 million from beef
- \$324 million from poultry
- More than \$166 million from miscellaneous other livestock products like hogs, honey, sheep and lamb's wool and others





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Slides 19-21

Dairy Cattle


- 189 dairy farms
- 142,000 dairy cows
 - 1st in Southeast for number of cows, 16th nationally
 - Okeechobee county has the most dairy cattle, 30,000 head in 2004
- Farmers milk an average of 750 cows per farm




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Dairy Cattle

- Per cow milk production 15,218 pounds (about 5 gallons/day/cow)
 - All dairies collectively produced 2.16 billion pounds of milk
- Ice cream production is about 43 million gallons
 - Other frozen foods production about 47 million gallons



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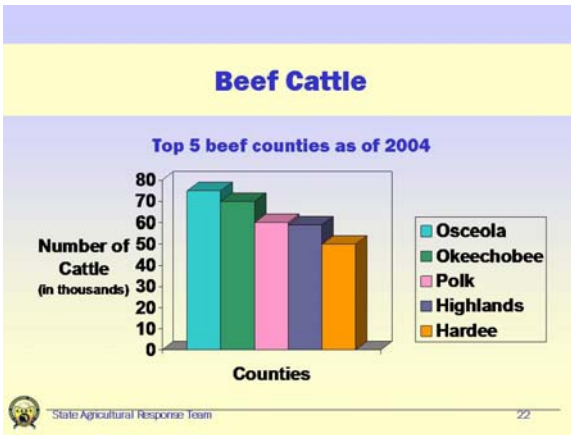
Beef Cattle

- 15,800 beef operations in Florida with 950,000 head as of 2004
- Ranked 12th in beef cows nationally and 3rd east of Mississippi River
- 920,000 calves born in 2003, 662,000 of which were marketed
- Large-scale beef producers not the norm: 80% of herds have less than 50 head



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Poultry

A poultry farm in central Florida. Operations such as this one can house in excess of one million animals.

- Florida is 12th in number of chickens on farms (2003)
- 10.8 million layers produced 2.8 billion eggs and \$145 million in sales
- 91.3 million broilers produced 511.3 million pounds of meat and \$179 million in sales

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The Swine Industries

- Swine
 - Commercial hog slaughter of 108,200
 - Average live weight was 176 pounds
 - Value \$5.27 million
 - A traditional source of farm income (apparently downsizing now in Florida)



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The Bee/Honey Industries

- Honey
 - 3rd in production nationally
 - 14,910,000 pounds of honey in 2003 from 210,000 colonies
 - Value of \$20.1 million



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The Bee/Honey Industries



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Horses!

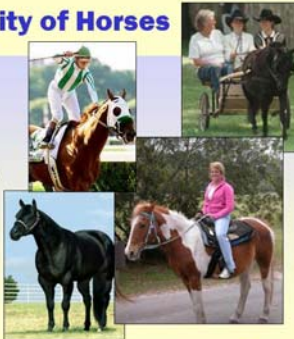
- About 299,000 horses in Florida
- 12,753 horse and pony farms (2002 Ag Census)
- More than 70% are used for showing and recreation
- \$6.5 billion overall impact on state GDP
- Produce goods and services of \$2.2 billion



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The Diversity of Horses

- Many breeds and disciplines are found throughout the state
- Marion County has more horses and ponies than any other county in the U.S.
 - Known as "Horse Capital of the World"
 - More than 900 farms in Marion County



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Thoroughbreds

- Over 600 thoroughbred farm and training facilities
 - More than 75% in Marion County
- Moderate Florida climate provides ideal place to "winter" racehorses




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Slides 31-33

Stakeholder Involvement in the Livestock and Horse Industries


- State
 - Florida Department of Agriculture and Consumer Services (FDACS), Divisions of Animal Industry and Dairy
- Federal
 - United States Department of Agriculture, Animal and Plant Health Inspection Service (USDA-APHIS)
- Academia
 - University of Florida, Institute of Food & Agricultural Sciences
- Private
 - Producers
 - Hobbyists
 - Suppliers

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Stakeholder: FDACS


- FDACS: "Serves the animals and citizens of Florida by preventing, controlling and eradicating certain infectious or communicable diseases of livestock and other domestic animals."
 - Animal ID program
 - Animal movement monitoring
 - Processing of health certificates
 - Livestock hauler permitting
 - Marks and brands program



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Stakeholder: FDACS, Division of Animal Industry

- Poultry
 - Poultry Disease Control Unit
 - Conducts inspections, takes samples, monitors for AI and END
- Cattle
 - Inspected at markets
 - Monitoring and testing for brucellosis, tuberculosis, TSEs, Johne's Disease and CWD
- Goats and Sheep
 - Scrapie-free Flock Certification Program (SFCP)

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Stakeholder: FDACS, Division of Animal Industry

- Equine
 - CEM, EIA, EP, arboviruses, EEE, WNV monitoring
- Swine
 - Swine brucellosis, pseudo-rabies and garbage feeding operation monitoring
- Other
 - Cervidae
 - Reptiles and amphibians
 - Companion animal and other small animals




This remarkable deer, extinct in the wild in its native land, is found in Florida. Can you name the deer and tell where it may be found?

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Stakeholder: FDACS, Division of Dairy

Bureau of Dairy Inspection
Bureau of Dairy Compliance Monitoring

- Issues permits and performs inspections of dairy facilities, transport tankers and bulk milk haulers
- Also collect samples to test for bacteria, antibiotics, water and other impurities
- Weight checking conducted for past 17 years



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Stakeholder: US Department of Agriculture, APHIS

- BSE testing and monitoring
- Animal and animal product import permits and enforcement of export requirements
- Licensing and registration associated with the Animal Welfare Act (AWA)




BSE or mad cow disease has appeared at least eight times in the US.

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Slides 37-39

Stakeholder: UF, IFAS and College of Agriculture



Research
Teaching
Extension

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Stakeholder: The Private Sector

- Producers
 - Beef cow-calf and dairy cows
 - Thoroughbred and horse breeders
 - Poultry, swine, sheep, goats and others
- Hobbyists
 - "Hobby farms," horse show participants
 - Racing spectators



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Key Resources


- United States Dept. of Agriculture (USDA)
 - www.usda.gov
- Florida Dept. of Agriculture & Consumer Services (FDACS)
 - www.doacs.state.fl.us
- FDACS Division of Animal Industry
 - www.doacs.state.fl.us/ai/
- FDACS Division of Dairy
 - www.doacs.state.fl.us/dairy/
- Sunshine State Horse Council
 - www.sshc.org

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Key Resources

- "The Florida Horse Industry" (an FDACS brochure)
– www.florida-agriculture.com/pubs/pubform/pdf/Florida_Horse_Industry_Brochure.pdf
- "The Florida Agriculture Statistical Directory"
– www.florida-agriculture.com/pubs/pubform/pdf/Florida_Agriculture_Statistical_Directory_2004.pdf
- "Florida Department of Agriculture Annual Report 2004"
– www.florida-agriculture.com/pubs/pubform/pdf/FDACS_Annual_Report_2004.pdf
- FDACS' Division of Marketing and Development Web site provides information to agribusinesses and the general public about Florida agriculture
– www.florida-agriculture.com

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Key Resources

- USDA-APHIS National Center for Import and Export (NCIE) www.aphis.usda.gov/vs/ncie/
- United States Dept. of Health & Human Services, Centers for Disease Control (CDC) www.cdc.gov
- American Veterinary Medical Assn. www.avma.org

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Now, Test Your Knowledge and Awareness (1 of 4)

1. (circle the best answer) The largest agricultural sector of Florida's economy is:
a. Citrus b. Cattle
c. Forestry d. Chickens
2. (True or False) Florida's humid sub-tropical climate compounds the difficulties of maintaining viable economic sectors for large animals – beef and dairy cattle and horses.
3. (circle the best answer) What fraction best represents the total land devoted to farms and ranches (not, however, including tree farms or forests) in Florida?
a. 1/3 b. 1/4
c. 1/10 d. 2/3

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Slides 43-45


Test continued (2 of 4)

4. Which one of the following is not considered livestock in Florida?

- a. exotic imported animals such as zebras
- b. Poland China hogs
- c. honeybees
- d. Siamese cats
- e. all of the above can be considered livestock

5. (fill in the blank) The Florida county with the greatest concentration of horses in the US is _____.

6. (True or False) The heart of Florida's beef cattle industry lies below the Tampa-Orlando-Cape Canaveral growth belt.

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Test continued (3 of 4)

7. (circle the best answer) The honeybee, a beneficial, but exotic import into the early American colonies, is now threatened by:

- a. a combination of killer mites and Africanized bees
- b. a decline in the public's interest in honey
- c. artificial methods of pollination
- d. none of the above is important in the future of the honeybee

8. (circle the best answer) What does it mean that a person, a corporation or an agency of government has "stakeholder involvement" in the horse and livestock industries?

- a. Those entities have placed legitimate bets either at an authorized racetrack or are wagering on the futures market.
- b. Those entities have an interest in the viability of the economic sector.
- c. "Stakeholder" is a short-hand term for the person who holds the reins of a winning racehorse once a course has been run.

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Test continued (4 of 4)

9. Which of the following is not a role of the Florida Department of Agriculture and Consumer Services, Division of Animal Industry:

- a. monitoring for brucellosis in hogs and pigs
- b. maintaining an alert status for avian influenza
- c. periodically surveying cattle for "mad cow" disease
- d. the quarantine of mink coats to halt mink-flea wart spread
- e. controlling exotic deer transport to prevent chronic wasting


10. (circle the best answer or answers from your point of view) This is an *opinion sampler*, not a test question. Please give us your most thoughtful reply. Florida's livestock and horse industries:

- a. have a bright future
- b. are threatened by the growth of Florida's human population
- c. have a limited future
- d. will not be viable in our children's adult lifetimes

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Test Answer Key


1. (c) Forestry
2. False
3. (a) 1/3
4. (e) all of the above can be considered livestock
5. Marion
6. True
7. (a) a combination of killer mites and Africanized bees
8. (b) That those entities have an interest in the viability of that economic sector.
9. (d) the quarantine of mink coats to halt mink-flea wart spread
10. This question asks for your opinion. There is no "right" answer and arguments can be made for every answer. What do you think?



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Glossary


- **Brucellosis:** A highly contagious bacterial disease of cattle, goats, sheep and swine that can be transmitted to humans as undulant fever.
- **Chronic wasting disease:** A wildlife disease (akin to bovine spongiform encephalitis or "mad cow") that affects deer and elk, but is not believed to be transmissible to humans.
- **Exotic:** Not native, introduced from abroad.
- **Killer bees:** A strain of honeybees that originated in Brazil in the 1950s as a cross between an aggressive African bee and a European honeybee. These bees retain most of the traits of the African bee: highly aggressive, relatively poor pollinators and relatively poor honey producers.
- **Relative humidity:** Ratio of the actual water vapor pressure at a given time to the vapor pressure that would occur if the air were saturated at the same ambient temperature.
- **SART:** The Florida State Agricultural Response Team. A multi-agency coordinating group consisting of governmental and private entities dedicated to all-hazard disaster preparedness, planning, response and recovery.



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Glossary

- **Spongiform encephalopathies:** A group of diseases characterized by long incubation and fatal progressive courses with characteristic spongiform degeneration of the brain (Creutzfeldt-Jakob and "mad cow" disease.)
- **Stakeholder:** An individual or group with an interest in the success of an organization in delivering intended results and maintaining the viability of the organization's products and services. Stakeholders influence programs, products, and services.
- **Tracheal mite (*Acarapis woodi*):** A minute arachnid that is parasitic on honeybees, clogging their breathing tubes and eventually killing them.
- **Tuberculosis:** An infectious disease caused by the tubercle bacillus affecting primarily the lungs of humans and animals, more common in urban areas, treatable with antibiotics (though resistant strains are appearing).
- **West Nile virus:** A virus of the genus *Flavivirus* antigenically that is transmitted by *Culex* mosquitoes, with wild birds serving as the reservoir. It occurs widely in Africa, Europe, the Middle East and Asia, and has recently been reported in the United States. Symptoms may be mild or severe, resulting in death.




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**Introducing Florida's
Livestock & Horse Industries**

That concludes our "Introduction to
the Florida Livestock and Horse
Industries." Thank you for
attending and for participating!



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RESOURCES

This publication and other materials for SART training programs are available on the World Wide Web at www.flsart.org, the web site of the Florida State Agricultural Response Team. As new modules become available, they will be posted on the web site.

The following are sources of additional information about the agencies, their missions and roles, especially relating to horses and livestock that are mentioned in this module. Others listed, but not mentioned, may be helpful resources as well.

United States Department of Agriculture (USDA, www.usda.gov)

Florida Department of Agriculture and Consumer Services

FDACS (www.doacs.state.fl.us)

FDACS Division of Animal Industry (www.doacs.state.fl.us/ai/)

FDACS Division of Dairy (www.doacs.state.fl.us/dairy)

The Florida Horse Industry, a brochure from FDACS is available at:

www.florida-agriculture.com/pubs/pubform/pdf/Florida_Horse_Industry_Brochure.pdf

Florida Agriculture Statistical Directory 2004 can be downloaded from:

www.floridaagriculture.com/pubs/pubform/pdf/Florida_Agriculture_Statistical_Directory_2004.pdf

Florida Department of Agriculture Annual Report 2004 is available at:

www.floridaagriculture.com/pubs/pubform/pdf/FDACS_Annual_Report_2004.pdf

FDACS' Division of Marketing and Development Web site provides information to agribusinesses and the general public about Florida agriculture. Brochures, classified ads, fair and exposition information and even recipes are available there.

www.florida-agriculture.com

