

The Florida Senate
COMMITTEE MEETING EXPANDED AGENDA

AGRICULTURE
Senator Siplin, Chair
Senator Bullard, Vice Chair

MEETING DATE: Tuesday, September 20, 2011

TIME: 8:30 —10:30 a.m.

PLACE: *Mallory Horne Committee Room, 37 Senate Office Building*

MEMBERS: Senator Siplin, Chair; Senator Bullard, Vice Chair; Senators Alexander, Dockery, Garcia, Hays, Montford, and Simmons

TAB	BILL NO. and INTRODUCER	BILL DESCRIPTION and SENATE COMMITTEE ACTIONS	COMMITTEE ACTION
1	Issue Brief 2012-202 (Local and Organic Food Production) Presentation		
2	Presentation from Department of Agriculture on Bees and Honey production		
3	Update from Department of Agriculture on the conversion of Division of Dairy to a Bureau within the Division of Food Safety - SB2076/HB7215 (2011-206 L.O.F.)		
4	School nutrition program transfer from DOE to the Department of Agriculture update SB1312 (2011-217 L.O.F.)		
5	Overview of the proposed Department of Agriculture legislation for 2012		
6	Presentation by the Future Farmers of America		



The Florida Senate

Issue Brief 2012-202

September 1, 2011

Committee on Agriculture

LOCAL AND ORGANIC FOOD PRODUCTION

Statement of the Issue

Buying and eating food produced locally rather than shipped from thousands of miles away, keeps money in the local community, saves energy, and helps farms and ranches remain economically viable. This movement has been gaining steam with the steady growth of farmers markets and a phenomenon called community-supported agriculture.

The organic food industry also continues to grow worldwide as people are becoming more aware of the impact that their food choices have, not only on their own personal health, but also on the environment in which they live. According to the Organic Trade Association, United States sales of organic food and beverages have grown from \$1 billion in 1990 to \$26.7 billion in 2010.¹

Discussion

The roots of most American rural communities are in agriculture. When the Europeans first arrived in North America, they found a land of great natural wealth. Some of that wealth was in minerals and timber, but most of it lay in vast plains and winding valleys of fertile farmland. However, it took people to transform this potential wealth into economic wellbeing. People had to clear the land and till the soil to bring forth the bounty of food and fiber from the fertile fields. It took people to care for the cattle and sheep that grazed the vast plains, and as these farmers and ranchers achieved surpluses beyond their own needs, they began to need other people in towns and rural communities with whom they could trade their surpluses for the things they couldn't produce. They needed blacksmiths, dry goods stores, livery stables, banks, schools, and medical care if they were to move beyond economic survival to achieve a desirable quality of life.²

Two events transformed American agriculture. First, the agricultural revolution resulted in new advances in farming research that changed the country from a small farm, subsistence economy, to being able to meet most all our food demands and to have food left over to help feed the world through exports. Second, the industrial revolution improved farming practices, allowing fewer farmers to produce more food and fiber and allowing others to work in industrial plants and assembly lines. Over time many people moved to the major cities to find higher paying jobs and as a result the large farms got larger, and the small farms began to disappear.³

Today, Americans are accustomed to eating produce and proteins from across the globe, all year. Tomatoes, corn, and bananas are found in the grocery store even in February. However, some consumers are concerned about the rising costs of energy for transportation and the impact of chemicals used to boost food production. History has a way of repeating itself, and one way that environmentally - and socially-conscious eaters are addressing these concerns is by eating local produce and becoming a "locavore."⁴

¹ Organic Trade Association, *Industry Statistics and Projected Growth*, (June 2011).

² John Ikerd, *Sustaining Rural Communities Through Sustainable Agriculture*, (January 29, 2001), 1.

³ Roger Vines, *How Agriculture Has Changed!*, (October 22, 2007), 1.

⁴ Sturm College of Law, *The Local Food Movement: Back En Vogue*, (March 6, 2011), 1.

While it may not be practical to eat *completely* local, the “local” movement — buying and eating food produced locally rather than shipped from thousands of miles away — has been gaining steam with the steady growth of farmers markets and a phenomenon called community-supported agriculture (CSA). Such a model has existed in Japan and Europe for decades, but was brought to the United States in 1986. Since that time, it has grown from a few farms on the East Coast to over a thousand farms nationwide. There are now national and regional associations of CSAs.⁵

CSA members purchase shares of a farmer's crop for the season. The government doesn't track the numbers, but Local Harvest, a nationwide directory of small farms, farmers markets and other local food sources, estimates that tens of thousands of American families belong to CSAs, and report that supply trails demand. Local Harvest has the most comprehensive directory of CSA farms, with over 4,000 listed in their grassroots database.⁶

A CSA provides consumers with a direct connection to the farm that produces their food while supporting smaller and family-owned farm operations. CSA members typically make an upfront financial contribution to the farm, which provides the grower with a salary and covers pre-season expenses. A share, usually sufficient to feed a family of four, can range in price from \$250-\$900 per season, and the growing season can range from 16 weeks to a full year, depending on the region.⁷ In return, members receive education about local food production along with weekly shares of the fresh vegetables the farm has to offer. Other perks of joining a CSA are introduction to new foods, knowledge of where and how the food was grown, and a relationship with the grower. Becoming a member of a CSA also comes with the risks inherent in farming, since the harvest and variety of foods a member will receive is affected by how well the farm does that year. Joining a CSA also means forfeiting of some of the conveniences of choosing produce at the grocery store.⁸

Through their direct relationship to the farm, CSA members have the opportunity to become familiar with the natural rhythms and processes involved in growing good food. The wisdom of recycling and the effectiveness of intercropping, crop rotations, cover crops, and crop diversify can be realized first-hand. There is, as a result, a tendency for CSAs to be small in size (less than 10 acres), labor intensive, and organic. The objective is to create more humanly-scaled, earth-friendly, and place-based enterprises, thereby bringing soil, people, and good food closer together.⁹

The organic movement began in the early 1900s in response to the shift towards synthetic nitrogen fertilizers and pesticides in the early days of industrial agriculture. It lay dormant for many years, kept alive by a relatively small group of ecologically minded farmers. These farmers came together in various associations: Demeter International of Germany, which encouraged biodynamic farming and began the first certification program, the Soil Association of the United Kingdom, and others including Rodale Institute in the United States. In recent years, environmental awareness has driven demand and conversion to organic farming. Some governments in the European Union support organic farming through agricultural subsidy reform, because they believe that it is cheaper to encourage a change in production practices to organic production rather than paying to clean up polluted surface and ground water. Organic production and marketing have grown at a fast pace.¹⁰

For a food to qualify as organic, it must meet the standards of the United States Department of Agriculture's (USDA) National Organic Program (NOP). The Organic Food Production Act required the USDA to develop

⁵ Sustainable Agriculture & Food Systems at Michigan State University, *Community Supported Agriculture*, Retrieved from <http://www.safs.msu.edu/culturaldiv/csa.htm> on September 1, (2011) .

⁶ Local Harvest, *Community Supported Agriculture*, Retrieved from <http://www.localharvest.org/csa> on September 1, 2011.

⁷ Sustainable Agriculture & Food Systems at Michigan State University, *Community Supported Agriculture*.

⁸ Sturm College of Law, *The Local Food Movement: Back En Vogue*, (March 6, 2011), 1

⁹ Sustainable Agriculture & Food Systems at Michigan State University, *Community Supported Agriculture*.

¹⁰ Wikipedia, *Organic Movement*, Retrieved from http://en.wikipedia.org/wiki/Organic_movement, (July 2011).

national standards for organic products.¹¹ The NOP Final Rule, which became effective February 20, 2001, was published in the Federal Register in 2000.¹²

Organic farming emphasizes management practices and a systems approach rather than reliance on off-farm agricultural inputs. Organic food and fiber is defined by certain production practices that certified organic farmers must use, including crop rotation and methods that maintain or improve soil organic matter content, and monitoring the physical, chemical and biological condition of soil. In addition, organic regulations prohibit the use of certain materials and methods. According to the USDA, organic foods are produced without using most synthetic pesticides and fertilizers. Organic foods must be produced and handled without sewage sludge, without the use of genetic engineering, and processed without using ionizing radiation.¹³ Organic poultry, eggs, meat, and dairy products must come from animals that were given no antibiotics or growth hormones, although organic producers cannot withhold medical treatment from a sick animal in order to preserve its organic status.¹⁴

Prior to harvest of a crop that is to be marketed as organic, the land must be free of prohibited substances for three years. In addition, a public or private organization must verify whether a certified organic grower or processor meets or exceeds the defined organic standards. These standards include:

1. A USDA-accredited certifying agency annual inspection of farm/processor operations.
2. Farmers and processors must keep detailed records of organic practices.
3. All farmers and handlers are required to maintain a written organic management plan.

As long as farmers remain in compliance with these standards, their products can be labeled as organic, including using the USDA organic seal, if desired. About fifty US-based organizations, such as Quality Certification Services, the certification program operated by Florida Certified Organic Growers and Consumers Inc. (FOG) offer USDA accredited certification to farmers, ranchers, food handlers and processors. FOG is a 501(c)(3) not-for-profit corporation established in 1987, which gained accreditation for its certification program in 2001. FOG operates an Education and Outreach program that works actively within Florida, as well as nationally and internationally to support organic and sustainable farms. FOG was heavily involved in the development of the National Organic Program regulations governing organics and continues to be very active in policy, including continuing development of the NOP standards, and advancing organic stakeholders' concerns on topics such as food safety, and the development of more local and regional food systems.¹⁵

The organic vs. non-organic debate has become one of the liveliest in the food world with differing views on whether organic foods are really better than conventional foods. Generally, organic food consumers, manufacturers, and farmers believe that organic food promotes better health, tastes better, is more protective of the environment, and provides animal welfare.¹⁶ Some scientists believe that there is little scientific evidence to prove that organic food is better in quality than conventional food. An independent review commissioned by Britain's Food Standards Agency found that there are no important differences in the nutritional content when compared with conventionally produced food.¹⁷

¹¹ United States Department of Agriculture Agricultural Marketing Service, *National Organic Program*, Retrieved from <http://www.ams.usda.gov/AMSv1.0/getfile?dDocName=STELDEV3004443>, (April 2008).

¹² Federal Register, United States Department of Agriculture Agricultural Marketing Service, *National Organic Program*, Retrieved from <http://ams.usda.gov/AMSv1.0/getfile?dDocName=STELPRDC5087165>, (December 2000).

¹³ United States Environmental Protection Agency, *Organic Farming*, Retrieved from <http://www.epa.gov/agriculture/torg.html>, (July 18, 2011), 2.

¹⁴ Jim Riddle, University of Minnesota, *Some Guidance for Certifying Your Livestock to the NOP with OCLA International*, Retrieved from http://swroc.cfans.umn.edu/prod/groups/cfans/@pub/@swroc/ducments/asset/cfans_asset_234016.pdf

¹⁵ Information received from Florida Certified Organic Growers and Consumers, Inc. by email on 7/21/2011.

¹⁶ Health Benefits of Organic Food, Retrieved from <http://www.organicfacts.net/organic-food/organic-food-basics/health-benefits-of-organic-food.html> on September 1, 2011.

¹⁷ Food Standards Agency, *Organic Review Published*, Retrieved from <http://www.food.gov.uk/news/newsarchive/2009/jul/organic>, (July 29, 2009).

There are recent studies that have suggested that some organic foods contain higher levels of vitamins than their conventionally grown counterparts. In a paper published in October in the *Journal of Agricultural and Food Chemistry*, a team from the University of California, Davis, found that organically grown tomatoes have on average 79 and 97 percent more quercetin and kaempferol aglycones (beneficial flavonoids) than conventionally grown tomatoes.¹⁸ In addition, a study by the Leopold Center for Sustainable Agriculture at Iowa State University concluded that organic milk contains higher levels of short-chain omega-3 essential fatty acids as well as vitamin E and the antioxidant beta-carotene. Higher levels of the antioxidants lutein and zeaxanthine have also been found in milk from cows that eat grass-based, hormone restricted, diets that are typical of organic farming.¹⁹

According to the Florida Department of Agriculture and Consumer Services, organics continue to be a small market in Florida, but during the last five to six years, organic producers have grown from an obscure level of supplying relatively small sales forums, like farmers markets or other venues, to being capable of delivering select products to retail chains. At Publix, for instance, six years ago an organic section was roughly four feet wide. Today, most have more than 30 feet of fruits and vegetables, meats, dairy, dried goods and an assortment of processed items.²⁰

Strawberries are an example of organics gaining a foothold, and this has occurred in just the last three to four years. During March 2010, Florida shipped more than 650,000 quarts of organic strawberries. A Plant City, Florida grower indicated that his farm has doubled its organic strawberry acreage in the past eight years, and that there is much more demand for organic strawberries than are available. Florida's growing season is from December 1 until the first part of April and this is the opposite of California's growing season which allows Florida to fill in the gap when California is not producing.²¹

Bottom line, one of the most difficult production methodologies, and most expensive consumer items, has managed to survive during a tough economic environment. This would indicate that organics will survive and that smaller-scale farmers selling direct, organic food will continue to be in demand by consumers who are deeply committed to a lifestyle choice and very loyal to their food selections.

¹⁸ Organic Trade Association, *Nutritional Considerations*, Retrieved from <http://www.ota.com/organic/benefits/nutritional.html> on September 1, 2011.

¹⁹ Iowa State University, Leopold Center for Sustainable Agriculture, *Organic Milk: Nutritional Benefits*, (2008), Retrieved from <http://www.leopold.iastate.edu/organic/milk/3.html> on July 19, 2011.

²⁰ Information received from the Florida Department of Agriculture and Consumer Services by email, July 2011.

²¹ Information received from Sales Associate for Wish Farms by telephone, July 2011.

FLORIDA AGRICULTURE: HONEY BEE INDUSTRY



It's more than honey!



DIVISION OF PLANT INDUSTRY

Florida Department of Agriculture & Consumer Services | Adam H. Putnam, Commissioner

Agricultural Acres Planted with Pollinator Dependent Crops has Outpaced the Availability of Pollinators



There is an Increasing Demand for Managed Honey Bees



**Total Cash Receipts/Value
Honey Bee Dependent Crops**
\$ 1,422,000,000

Total Honey Value
\$ 12,000,000

Total Economic Impact
\$ 3,387,915,000



Jobs
48,135

Tax Revenue
\$192,538,800

Figures provided by FDACS Division of Marketing



DIVISION OF PLANT INDUSTRY

Florida Department of Agriculture & Consumer Services | Adam H. Putnam, Commissioner

Less Honey Bees

Less Produce

Less Revenue



DIVISION OF PLANT INDUSTRY

Florida Department of Agriculture & Consumer Services | Adam H. Putnam, Commissioner

Apiary Industry Under Pressure From Pests, Diseases and now, something called CCD

Colony Collapse Disorder



HONEY BEE COLONY MORTALITY AIA SURVEY

Losses

- 2006 – 2007 32%
- 2007 – 2008 36%
- 2008 – 2009 29%
- 2009 – 2010 31%
- 2010 – 2011 30%



DIVISION OF PLANT INDUSTRY

Florida Department of Agriculture & Consumer Services | Adam H. Putnam, Commissioner

VARROA MITE



DIVISION OF PLANT INDUSTRY

Florida Department of Agriculture & Consumer Services | Adam H. Putnam, Commissioner

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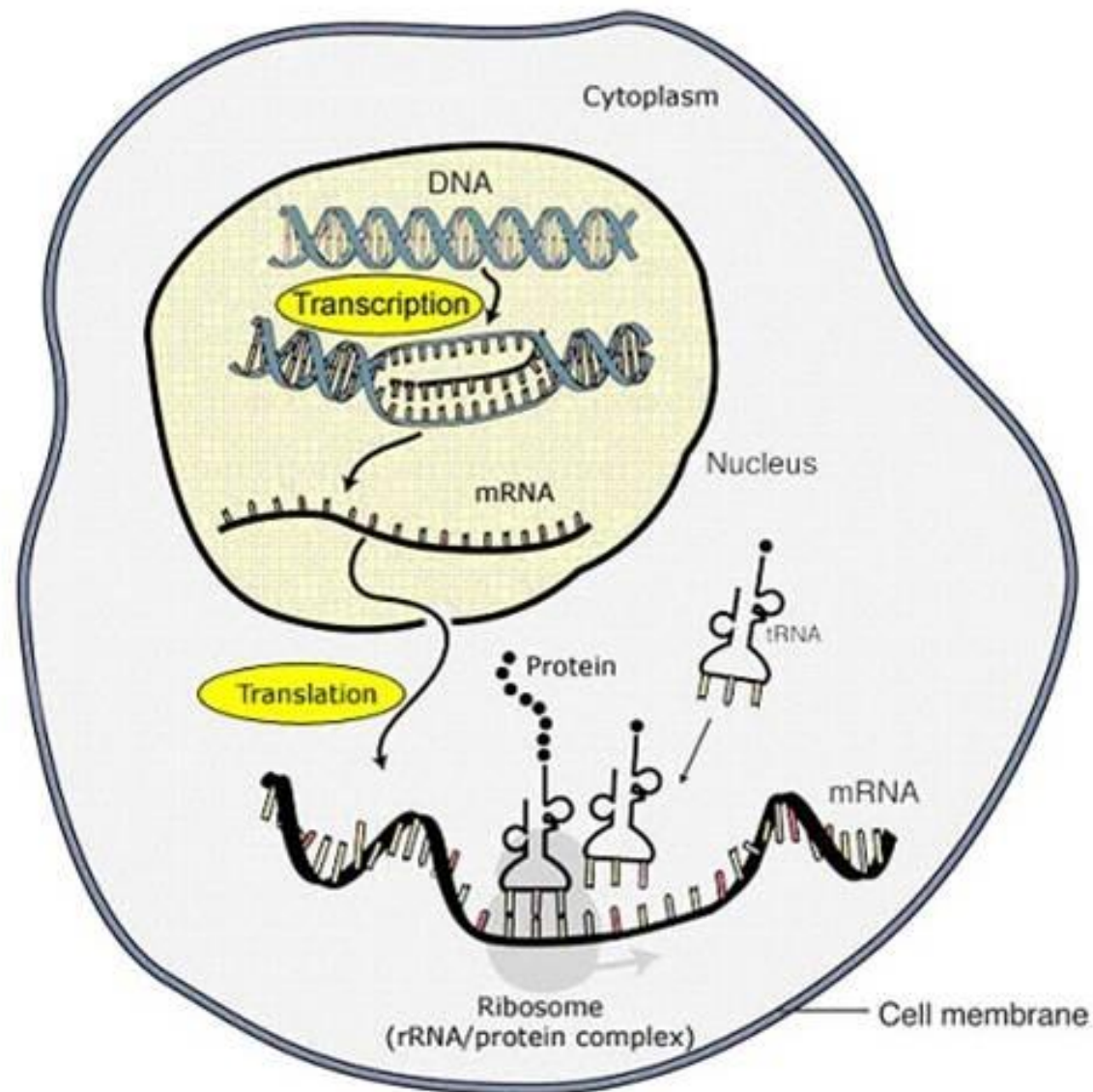


Image adapted from: National Human Genome Research Institute.

ENTOMOPHOBIA

Definition:

- ❑ Unreasonable, unnatural fear of insects

People all over the world are affected by Entomophobia



APIARY INSPECTION



DIVISION OF PLANT INDUSTRY

Florida Department of Agriculture & Consumer Services | Adam H. Putnam, Commissioner

SAFE BEEKEEPING

- ❑ Managed Honey Bees are safe
- ❑ BMPs
- ❑ Managed Honey Bees keep African Bees away



Florida Department of Agriculture and Consumer Services
Division of Plant Industry

BEEKEEPER COMPLIANCE AGREEMENT

1911 NW 34 Street P.O. Box 147100, Gainesville, FL 32614-7100
Ph: (352) 375-5205 / Fax: (352) 334-6717

1. NAME & MAILING ADDRESS OF OWNER/BEESKEEPER
2. APHIS/VES LOCATIONS BY COUNTY

I, _____, agree to follow the Best Management Practices for maintaining European Honey Bee colonies to minimize the threat of Africanized Honey Bees (AHB) in the state of Florida, I further agree to participate in the division process of any first AHB populations that may become established in Florida, by maintaining grade managed honey bee colonies that are vital to this effort.

BEST MANAGEMENT PRACTICES FOR MAINTAINING EUROPEAN HONEY BEE COLONIES

1. Beekeepers will maintain a valid registration with the Florida Department of Agriculture and Consumer Services, Division of Plant Industry (FDACS/DPI), and be current with any and all special inspection fees.
2. A Florida colony may be deemed an EHB (European Honey Bee) with a minimum 10% random survey of colonies using the FADIS (First African Bee Identification System) and/or the composite survey, morphometric, phenotypic or Unmarked system for the detection of Africanized Honey Bees (AHB) (USDA ID), or other approved methods by FDACS on a yearly basis or as requested.
3. Honey bee colony divisions or splits should be quarantined with production queens or queen cells from EHB hives.
4. Florida beekeepers are discouraged from collecting swarms that cannot be immediately re-queened.
5. Florida beekeepers should practice good re-queening techniques to prevent an abundance of virgin queens and thus reduce mating with available AHB queens that carry the defensive trait.
6. Maintain all EHB colonies in a strong, healthy, populous condition to discourage usurpation (take over) events of AHB.
7. Do not allow any weak or empty colonies to exist in an Apiary, as they may be attractive to AHB.
8. Recommended re-queening with European stock every six months unless using marked or clipped queens and having in possession a full set of rules from a EHB Queen Producers.
9. Immediately re-queens with a European Queen if previously installed clipped or marked queens are found.

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WILD BEES MAY NOT BE SAFE

- ❑ Managed Honey Bees are safe and valuable



RESTRICTIONS ON BEEKEEPERS

- ❑ Beekeepers are being zoned and “ordinanced” out of beekeeping
- ❑ Some local governing bodies are not aware of the value of honey bees to urban and suburban environments as well as Florida agriculture.



DIVISION OF PLANT INDUSTRY

Florida Department of Agriculture & Consumer Services | Adam H. Putnam, Commissioner

RESULTS

Honey bee
diseases,
parasites, CCD

+

Location
restrictions

=

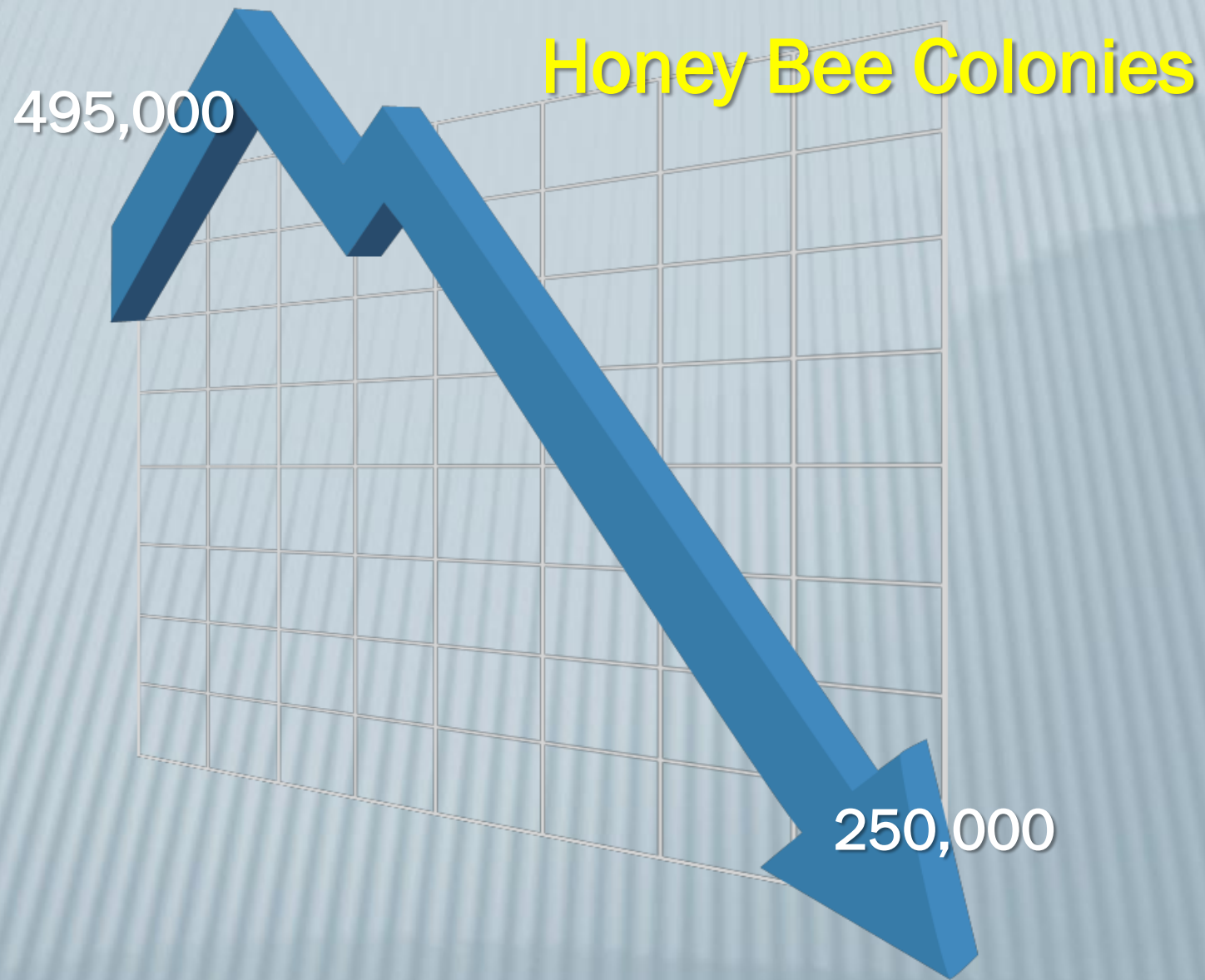
Less honey bees
for Florida
agriculture and
its environment



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STATUS OF BEEKEEPING IN FLORIDA



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BUT DOES ANY OF THIS MATTER?



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INMATE BEEKEEPER TRAINING



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THANK YOU!

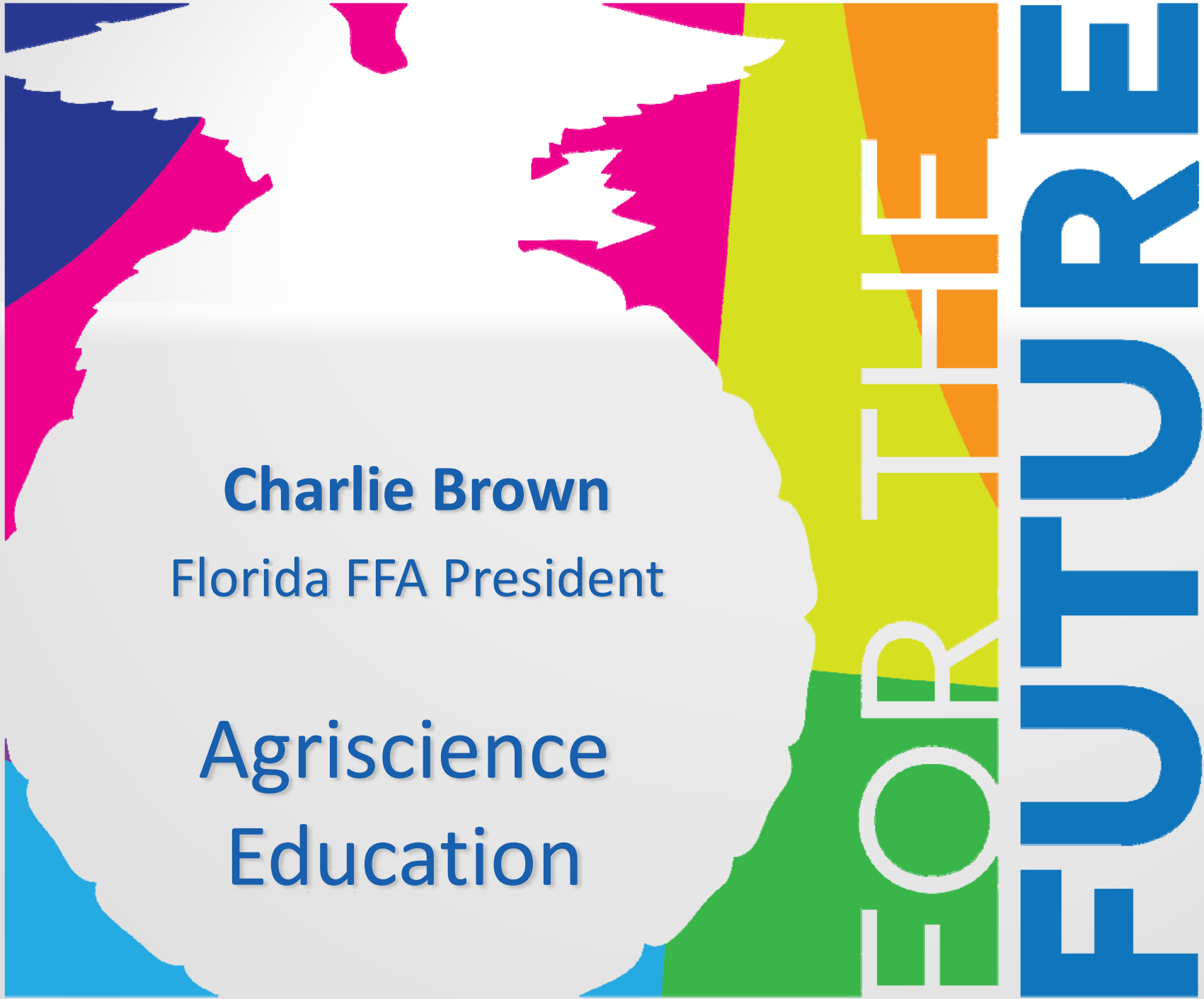
Questions/ Comments?

Jerry Hayes
Chief, Apiary Section
850-488-3022



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Charlie Brown
Florida FFA President

**Agriscience
Education**

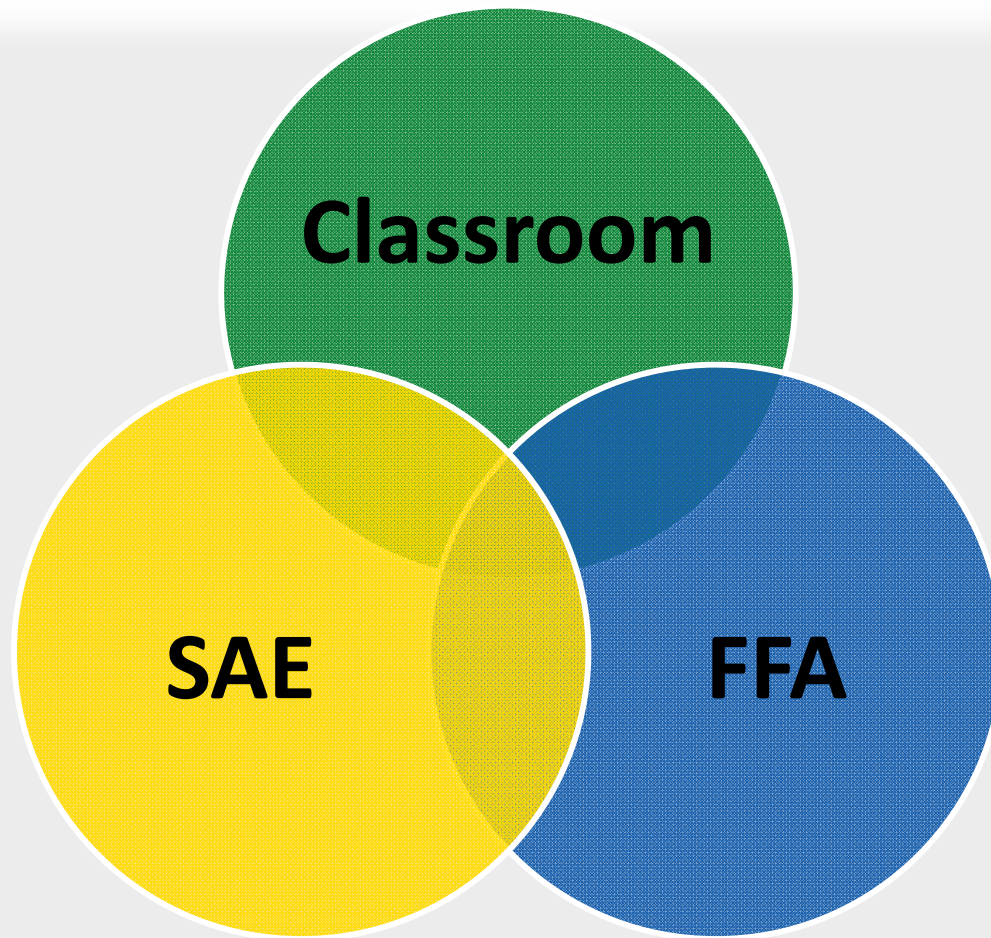
FLORIDA FFA ASSOCIATION

Agriscience Education

- **Classroom/Laboratory Instruction**
- **Work-based Learning (Supervised Agricultural Experience)**
- **Leadership Development (FFA)**



Total Agriscience Education Program Model



Classroom/Laboratory Instruction



- Integrates academic concepts with technical agriculture skills
- Prepares students for work and postsecondary education in more than 300 careers
 - Animal Systems
 - Plant Systems
 - Food Products and Processing Systems
 - Power, Structural and Technical Systems
 - Natural Resource Systems
 - Environmental Service Systems
 - Agribusiness Systems

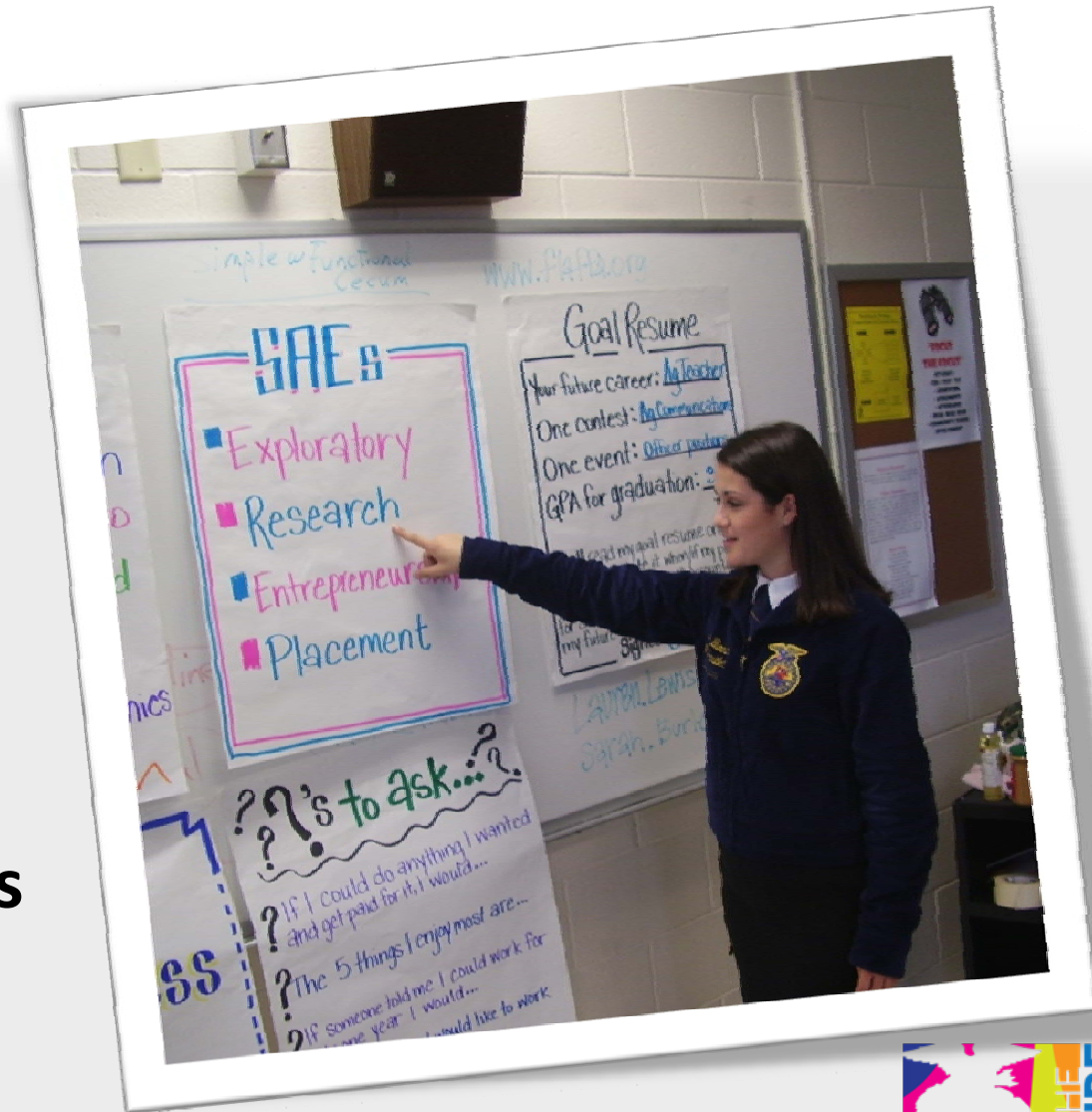
Supervised Agricultural Experience

- **Practical application of classroom/laboratory concepts conducted outside of class time**
- **Explore careers**
 - Research
 - Placement
 - Ownership
- **Earn money**
- **Learn work place skills**
 - Team work
 - Responsibility
 - Communication skills



National FFA Organization

- Founded in 1928
- Chartered by U.S. Congress
- Approximately 540,379 members nationwide
 - 34% Urban and Suburban
 - 39% Rural, Non-Farm
 - 27% Rural, Farm
- Integral part of a school's agricultural education program



FFA



- Builds leadership skills for life
- Reinforces instruction
- Recognizes excellence
- Gives students opportunities to make a positive difference in their schools and communities

FFA Mission

FFA makes a positive difference in the lives of students by developing their potential for *premier leadership, personal growth, and career success* through agricultural education.

Florida FFA Association

- Over 15,500 middle and high school members
- In 320 chapters
- With 450 teachers



Thank You

On behalf of every Florida FFA member and agriscience student, thank you for all that you do for Florida FFA and agriscience education.

