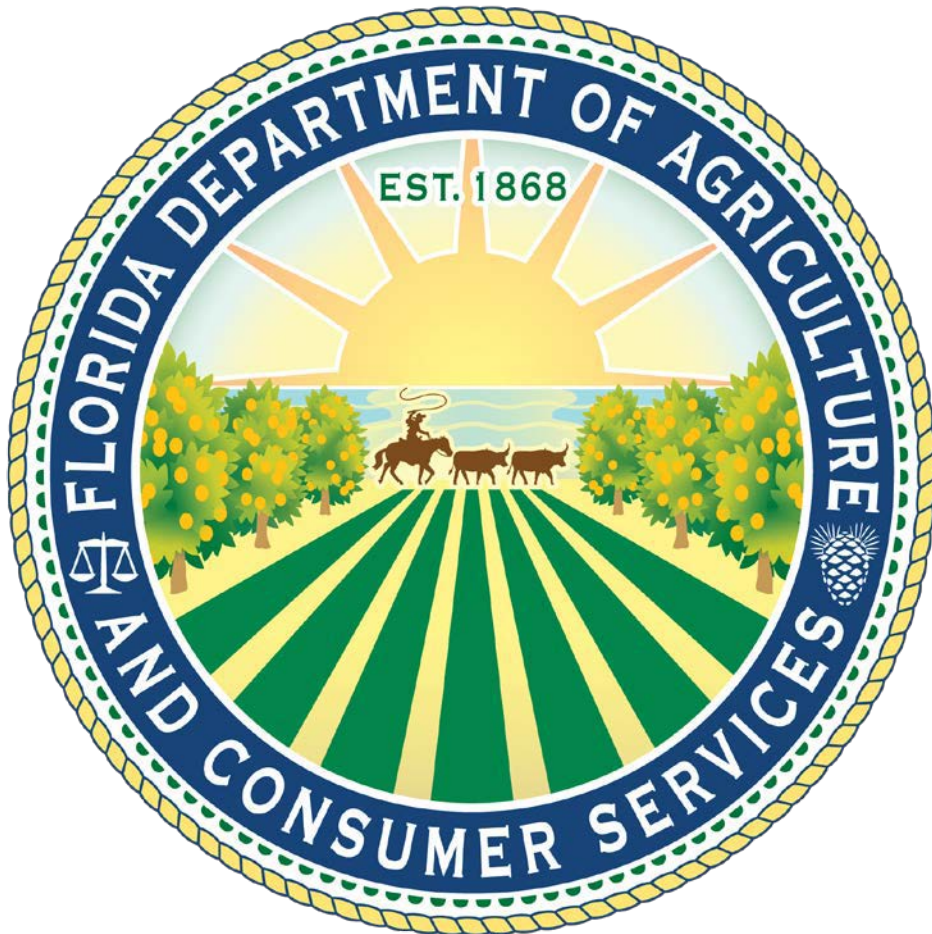




**JULY 1, 2016 – JUNE 30, 2017**  
**BUREAU OF PLANT &  
APIARY INSPECTION**

**Tyson R. Emery, Bureau Chief**

**DIVISION OF PLANT  
INDUSTRY**

**Dr. Trevor Smith, Director**



**Florida Department of Agriculture and Consumer Services**  
**Adam H. Putnam, Commissioner**

**Nurseries & Stock  
Dealers**

**Administrative**

**Caribbean Fruit  
Fly, Protocol, and  
Detector Dog**

**Giant African  
Land Snails  
(GALS)**

**Apiary**

**FLORIDA DEPARTMENT  
OF AGRICULTURE  
DIVISION OF PLANT  
INDUSTRY**

1911 SW 34th Street  
Gainesville, FL 32608-1201

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[www.FreshFromFlorida.com](http://www.FreshFromFlorida.com)

July 1, 2016 – June 30, 2017

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Dr. Trevor Smith  
Director  
Division of Plant Industry



Dr. Greg Hodges  
Deputy Director  
Division of Plant Industry



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## MISSION STATEMENT

**The Division of Plant Industry's mission is to detect, intercept, and control plant and honey bee pests that threaten Florida's native and commercially grown plants and agriculture resources. This is accomplished by implementing policies and procedures supported by Florida statutes and rules of the department and our division**



## BUREAU OF PLANT AND APIARY INSPECTION PERSONNEL

|                            |                                         |             |
|----------------------------|-----------------------------------------|-------------|
| <b>Tyson Emery</b>         | Bureau Chief                            | Gainesville |
| <b>Sheila McMahon</b>      | Staff Assistant                         | Gainesville |
| <b>Bryan Benson</b>        | Assistant Chief, Plant Inspection       | Gainesville |
| <b>Stephen Hildebrandt</b> | Environmental Specialist III            | Gainesville |
| VACANT                     | Environmental Specialist III            | Palmetto    |
| <b>Steven N. Kelley</b>    | Operations and Management Consultant I  | Gainesville |
| Glenda Anderson            | Senior Word Processing Systems Operator | Gainesville |
| Cathy Daniels              | Senior Word Processing Systems Operator | Gainesville |
| Terri Hymes                | Staff Assistant                         | Gainesville |
| VACANT                     | Staff Assistant                         | Gainesville |
| Maria Lucy Furnas          | Senior Clerk                            | Gainesville |
| Sara White                 | Senior Clerk                            | Inverness   |
| VACANT                     | Staff Assistant                         | Palmetto    |

## REGION I

|                         |                                    |             |
|-------------------------|------------------------------------|-------------|
| <b>Christine Zamora</b> | <b>Environmental Supervisor II</b> | Gainesville |
| Lane Pritchard          | Administrative Secretary           | Gainesville |

|                        |                                   |              |
|------------------------|-----------------------------------|--------------|
| <b>Cheryl A. Jones</b> | <b>Environmental Supervisor I</b> | Gainesville  |
| Michael McMahan        | Environmental Specialist I        | Milton       |
| Michael Bentley        | Environmental Specialist I        | Monticello   |
| M. Janie Echols        | Environmental Specialist I        | Glen St Mary |
| Kelly Douglas          | Environmental Specialist I        | Gainesville  |
| Sol F. Looker          | Environmental Specialist I        | Palatka      |
| Larry W. Smith         | Environmental Specialist I        | Panama City  |
| VACANT                 | Environmental Specialist I        | Trenton      |
| VACANT                 | Agricultural Technician II        | Gainesville  |

## 2016-17 Annual Report

### Florida Department of Agriculture and Consumer Services, Plant Industry Division, Plant and Apiary Inspection Bureau

|                    |                                   |           |
|--------------------|-----------------------------------|-----------|
| <b>Mo Violet</b>   | <b>Environmental Supervisor I</b> | Tavares   |
| Tavia Gordon       | Environmental Specialist I        | Ocala     |
| Stephen R. Jenner  | Environmental Specialist I        | Inverness |
| Lauren L. Dorval   | Environmental Specialist I        | Tavares   |
| Harry L. Morrison  | Environmental Specialist I        | Tavares   |
| Mary C. Sellers    | Environmental Specialist I        | Tavares   |
| Charlie L. Spriggs | Environmental Specialist I        | Tavares   |
| VACANT             | Environmental Specialist I        | Tavares   |
| Nora Marquez       | Agricultural Technician II        | Tavares   |
| Robert Lawton      | Agricultural Technician II        | Tavares   |
| Mike Hatcher       | Agricultural Technician III       | Inverness |

|                        |                                   |              |
|------------------------|-----------------------------------|--------------|
| <b>Tracy L. Wright</b> | <b>Environmental Supervisor I</b> | Deland       |
| Kaleigh Hire           | Environmental Specialist I        | Palatka      |
| Lisa Hassell           | Environmental Specialist I        | Jacksonville |
| Kevin S. Loadholtz     | Environmental Specialist I        | Deland       |
| Karen G. Coffey        | Environmental Specialist I        | Port Orange  |
| VACANT                 | Environmental Specialist I        | Deland       |
| VACANT                 | Environmental Specialist I        | Port Orange  |

## REGION II

|                           |                                    |        |
|---------------------------|------------------------------------|--------|
| <b>Serena Stornaiuolo</b> | <b>Environmental Supervisor II</b> | Apopka |
| VACANT                    | Administrative Secretary           | Apopka |

|                         |                                   |        |
|-------------------------|-----------------------------------|--------|
| <b>Anthony Puppelo</b>  | <b>Environmental Supervisor I</b> | Apopka |
| George A. Warden        | Environmental Specialist I        | Apopka |
| Lance A. Brown          | Environmental Specialist I        | Apopka |
| Anna J. Gourlay         | Environmental Specialist I        | Apopka |
| Sean McCarthy           | Environmental Specialist I        | Apopka |
| Jesse M. Krok           | Environmental Specialist I        | Apopka |
| Kathy A. Gonzalez       | Environmental Specialist I        | Apopka |
| VACANT                  | Environmental Specialist I        | Apopka |
| VACANT                  | Environmental Specialist I        | Apopka |
| Arturo Montilla-Nolasco | Agricultural Technician II        | Apopka |
| Katherine Steinkamp     | Agricultural Technician II        | Apopka |

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## Florida Department of Agriculture and Consumer Services, Plant Industry Division, Plant and Apiary Inspection Bureau

|                      |                                   |              |
|----------------------|-----------------------------------|--------------|
| <b>Daniel Merced</b> | <b>Environmental Supervisor I</b> | Dade City    |
| Gary Webb            | Environmental Specialist I        | Dade City    |
| Albert L. Wright     | Environmental Specialist I        | Winter Haven |
| Susan C. Distelberg  | Environmental Specialist I        | Winter Haven |
| VACANT               | Environmental Specialist I        | Winter Haven |
| Karen R. Destefano   | Environmental Specialist I        | Dade City    |
| Diana E. Bozeman     | Environmental Specialist I        | Dade City    |
| Kenneth Miller       | Agricultural Technician II        | Dade City    |
| Jodi Bixler          | Agricultural Technician II        | Winter Haven |

|                         |                                   |            |
|-------------------------|-----------------------------------|------------|
| <b>Richard A. White</b> | <b>Environmental Supervisor I</b> | Clearwater |
| Jason Spiller           | Environmental Specialist I        | Clearwater |
| Thomas S. Lastrapes     | Environmental Specialist I        | Clearwater |
| Mark A. Spearman        | Environmental Specialist I        | Clearwater |
| Gabriela M. Bernard     | Environmental Specialist I        | Clearwater |
| Linda G. McRay          | Environmental Specialist I        | Clearwater |
| Jessica Tromer          | Environmental Specialist I        | Clearwater |
| Sammy Lee Campbell      | Agricultural Technician II        | Clearwater |
| Bobbe A. Rose           | Environmental Specialist I        | Clearwater |
| William J. Salway       | Environmental Specialist I        | Clearwater |
| Dan A. Chiszar          | Agricultural Technician II        | Clearwater |
| VACANT                  | Agricultural Technician II        | Clearwater |
| Deborah L. Simmons      | Agricultural Technician II        | Clearwater |
| Calvin Snyder           | Agricultural Technician II        | Clearwater |

|                                |                                   |            |
|--------------------------------|-----------------------------------|------------|
| <b>Carlos Averhoff-Chirino</b> | <b>Environmental Supervisor I</b> | Ft. Pierce |
| Scott D Berryman               | Environmental Specialist I        | Avon Park  |
| Anthony Gubler                 | Environmental Specialist I        | Cocoa      |
| VACANT                         | Environmental Specialist I        | Cocoa      |
| Jeanie P. Frechette            | Environmental Specialist I        | Vero Beach |
| VACANT                         | Environmental Specialist I        | Ft. Pierce |
| Richard T. Bloom               | Environmental Specialist I        | Avon Park  |
| Keith Clanton                  | Environmental Specialist i        | Avon Park  |
| Teresa Ortell                  | Agricultural Technician II        | Vero Beach |

## 2016-17 Annual Report

### Florida Department of Agriculture and Consumer Services, Plant Industry Division, Plant and Apiary Inspection Bureau

|                     |                                   |           |
|---------------------|-----------------------------------|-----------|
| <b>VACANT</b>       | <b>Environmental Supervisor I</b> | Bradenton |
| Eddie Anderson      | Environmental Specialist I        | Bradenton |
| VACANT              | Environmental Specialist I        | Bradenton |
| VACANT              | Environmental Specialist I        | Bradenton |
| Susan B. Youngblood | Environmental Specialist I        | Bradenton |
| VACANT              | Agricultural Technician II        | Bradenton |
| VACANT              | Agricultural Technician II        | Bradenton |
| VACANT              | Agricultural Technician II        | Bradenton |

|                          |                                   |       |
|--------------------------|-----------------------------------|-------|
| <b>Howard L. Wallace</b> | <b>Environmental Supervisor I</b> | Tampa |
| Travis J. Streeter       | Environmental Specialist I        | Tampa |
| Brandon McCauley         | Environmental Specialist I        | Tampa |
| William R. Stokes        | Environmental Specialist I        | Tampa |
| Jose L Llanos            | Environmental Specialist I        | Tampa |
| VACANT                   | Environmental Specialist I        | Tampa |
| Maria Echevarria-Garcia  | Agricultural Technician II        | Tampa |
| Kevin Morris             | Agricultural Technician II        | Tampa |
| William A. Counts        | Agricultural Technician II        | Tampa |
| Charles G. Davis         | Agricultural Technician II        | Tampa |
| Marvin L. Nelson         | Agricultural Technician II        | Tampa |

## REGION III

|                   |                             |       |
|-------------------|-----------------------------|-------|
| <b>Scott Shea</b> | Environmental Supervisor II | Miami |
| Elsie Aviles      | Administrative Secretary    | Miami |

|                      |                                   |                 |
|----------------------|-----------------------------------|-----------------|
| <b>Richard Tordi</b> | <b>Environmental Supervisor I</b> | West Palm Beach |
| LeAnn M. West        | Environmental Specialist I        | Palm City       |
| VACANT               | Environmental Specialist I        | West Palm Beach |
| Matt Miller          | Environmental Specialist I        | Belle Glade     |

|                  |                            |                 |
|------------------|----------------------------|-----------------|
| Bill Churchill   | Environmental Specialist I | West Palm Beach |
| Eduardo Solis    | Environmental Specialist I | Palm City       |
| James C. Lee     | Environmental Specialist I | West Palm Beach |
| VACANT           | Environmental Specialist I | Belle Glade     |
| Carlene Sargeant | Environmental Specialist I | Delray Beach    |

# 2016-17 Annual Report

## Florida Department of Agriculture and Consumer Services, Plant Industry Division, Plant and Apiary Inspection Bureau

|                   |                            |                 |
|-------------------|----------------------------|-----------------|
| Juan Carlos Ochoa | Environmental Specialist I | Boynton Beach   |
| VACANT            | Environmental Specialist I | West Palm Beach |

|                           |                                   |               |
|---------------------------|-----------------------------------|---------------|
| <b>Ellen J. Tannehill</b> | <b>Environmental Supervisor I</b> | Pompano Beach |
| Sallie H. Simmons         | Environmental Specialist I        | Boynton Beach |
| J. Keith Harris           | Environmental Specialist I        | Pompano Beach |
| Michael Golub             | Environmental Specialist I        | Pompano Beach |
| Nury M. Marrone           | Environmental Specialist I        | Davie         |
| Justin Anto               | Environmental Specialist I        | Davie         |
| VACANT                    | Environmental Specialist I        | Davie         |
| Shannen Webb              | Environmental Specialist I        | Davie         |
| Lane M. Smith             | Environmental Specialist I        | Delray Beach  |
| VACANT                    | Environmental Specialist I        | Boynton Beach |
| VACANT                    | Agricultural Technician II        | Davie         |
| VACANT                    | Agricultural Technician II        | Davie         |

|                         |                                   |         |
|-------------------------|-----------------------------------|---------|
| <b>Charles Gonzalez</b> | <b>Environmental Supervisor I</b> | Hialeah |
| Juan Garcia Lopez       | Environmental Specialist I        | Hialeah |
| VACANT                  | Environmental Specialist I        | Hialeah |
| Rebecca Sanders         | Environmental Specialist I        | Hialeah |
| VACANT                  | Environmental Specialist I        | Miami   |
| Juan Aleman-Martinez    | Environmental Specialist I        | Hialeah |
| Haydee I. Escobar       | Environmental Specialist I        | Miami   |
| Misael E. Igarza        | Environmental Specialist I        | Hialeah |
| VACANT                  | Agricultural Technician II        | Hialeah |
| Miguel Hernandez        | Agricultural Technician II        | Hialeah |
| Gloria Gonzalez         | Agricultural Technician II        | Hialeah |
| VACANT                  | Agricultural Technician II        | Hialeah |
| Sergio Delgado          | Agricultural Technician II        | Miami   |
| Elena Kej               | Agricultural Technician II        | Hialeah |
| VACANT                  | Agricultural Technician II        | Hialeah |

|                              |                                   |       |
|------------------------------|-----------------------------------|-------|
| <b>RosaMaria M. Quinones</b> | <b>Environmental Supervisor I</b> | Miami |
| Luis Bradshaw                | Environmental Specialist I        | Miami |
| Maria C. Acosta              | Environmental Specialist I        | Miami |
| VACANT                       | Environmental Specialist I        | Miami |
| Ciro Milian                  | Environmental Specialist I        | Miami |
| Marieta Figueroa             | Environmental Specialist I        | Miami |

## 2016-17 Annual Report

### Florida Department of Agriculture and Consumer Services, Plant Industry Division, Plant and Apiary Inspection Bureau

|                       |                            |              |
|-----------------------|----------------------------|--------------|
| Juan Menendez         | Environmental Specialist I | Florida City |
| Jake Farnum           | Environmental Specialist I | Florida City |
| Haylett Cruz-Escoto   | Environmental Specialist I | Miami        |
| Ana L. Ochoa          | Environmental Specialist I | Florida City |
| Karen W. LeBoutillier | Environmental Specialist I | Florida City |
| Rosalba Pina          | Agricultural Technician II | Miami        |
| Tommy Rosario         | Agricultural Technician II | Miami        |
| Slim Campos           | Agricultural Technician II | Miami        |

|                       |                                   |           |
|-----------------------|-----------------------------------|-----------|
| <b>Matt W. Brodie</b> | <b>Environmental Supervisor I</b> | Naples    |
| Walter W. Golden      | Environmental Specialist I        | Ft. Myers |
| Mark Terrell          | Environmental Specialist I        | Labelle   |
| Scott D. Krueger      | Environmental Specialist I        | Labelle   |
| Richard L. Blaney     | Environmental Specialist I        | Naples    |
| Leonora J. Coleman    | Environmental Specialist I        | Naples    |
| Richard J. Nanneman   | Environmental Specialist I        | Naples    |
| Roberto Delcid        | Environmental Specialist I        | Labelle   |
| Edward A. Zeigler     | Agricultural Technician II        | Naples    |

## CITRUS NURSERY INSPECTION

|                        |                                     |              |
|------------------------|-------------------------------------|--------------|
| <b>Justin T. Ezell</b> | <b>Environmental Specialist III</b> | Winter Haven |
| <b>Randall A. Dean</b> | Environmental Supervisor I          | Avon Park    |
| Donald G. Taylor       | Environmental Specialist II         | Avon Park    |
| Peter Carbon           | Environmental Specialist II         | Gainesville  |
| Ashley Nolen           | Environmental Specialist II         | Winter Haven |
| Johnny J. Yates        | Environmental Specialist II         | Winter Haven |
| Craig J. Landress      | Environmental Specialist II         | Avon Park    |
| VACANT                 | Environmental Specialist II         | Winter Haven |

## CITRUS TREE SURVEY

|                       |                                   |            |
|-----------------------|-----------------------------------|------------|
| <b>W. Jim Dowling</b> | <b>Environmental Supervisor I</b> | Dade City  |
| Kathy D. Morgan       | Environmental Specialist I        | Palmetto   |
| Carrie L. Karppe      | Environmental Specialist I        | Dade City  |
| Lavinia Hancock       | Environmental Specialist I        | Avon Park  |
| C. David Wolf         | Environmental Specialist I        | Labelle    |
| Janet L. Young        | Environmental Specialist I        | Vero Beach |

## APIARY INSPECTION

|                  |                                    |             |
|------------------|------------------------------------|-------------|
| David Westervelt | Assistant Chief, Apiary Inspection | Gainesville |
| Cathy Harrity    | Administrative Secretary           | Gainesville |
| VACANT           | Apiary Technician                  | Gainesville |

|                       |                                                |              |
|-----------------------|------------------------------------------------|--------------|
| Gary Van Cleef        | Agriculture and Consumer Protection Supervisor | Gainesville  |
| Kenneth Finch         | Agriculture and Consumer Protection Specialist | Milton       |
| Jeffrey D. Pippin     | Agriculture and Consumer Protection Specialist | Bristol      |
| Stephen Cutts         | Agriculture and Consumer Protection Specialist | Trenton      |
| Rob Horsburgh         | Agriculture and Consumer Protection Specialist | Jacksonville |
| VACANT                | Agriculture and Consumer Protection Specialist | Miami        |
| Jose T. Gill-Sanabria | Agriculture and Consumer Protection Specialist | Gainesville  |

|                 |                                                |              |
|-----------------|------------------------------------------------|--------------|
| Carmen Fraccica | Agriculture and Consumer Protection Supervisor | Winter Haven |
| Charles Adams   | Agriculture and Consumer Protection Specialist | Sebring      |
| VACANT          | Agriculture and Consumer Protection Specialist | Vero Beach   |
| VACANT          | Agriculture and Consumer Protection Specialist | Dade City    |
| Lisa Reynes     | Agriculture and Consumer Protection Specialist | Tavares      |
| Fred Howard     | Agriculture and Consumer Protection Specialist | Labelle      |

## CARIBBEAN FRUIT FLY CERTIFICATION

|                 |                              |            |
|-----------------|------------------------------|------------|
| Christine Frere | Environmental Specialist III | Ft. Pierce |
| Marilyn Quigley | Administrative Secretary     | Ft. Pierce |
| Denise Marshall | Certification Specialist     | Ft. Pierce |
| Barbara Scher   | Senior Clerk                 | Ft. Pierce |

## 2016-17 Annual Report

### Florida Department of Agriculture and Consumer Services, Plant Industry Division, Plant and Apiary Inspection Bureau

|                      |                                                       |            |
|----------------------|-------------------------------------------------------|------------|
| Lisa Whiteman        | <b>Agriculture and Consumer Protection Supervisor</b> | Ft. Pierce |
| Toni A. Weaver       | Agriculture and Consumer Protection Specialist        | Ft. Pierce |
| John Serra           | Agriculture and Consumer Protection Specialist        | Ft. Pierce |
| VACANT               | Agricultural Technician II                            | Ft. Pierce |
| Brandon J. Morgan    | Agricultural Technician II                            | Ft. Pierce |
| VACANT               | Agricultural Technician II                            | Ft. Pierce |
| Katie Sue Weingarten | Agricultural Technician II                            | Ft. Pierce |

|                     |                                                       |            |
|---------------------|-------------------------------------------------------|------------|
| <b>Paul Sinnott</b> | <b>Agriculture and Consumer Protection Supervisor</b> | Ft. Pierce |
| Mike Schlueter      | Agriculture and Consumer Protection Specialist        | Ft. Pierce |
| Jay L. Towler       | Agricultural Technician III                           | Ft. Pierce |
| Ray D. Jordan       | OPS Agricultural Technician II                        | Ft. Pierce |
| Daniel F. Ochse     | OPS Agricultural Technician II                        | Ft. Pierce |
| Steven Rish         | OPS Agricultural Technician II                        | Ft. Pierce |
| VACANT              | OPS Agricultural Technician II                        | Ft. Pierce |
| William S. Blatch   | OPS Agricultural Technician III                       | Ft. Pierce |

|                       |                                                       |            |
|-----------------------|-------------------------------------------------------|------------|
| <b>Carol McKenzie</b> | <b>Agriculture and Consumer Protection Supervisor</b> | Vero Beach |
| John Quigley          | Agriculture and Consumer Protection Specialist        | Vero Beach |
| John Wiggins          | Agriculture and Consumer Protection Specialist        | Vero Beach |
| VACANT                | Agricultural Technician III                           | Vero Beach |
| Eric Witter           | Agricultural Technician II                            | Vero Beach |
| Mathew McCloskey      | Agricultural Technician II                            | Vero Beach |

|                     |                                                       |              |
|---------------------|-------------------------------------------------------|--------------|
| <b>Joyce Willis</b> | <b>Agriculture and Consumer Protection Supervisor</b> | Labelle      |
| Ted A. Phillips     | Agriculture and Consumer Protection Specialist        | Winter Haven |
| Lisa A. Blakey      | Agriculture and Consumer Protection Specialist        | Labelle      |
| Ricky Byrd          | Agricultural Technician II                            | Winter Haven |
| Mary J. Graham      | Agricultural Technician II                            | Labelle      |
| Karen Noland        | Agricultural Technician II                            | Labelle      |

## GIANT AFRICAN LAND SNAIL PROGRAM

|                       |                              |       |
|-----------------------|------------------------------|-------|
| William M. Torres     | Environmental Specialist III | Miami |
| Mark Anthony McDonald | Environmental Specialist     | Miami |
| Julio A. Rodriguez    | Staff Assistant              | Miami |
| Lorena Dewitz         | OPS Staff Assistant          | Miami |
| Mary Yong Cong        | Biological Scientist IV      | Miami |

|                              |                                              |       |
|------------------------------|----------------------------------------------|-------|
| Sergio H Riveron Ponomarenko | Agriculture & Consumer Protection Specialist | Miami |
| Sherry Anne Steele           | Agriculture & Consumer Protection Specialist | Miami |
| Earl Keith Dalberry          | Agriculture & Consumer Protection Specialist | Miami |
| Marcus Leonard Jones II      | Agriculture & Consumer Protection Specialist | Miami |
| Ana Perez                    | Agriculture & Consumer Protection Specialist | Miami |

|                    |                                |       |
|--------------------|--------------------------------|-------|
| David M. Ortiz     | OPS Agriculture Technician III | Miami |
| Carolina Reece     | OPS Agricultural Technician II | Miami |
| Robert George Shim | OPS Agricultural Technician II | Miami |
| Nubia I Tapia      | OPS Agricultural Technician II | Miami |
| Carlos H Aguilera  | OPS Agricultural Technician II | Miami |

|                       |                                |       |
|-----------------------|--------------------------------|-------|
| Emilio J. Armas       | OPS Agriculture Technician II  | Miami |
| Roxanne Bono          | OPS Agriculture Technician II  | Miami |
| Pedro D. Buzzi, Jr.   | OPS Agriculture Technician II  | Miami |
| Carlos Anibal Cambana | OPS Agricultural Technician II | Miami |
| Reinaldo Casanas      | OPS Agricultural Technician II | Miami |
| Gabriel M. Collazo    | OPS Agricultural Technician II | Miami |
| Yelitza Crespo Avila  | OPS Agricultural Technician II | Miami |
| Margarita Diaz        | OPS Agricultural Technician II | Miami |

|                         |                                |       |
|-------------------------|--------------------------------|-------|
| Tina Ruth Porter        | OPS Agricultural Technician II | Miami |
| Denis Maria Acosta      | OPS Agricultural Technician II | Miami |
| Fernando Aguila         | OPS Agricultural Technician II | Miami |
| Travis Sentell Thurmond | OPS Agricultural Technician II | Miami |

|                       |                                |       |
|-----------------------|--------------------------------|-------|
| Yannick Michael Dyer  | OPS Agriculture Technician III | Miami |
| VACANT                | OPS Agriculture Technician III | Miami |
| Eve Olivia Martinez   | OPS Agriculture Technician II  | Miami |
| Sandra Isabel Montoya | OPS Agricultural Technician II | Miami |

## 2016-17 Annual Report

### Florida Department of Agriculture and Consumer Services, Plant Industry Division, Plant and Apiary Inspection Bureau

|                                |                                |       |
|--------------------------------|--------------------------------|-------|
| Natasha Felicia Newkirk- Carbs | OPS Agricultural Technician II | Miami |
| Alvaro P. Pertuz               | OPS Agricultural Technician II | Miami |
| Stanley Joseph Pigniat         | OPS Agricultural Technician II | Miami |
| Davenia Davette Polydor        | OPS Agricultural Technician II | Miami |

## DETECTOR DOG PROGRAM

|                 |                                     |              |
|-----------------|-------------------------------------|--------------|
| <b>VACANT</b>   | <b>Environmental Specialist III</b> | Miami        |
| Jennifer Mestas | Environmental Specialist II         | Miami        |
| VACANT          | Environmental Specialist II         | Miami        |
| Greg Farina     | Environmental Specialist II         | Apopka       |
| Karen Holton    | Environmental Specialist II         | Tampa        |
| <b>VACANT</b>   | <b>Environmental Specialist II</b>  | <b>Miami</b> |
| Omar Garcia     | Environmental Specialist II         | Miami        |



Figure 1 DPI Detector Dogs

## NURSERIES



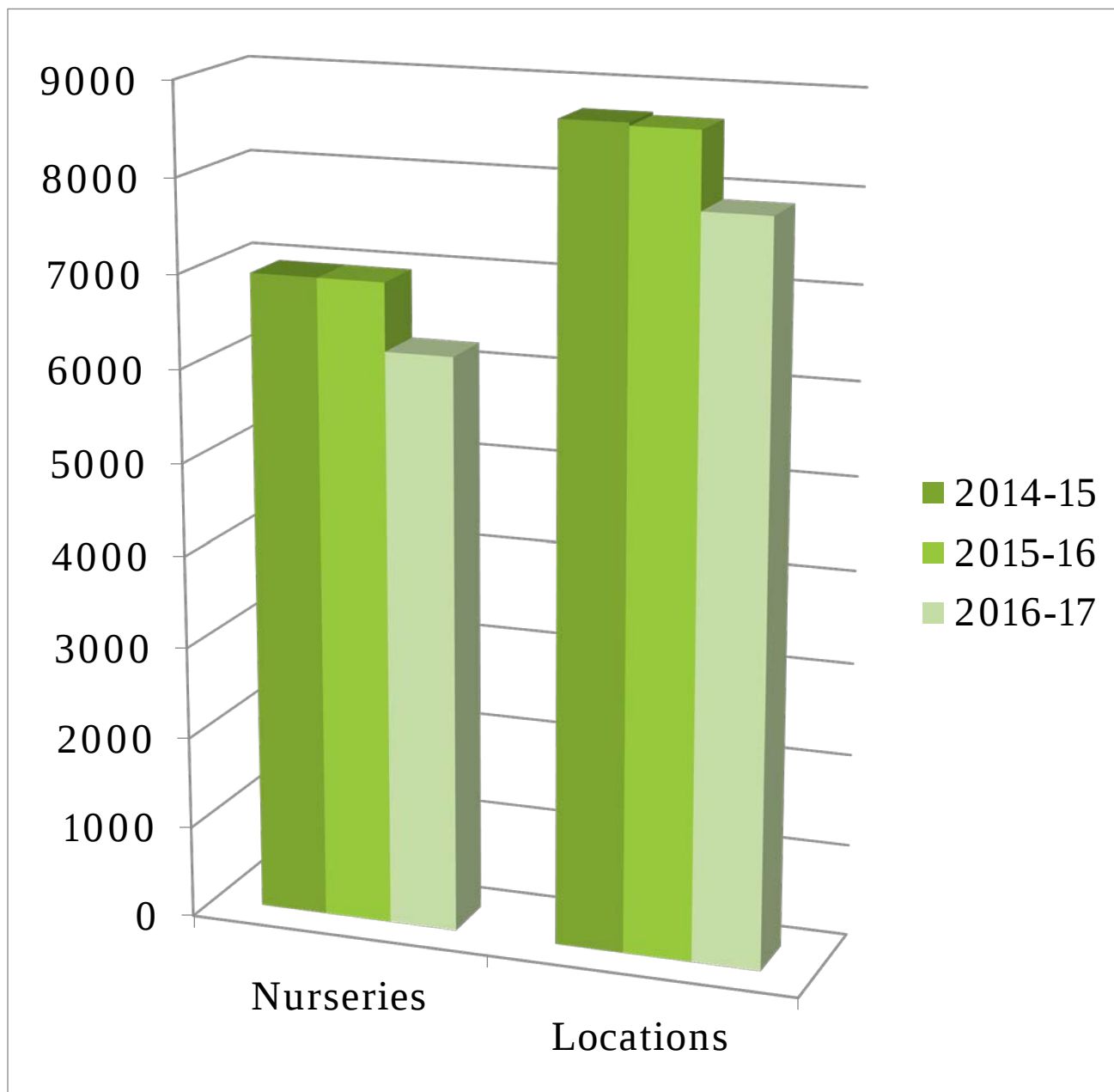
**Figure 2** Inspector checking a nursery

FDACS' Environmental Specialists made 33,852 inspections on 6,225 nurseries with 7,887 locations; during the 2016-17 season. Fifteen (15) Hold Order and Quarantine notices were issued to prevent the sale of infected or prohibited plants. These plants were either treated, destroyed, or released after being tested in a lab.

A Certificate of Registration issued by the Division of Plant Industry; is required by any person selling nursery stock in Florida. Nursery stock is defined as "all plants, trees, shrubs, vines, buds, vegetable and field crop plants, flowering annual plants, aquatic plants, corms, tubers, bulbs, liners, cuttings, grafts, and scions thereof, grown or kept for propagation, sale or distribution; EXCEPT seeds, lawn or pasture grasses, cut flowers, cut ferns, and cut foliage (greens) are specifically exempted from nursery stock classification for registration purposes, when apparently free from injurious plant pests.

|         | Nurseries | Locations |
|---------|-----------|-----------|
| 2015-16 | 6,948     | 8,695     |
| 2016-17 | 6,225     | 7,887     |

The data shows a slight decrease in the number of nurseries that were certified but a significant increase in locations. This change is believed to be a reflection of the improving economy and its impact on the nursery industry. The increase in nursery production indicates the strength and staying power of Florida's nurseries.



**Table 2** Number of Florida Nurseries and Locations

## STOCK DEALERS



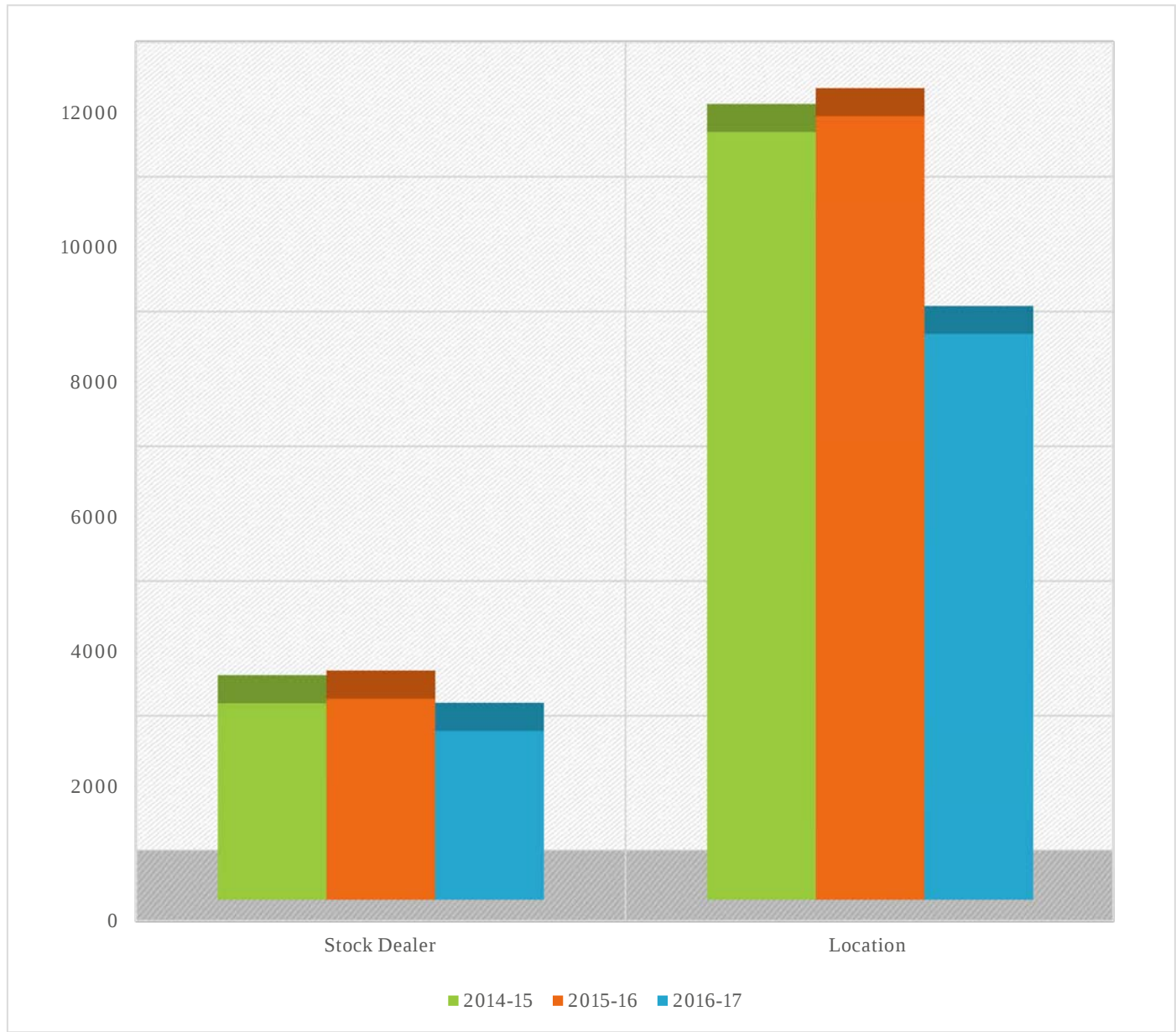
**Figure 3** Registered Stock Dealer

FDACS' Environmental Specialists made 11,247 inspections on 2,505 stock dealers with 8,395 locations; during the 2016-17 season. Five (5) Hold Order and Quarantine notices were issued to prevent the sale of infected or prohibited plants. These plants were either treated, destroyed, or released after being tested in a lab.

An Inspection means; Nursery stock must be inspected by a Plant Protection Specialist of the Division of Plant Industry prior to sale or distribution. (Distribution is defined as the movement of nursery stock from the property where grown or kept to any other property that is not contiguous thereto, regardless of the ownership of the properties concerned.) Also, if sold by grade, stock must be graded and labeled as prescribed by the Division of Plant Industry. Requests for inspection should be made at least 30 days in advance of the movement of stock. If a special inspection is required, it will be necessary for the nurseryman to defray the cost of such an inspection.

|         | Stock Dealers | Locations |
|---------|---------------|-----------|
| 2015-16 | 2,984         | 11,627    |
| 2016-17 | 2,505         | 8,395     |

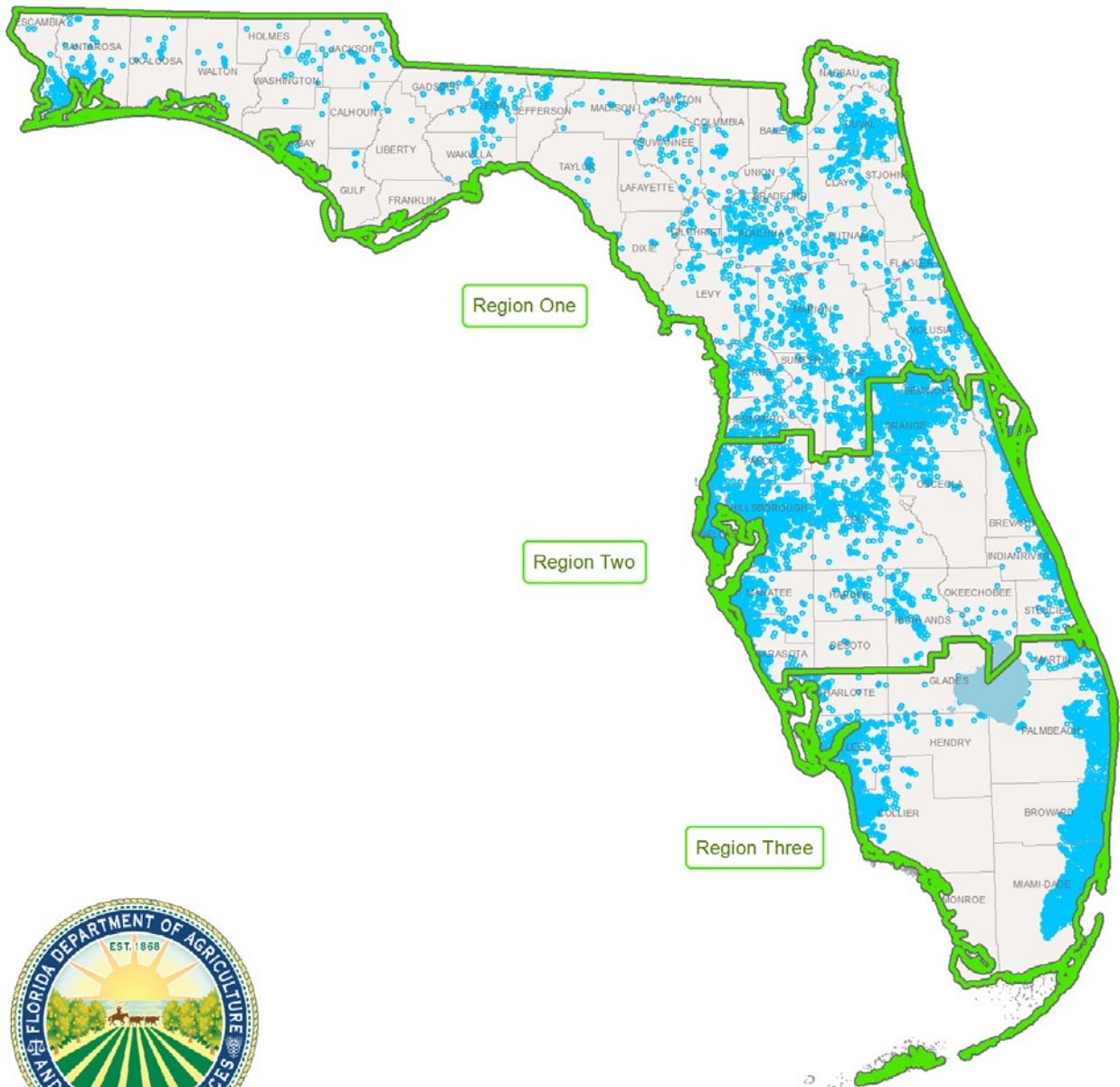
The data shows a slight decrease in the number of stock dealers that were certified and include a marginal decrease in locations. This change is believed to be a reflection of the environmental impact on the nursery industry. The decrease in stock dealer production indicates little effect on Florida's stock dealers.



**Table 3** Number of Florida Stock Dealers

## Florida Nurseries and Stock Dealers

October 13, 2017



 Plant Inspection Regions     Nurseries and Stock Dealers

User: albritm1

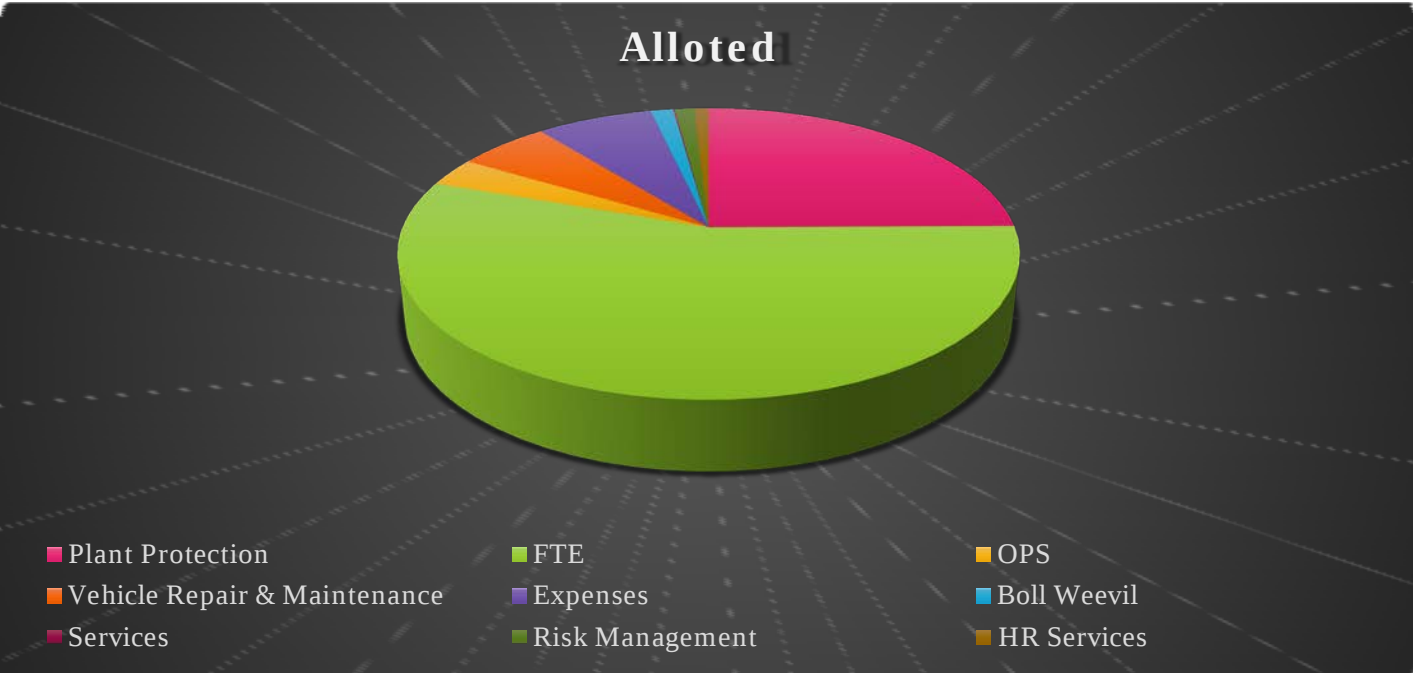
0      40      80      160      240      320  
Miles

**Figure 4** Florida map with Nurseries and Stock Dealers plotted

ADMINISTRATIVE AND SUPPORT

The Plant & Apiary Inspection’s state authorized budget for 2016-17 was \$7,131,499.21 and included a total staff of 249 full-time employees. The Plant Industry Division continued its work with other organizations, both public and private, through the administration of cooperative agreements. For the period, approximately \$1,817,804.74 in cooperative agreements was received and administered for work with joint plant pest regulatory programs. Programs include Imported Fire Ant, Giant African Land Snails, and Detector Dogs. Figure 5 provides a summary of the Plant Industry budget for the 2016-17 fiscal year.

The Plant & Apiary Inspection Bureau, Support Operations provides support for all the division’s programs, including staff and maintenance of Division owned vehicles and other equipment needed for all service and regulatory programs. This unit also assists the Division with the implementation of safety orientation.



**Table 4** Plant & Apiary Inspection FY 2016-17 Budget Summary

**Table 5 Fees Collected**

| <b><u>FEES COLLECTED 2016-17</u></b> |                         |
|--------------------------------------|-------------------------|
| <b>Type of Charges</b>               | <b>Amount Collected</b> |
| NURSERY CERTIFICATE FEES             | \$520,015               |
| STOCK DEALER FEES                    | \$254,709               |
| APIARY FEES                          | \$75,090                |
| SPECIAL INSPECTION FEES              | \$1,125,720             |
| BOLL WEEVIL                          | \$168,584               |
| PROTOCOL                             | \$523,892               |
| RETURNED CHECKS                      | \$289                   |
| REFUNDS FOR PRIOR YEAR               | \$486                   |
| INSECT ID                            | \$1,070                 |
| INTRO. PERMIT FEES                   | \$413                   |
| RECORDS REQUESTS (MISC)              | \$341                   |
| SALE OF SURPLUS PROPERTY             | \$126,462               |
| BIOTECHNOLOGY                        | \$857                   |
| INSURANCE RECOVERY                   | \$1,839                 |
| CURRENT YEAR FUND                    | \$7,131,499             |
| <b>TOTAL</b>                         | <b>\$9,931,266</b>      |

## PLANTS AND NURSERIES UNDER INSPECTION BY COUNTY

| COUNTY       | TOTAL ACRES | TOTAL PLANTS | TOTAL NURSERIES |
|--------------|-------------|--------------|-----------------|
| ALACHUA      | 663.71      | 4,436,776    | 150             |
| BAKER        | 62.45       | 47,350       | 26              |
| BAY          | 3,076.35    | 15,590       | 16              |
| BRADFORD     | 9.27        | 29,310       | 16              |
| BREVARD      | 836.37      | 790,480      | 200             |
| BROWARD      | 1,130.23    | 3,564,158    | 364             |
| CALHOUN      | 10.95       | 4,399,450    | 4               |
| CHARLOTTE    | 293.38      | 841,995      | 45              |
| CITRUS       | 245.07      | 286,364      | 63              |
| CLAY         | 18.84       | 482,723      | 35              |
| COLLIER      | 1,653.12    | 175,281,288  | 130             |
| COLUMBIA     | 199.6       | 1,273,442    | 38              |
| DESOTO       | 620.34      | 2,020,723    | 33              |
| DIXIE        | 34.51       | 6,741        | 10              |
| DUVAL        | 1,198.34    | 558,036      | 64              |
| ESCAMBIA     | 40.02       | 4,335,978    | 43              |
| FLAGLER      | 11.96       | 1,433        | 8               |
| FRANKLIN     | 0.10        | 600          | 1               |
| GADSDEN      | 480.09      | 9,361,006    | 18              |
| GILCHRIST    | 82.17       | 856,076      | 22              |
| GLADES       | 3,076.35    | 690,525      | 21              |
| GULF         | 0.36        | 1,590        | 3               |
| HAMILTON     | 91.73       | 71,185       | 12              |
| HARDEE       | 1,585.22    | 5,103,853    | 45              |
| HENDRY       | 1000.65     | 48,656,880   | 46              |
| HERNANDO     | 761.84      | 422,042      | 62              |
| HIGHLANDS    | 2,907.84    | 6,270,285    | 99              |
| HOLMES       | 1.96        | 5,120        | 7               |
| INDIAN RIVER | 1,070.83    | 327,764      | 81              |
| JACKSON      | 8.95        | 19,910       | 25              |
| JEFFERSON    | 222.10      | 2,586,750    | 27              |
| LAFAYETTE    | 147.63      | 5,059,321    | 6               |
| LAKE         | 3,349.18    | 34,288,169   | 236             |
| LEE          | 2,414.60    | 2,262,847    | 266             |
| LEON         | 139.30      | 137,360      | 37              |
| LEVY         | 378.23      | 267,059      | 37              |
| LIBERTY      | 0.35        | 1,620        | 2               |

**Table 6** Plants and Nurseries under inspection by County

| COUNTY         | TOTAL ACRES      | TOTAL PLANTS       | TOTAL NURSERIES |
|----------------|------------------|--------------------|-----------------|
| MADISON        | 105.09           | 10,100,010         | 16              |
| MANATEE        | 873.19           | 333,983,689        | 101             |
| MARION         | 12.36            | 85,815             | 26              |
| MARTIN         | 1,701.25         | 5,041,595          | 158             |
| MIAMI-DADE     | 45,402.77        | 142,146,277        | 1,405           |
| MONROE         | 11.65            | 36,105             | 34              |
| NASSAU         | 160.70           | 33,714             | 17              |
| OKALOOSA       | 9.11             | 15,330             | 16              |
| OKEECHOBEE     | 3,206.70         | 274,427            | 22              |
| ORANGE         | 1,395.09         | 39,530,766         | 340             |
| OSCEOLA        | 316.47           | 1,446,734          | 65              |
| PALM BEACH     | 1,653.12         | 18,651,093         | 298             |
| PASCO          | 293.01           | 1,263,058          | 124             |
| PINELLAS       | 16.84            | 41,170             | 33              |
| POLK           | 677.98           | 7,924,310          | 234             |
| PUTNAM         | 26.30            | 670,206            | 50              |
| SANTA ROSA     | 303.26           | 5,650,586          | 42              |
| SARASOTA       | 172.66           | 3,945,129          | 69              |
| SEMINOLE       | 301.86           | 2,134,811          | 121             |
| ST. JOHNS      | 229.14           | 670,971            | 43              |
| ST. LUCIE      | 1,426.10         | 542,351            | 57              |
| SUMTER         | 830.67           | 6,998,568          | 45              |
| SUWANNEE       | 424.51           | 13,135,954         | 27              |
| TAYLOR         | 83.33            | 4,338,364          | 8               |
| UNION          | 9.22             | 6,867              | 5               |
| VOLUSIA        | 1,723.72         | 2,843,471          | 187             |
| WAKULLA        | 9.16             | 377,000            | 11              |
| WALTON         | 3.30             | 9,330              | 9               |
| WASHINGTON     | 30.60            | 10,610             | 10              |
| <b>SUMMARY</b> | <b>87,568.79</b> | <b>473,249,758</b> | <b>6,225</b>    |

**Table 6 (Cont'd)** Plants and Nurseries under inspection

**Figure 5** Florida state flower



| NURSERY STOCK BY KIND - PLANTS |                    |                    |                    |
|--------------------------------|--------------------|--------------------|--------------------|
| KIND OF STOCK                  | 2014-2015          | 2015-2016          | 2016-2017          |
| Orange                         | 4,189,148          | 4,266,838          | 4,444,720          |
| Grapefruit                     | 230,750            | 186,120            | 114,827            |
| Lemons                         | 38,435             | 87,877             | 172,988            |
| Mandarin                       | 205,859            | 401,751            | 463,439            |
| Seedbed                        | 6,171,274          | 5,785,468          | 5,045,963          |
| Seedlings                      | 2,141,048          | 1,745,316          | 1,556,901          |
| Miscellaneous                  | 701,260            | 245,974            | 130,701            |
| <b>TOTAL CITRUS</b>            | <b>13,677,774</b>  | <b>12,719,344</b>  | <b>11,929,539</b>  |
| Aquatics                       | 1,497,423          | 2,348,141          | 1,988,321          |
| Ornamentals                    | 87,595,086         | 72,142,172         | 66,558,435         |
| Shrubs                         | 105,488,870        | 99,888,162         | 102,784,076        |
| Caladiums & Other Bulbs        | 195,465            | 376,326            | 168,157            |
| Vegetable Transplants          | 257,856,777        | 46,677,687         | 199,409,284        |
| Fruit/ Nut                     | 1,012,077          | 227,831            | 258,705            |
| Palms                          | 30,571,736         | 22,431,859         | 23,594,806         |
| Foliage                        | 87,595,086         | 72,142,172         | 66,558,435         |
| <b>TOTAL NON-CITRUS</b>        | <b>571,812,520</b> | <b>316,234,350</b> | <b>461,320,219</b> |
| <b>GRAND TOTAL</b>             | <b>585,490,294</b> | <b>328,953,694</b> | <b>473,249,758</b> |

Table 7 Nursery Stock by Kind

Figure 6 Florida nursery



Figure 7 Variety of citrus

## IMPORTED FIRE ANT (IFA) CERTIFICATION PROGRAM

Since the introduction of the imported fire ant (IFA) in Florida between 1933 and 1945 it has spread to all counties. There are two species of these IFAs found in Florida. The most common is *Solenopsis invicta* Buren, the red imported fire ant (RIFA) and the less common *Solenopsis geminate* (Fabricius); a native fire ant. As of June 30, 2017, there were 1,093 nursery and stock dealers under compliance agreement for Imported Fire Ant certification purposes. During this period, plant inspection personnel spent 6,251 hours associated with IFA activities.



**Figure 8** (*Solenopsis invicta* Buren)  
the Red Imported Fire Ant



**Figure 9** (*Anthonomus grandis*) The  
Boll Weevil

## BOLL WEEVIL ERADICATION PROGRAM

The boll weevil, *Anthonomus grandis*, is considered a major pest of cotton. The boll weevil first entered the U.S. in 1892, but has been eradicated from Florida for several years now through the Boll Weevil Eradication Program. At the close of the 2017 cotton-growing season, there were 77 commercial cotton producers in the state. These producers planted 23,067 acres of cotton in 8 counties. There was no boll weevil trapped in the state during the 2017 season.

## COMMERCIAL CITRUS NURSERY INSPECTION PROGRAM

As of June 30, 2017, there were 68 citrus propagating nurseries certified and inspected on a 30-day cycle. These locations consist primarily of commercial citrus nurseries for use in commercial citrus groves. This includes 27 own-use nurseries, 15 citrus research facilities, 2 dooryard only citrus producers and 65 commercial/dooryard citrus nurseries. Our inspectors are restricted from inspecting more than one nursery per day to prevent transport of citrus diseases/pests between nurseries. During this period, 5 commercial citrus nurseries were impacted by quarantine actions resulting in the destruction or limited movement of exposed plants until released from quarantine. During this reporting period Plant Inspection Personnel spent 17,437 hours associated with inspection activities.

## CARIBBEAN FRUIT FLY PROTOCOL PROGRAM

### COMMERCIAL CITRUS PRODUCTION

During the 2016-2017 season there were 41,640 acres certified under CFFP which produced 1,962,441 cartons of certified citrus. The certified fruit shipped to Japan, South Korea, China, California and Texas.

During the fiscal year 2016-2017, CFFPP personnel conducted the following number of inspections:

- Fruit Fly trap services: 26,730
- Harvesting inspections: 3,183
- Packing house inspections: 864
- Acreage surveyed in and around production areas for preferred hosts: 276,682

### COMMERCIAL PEACH PRODUCTION

As of June 30, 2017 there were 116,864 pounds of peaches shipped to Texas, an increase from the 2016 figures of 42,960 shipped to the same state. This change is most likely due to the scarcity of peaches from Georgia; which opened the market for Florida growers to sell them at a good price.

#### Protocol Peaches Shipped to Texas

|           | 2017    | 2016   | 2015    |
|-----------|---------|--------|---------|
| # Cartons | 14,608  | 5,370  | 32,643  |
| # Pounds  | 116,864 | 42,960 | 261,144 |

#### Peach Acreage Certified

|                   | 2017 | 2016 | 2015 |
|-------------------|------|------|------|
| # Acres Actual    | 572  | 320  | 396  |
| # Acres Billable* | 960  | 480  | 600  |

\*Minimum 40 acres per designated area

### CARAMBOLA

During the 2016-2017 season there were 120 acres certified under CFFPP, which produced 32,847 cartons of certified Carambola. The fruit was certified to ship to Texas.

During the fiscal year 2016-2017, CFFPP personnel conducted the following number of inspections:

- Fruit fly trap services: 420
- Harvesting inspections: 22
- Packing house inspections: 31
- Acreage surveyed for preferred hosts: 680

## IMPORT INSPECTIONS

Distribution centers, nurseries importing foreign plant material and post-entry quarantine locations are potential high-risk sites for bringing in exotic insect pests and plant pathogens due to the large volume of plant and plant products imported to these sites. Import inspection activities were conducted at high risk locations throughout the state. During this reporting period Plant Inspection Personnel spent 1,812 hours associated with import inspection activities. These inspections are instrumental in preventing the introduction of exotic insect pests and plant pathogens into the US via Florida. During the fiscal year 2016-2017 there were six post entry quarantine permits authorized. During the same period of time state inspectors conducted four post entry quarantine inspections on plant material. Two were approved and two were not.

## NON-PROHIBITED AQUATIC HARVESTING PERMITS

The Division of Plant Industry has regulatory authority of permitting for the importation, transportation, cultivation, collection, sale, or possession of any aquatic plant. Non-prohibited aquatic plant harvesters are now required to be registered as a nursery and sign a compliance agreement/permit to harvest non-prohibited aquatics. For the period of July 1, 2016 to June 30, 2017, the division issued nine aquatic harvesting permits. The Division currently has 39 active nurseries under compliance.

## ENDANGERED PLANT HARVESTING PERMITS

Harvesting Endangered and Commercially Exploited plants requires individuals to have a permit issued by the Division of Plant Industry. Between July 1, 2015 and June 30, 2016, the division issued 36 permits as compared to the 68 permits issued during the same period last year.

## PEST DETECTION RECORDS

| Pest Records       | Arthropods/Mollusca | Diseases /Nematodes |
|--------------------|---------------------|---------------------|
| New Host Records   | 33                  | 16                  |
| New County Records | 152                 | 6                   |
| New State Records  | 8                   | 3                   |
| New U.S. Records   | 8                   | 3                   |
| New to Continent   | 8                   | 4                   |

## ORIENTAL FRUIT FLY (*BACTROCERA DORSALIS*) ERADICATION PROGRAMS

### Saint Petersburg

On Friday, July 01, 2016, one Male *Bactrocera* fruit fly was found in a Jackson Trap baited with the male attractant Methyl Eugenol (ME) that was placed in an avocado tree on the north side of the residence at 545 Highland St. N, St. Petersburg, Florida. 301 Methyl Eugenol (ME) and 65 McPhail traps were placed and serviced. All ME and McPhail traps were serviced with negative results; no suspect flies found, concluding the delimitation program.

### Mount Dora

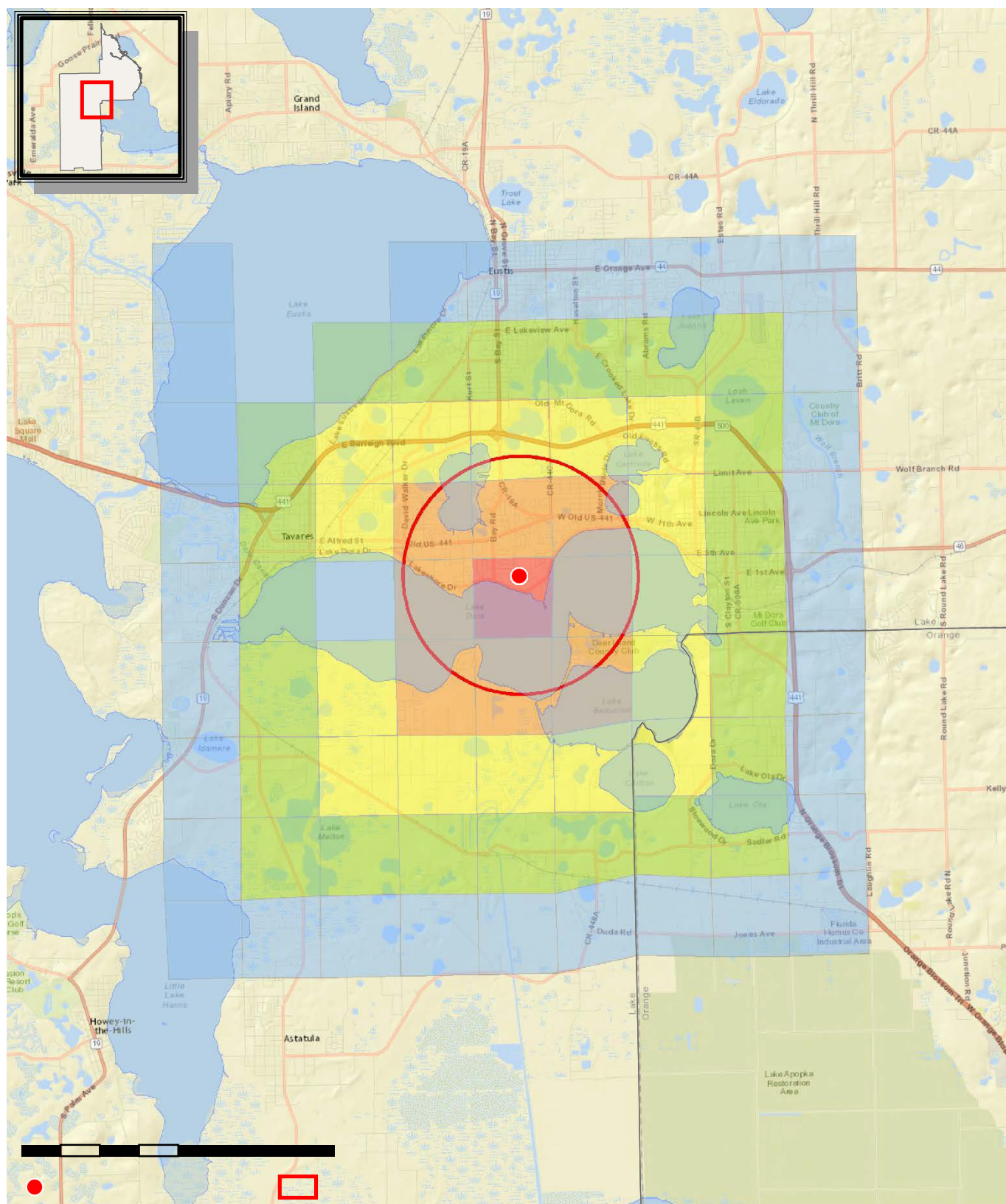
A single male of the Oriental fruit fly, *Bactrocera dorsalis* (Hendel) (Tephritidae), was captured in a methyl eugenol-baited fruit fly detection trap that was placed in a sour orange tree, in Mt. Dora (Lake County) on 12 January 2017.

Several members of this complex of species are of great economic importance, and the Florida and U.S. Departments of Agriculture respond aggressively to the detection of any of these fruit flies in the State. The response to the detection intensified and expanded the trapping program. Plant Inspection personnel detected the one Oriental Fruit Fly in Lake County from 12 January 2017 to 07 June 2017. Eradication of this pest, was not warranted beyond the addition of trapping measures in the zones. The additional trapping continued for three life cycle of the fly, which each is approximately 90 days.

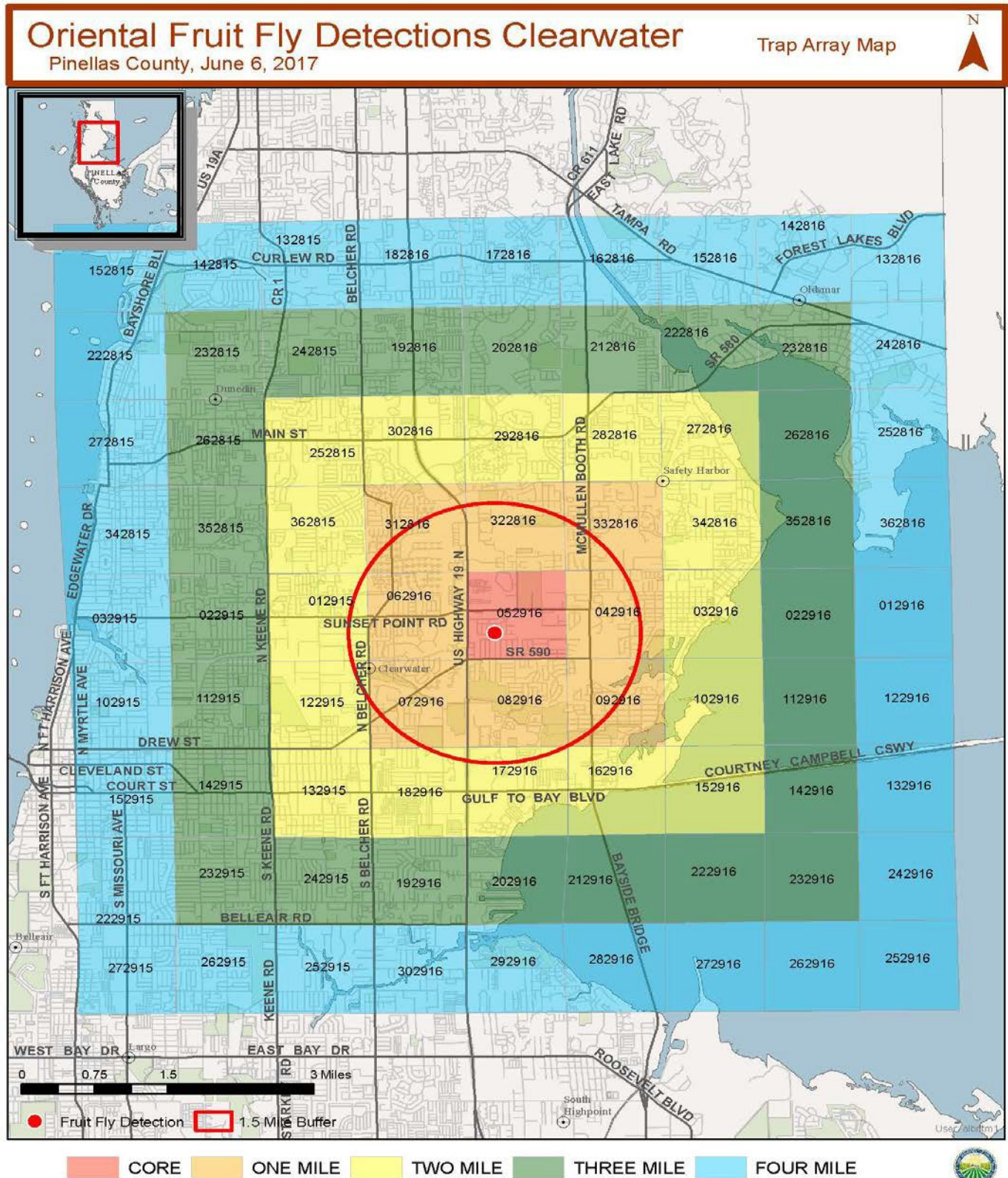
### Clearwater

On 06 June 2017, one male *Bactrocera dorsalis* complex fruit fly was detected in a Jackson Trap baited with male attractant Methyl Eugenol (ME) that was placed in a mango tree in Clearwater, FL (Pinellas County). This is the second find in the state during 2017. This fly find triggered a delimitation area of 66 square miles. This incident is ongoing with trapping measures in place and will continue into the next fiscal year.

# Mount Dora



## Clearwater



## NEMATODE CERTIFICATION ACTIVITIES

### ORNAMENTAL NURSERIES

Florida nursery stock is regulated for certain nematodes when shipped to California, Arizona, Texas, Louisiana, European Union (EU) and other countries. The Division of Plant Industry has plant inspectors across the state responsible for conducting nematode sampling in order to meet certification requirements. During the 2016-2017 Fiscal Year, nematode certification personnel evaluated 1,131 ornamental nursery locations consisting of 16,698 acres. During this reporting period, plant inspection personnel spent 12,661 hours related to nematode certification activities.

### COMMERCIAL CITRUS NURSERY SITES APPROVED

There were no nematodes of citrus detected in citrus nurseries this year. During this fiscal year 59 citrus nursery sites consisting of 289 acres were sampled and approved for pre-movement of commercial citrus plants.

### PITS

There were no nematodes of citrus detected in pits this year. During this fiscal year 34 soil pits consisting of 1,233 acres were sampled and approved for nematode certification.

### SAMPLES TAKEN

A total of 4,305 samples were collected and processed from citrus nurseries, soil pits, and ornamental nurseries for nematode certification during the 2016-2017 year.

## EXPORT CERTIFICATIONS

**Export Certification** – allows for nurseries and nursery stock dealers to export plants and plant products out of the state and/or country. During the fiscal year 2016-2017, Plant Inspection personnel issued the following number of export certificates for plants and plant products destined to other states and countries.

- State Phytosanitary Certificates 4,398 certificates
- Federal Phytosanitary Certificates: 9,769 certificates
- Federal Re-export Certificates: 444
- Federal Processed Products: 36 certificates

**Canadian Greenhouse Certification** – allows for nurseries to export to Canada based on quarterly inspections using authorized stickers in place of a phytosanitary certificate. We currently have 128 nursery locations under compliance and have authorized 3,640 stickers to be printed this year.

**Canadian Blueberry Certification** – allows for blueberry fruit shipments to enter Canada based on negative trapping surveys for the blueberry maggot using authorized stickers in place of a phytosanitary certificate. During the past fiscal year, we certified 55 locations consisting of 2,123 acres in Florida and authorized the printing of 1,050 stickers to be printed.

**Tropical Spiderwort Certification** – allows for commercial nursery shipments to meet the quarantine requirements of North Carolina in regard to freedom of the noxious weed, Tropical Spiderwort. For this reporting period 589 compliance agreements were issued and at the present time there are 1,033 nursery locations actively under compliance for Tropical Spiderwort.

## CONSUMER ACTIVITIES

Plant Inspection routinely assists consumers by responding to complaints and requests for information or by investigating plant pest problems. From July 1, 2016 until June 30, 2017 there were 14,627 consumer requests received by the Division of Plant Industry Helpline and forwarded to Plant Inspection for follow-up. The program areas of the calls included 4,930 GALS, 38 Fruit Fly, 5,239 Citrus Health, 878 Laurel Wilt and Nursery and Stock Dealer Certifications.

## OFFICE OF AGRICULTURE LAW ENFORCEMENT REPORT OF AGRICULTURE PRODUCTS ENTERING FLORIDA

A total of 26,909 vehicles carrying plants and plant products were reported entering and exiting Florida through the agriculture inspection stations operated by the Office of Agricultural Law Enforcement Unit during the 2015-2016 Fiscal Year. The commodities indicated below were reported from shipments entering Florida. Statistics provided by the Office of Agricultural Law Enforcement.

| 2016-17<br>Product | Total<br>Shipments | Total<br>Violations |  | 2016-17<br>Product | Total<br>Shipments | Total<br>Violations |
|--------------------|--------------------|---------------------|--|--------------------|--------------------|---------------------|
| AAA MULTIPRODUCTS  | 1,327              | 35                  |  | MELON              | 80                 | 24                  |
| ASTER              | 1                  | 0                   |  | NASTURTIUM         | 0                  | 0                   |
| AVOCADO            | 378                | 45                  |  | NURSERY STOCK      | 1,546              | 179                 |
| BABYS BREATH       | 0                  | 0                   |  | OAK                | 20                 | 1                   |
| BEET               | 0                  | 0                   |  | ONION              | 172                | 11                  |
| BROAD BEAN         | 0                  | 0                   |  | ORGANIC VEGETABLES | 3,405              | 15                  |
| BROCCOLI           | 1,107              | 23                  |  | OTHER - PLANT      | 1,126              | 73                  |
| CALENDULA          | 0                  | 0                   |  | PALMS              | 447                | 7                   |
| CARNATION          | 0                  | 0                   |  | PEPPER             | 106                | 23                  |
| CAULIFLOWER        | 619                | 0                   |  | PINE STRAW         | 0                  | 0                   |
| CELERY             | 355                | 2                   |  | POTATO             | 89                 | 2                   |
| CHRYSANTHEMUM      | 2                  | 0                   |  | PRODUCE-DOMESTIC   | 1,110              | 18                  |
| CITRUS             | 1,771              | 45                  |  | PRODUCE-FOREIGN    | 797                | 258                 |
| CUCUMBERS          | 42                 | 11                  |  | RED CHARD          | 0                  | 0                   |
| CUT CHRISTMAS TREE | 48                 | 1                   |  | SEED POTATOES      | 59                 | 4                   |
| CUT FERN           | 2                  | 0                   |  | SOD                | 37                 | 2                   |
| CUT FLOWERS        | 153                | 5                   |  | SPINACH            | 392                | 2                   |
| CUT FOLIAGE        | 51                 | 4                   |  | SUGARCANE          | 5                  | 2                   |
| DOGWOOD            | 3                  | 1                   |  | SWEET PEA          | 0                  | 0                   |
| FIREWOOD           | 17                 | 3                   |  | TOMATO             | 705                | 56                  |
| FLAX               | 0                  | 0                   |  | UNKNOWN            | 15                 | 1                   |
| GARDEN LETTUCE     | 1,822              | 17                  |  | VIOLA              | 0                  | 0                   |
| GARDEN PEA         | 0                  | 0                   |  |                    |                    |                     |
| GARLIC             | 0                  | 0                   |  |                    |                    |                     |
| GREEN ONIONS       | 1,819              | 35                  |  |                    |                    |                     |
| HAY                | 80                 | 25                  |  |                    |                    |                     |
| KALE               | 0                  | 0                   |  |                    |                    |                     |
| LEEKs              | 0                  | 0                   |  |                    |                    |                     |
| LIME               | 192                | 35                  |  |                    |                    |                     |
| MANGOES            | 427                | 17                  |  | TOTALS             | 20,326             | 982                 |

## GIANT AFRICAN LAND SNAIL (GALS) PROGRAM

During routine fruit fly monitoring activities, a snail specimen that had been collected by a homeowner in Miami Dade County was provided to a Florida Department of Agriculture and Consumer Services Division of Plant Industry inspector and later identified by DPI, Florida Museum of Natural History and USDA APHIS PPQ taxonomic specialists as *Achatina fulica*, Giant African Land Snail (GALS). The specimen was collected on September 8, 2011 in the City of Miami, Miami-Dade County. Since the initial detection, over 168,000 snails have been collected on 719 properties in 32 core areas of infestation.

Giant African Land Snails are a potential threat to a wide variety of crops, including vegetable, field, oil, ornamental and fruit crops. Our primary mission is to protect the health and value of American agricultural resources threatened by the establishment of exotic pests. Therefore, the first priority is to detect and/or mitigate economically important pest introductions to prevent production losses and/or trade disruption to U.S. growers and industry that would result from the establishment of economic pests and their spread. In addition, this agricultural pest poses a human health risk as a carrier of the rat lungworm (nematode) which can cause eosinophilic meningitis in humans.

Thirty-four (34) personnel are assigned to the GALS program in Miami-Dade County, Florida. Program activities include six core teams carrying out survey, control, regulatory and outreach in their assigned areas based on positive cores.

Survey and control activities involve biweekly inspections including the mechanical collection of GALS, molluscicides bait applications and debris removal. As of June 30, 2017 the following was completed by our survey and control teams:

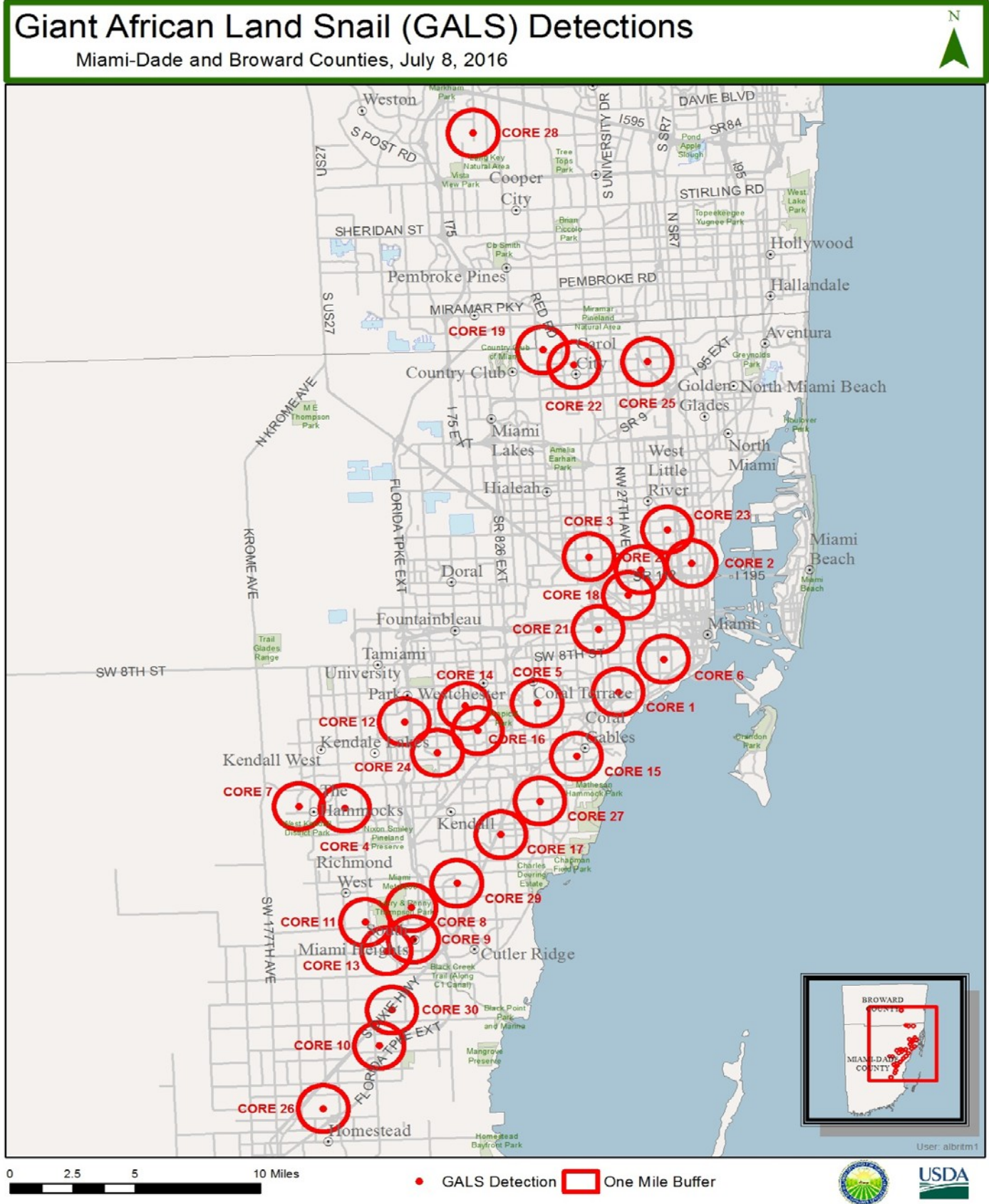
181,998 inspections, 95,106 properties bait treated, Over 3 million pounds of debris removed

168,155 GALS collected

Regulatory and outreach activities involve nursery, stock dealer, solid waste, recycling, transfer facilities, illegal dumpsite inspections and helpline calls. As of June 30, 2017 the following was completed by our regulatory and outreach teams:

1,035 nursery inspections, 631 stock dealer inspections, 656 solid waste/recycling/transfer station inspections, 139 Lawn maintenance inspections, 259 illegal dumpsite inspections

2,676 helpline resolved



## DETECTOR DOG PROGRAM

A primary objective of this program is to continue safeguarding our nations' food and environmental security through early detection of exotic pests and pathogens that threaten our agricultural production and ecological systems. This program provides the opportunity for early identification and mitigation of plant pests through the use of detector dog technology directed at high risk pathways. We have trained canines deployed at mail/parcel hubs and distribution centers targeting high risk fruit fly host material.

During the past year, the Detector Dog Inspection section has added canine technology to our Giant African Land Snail (GALS) eradication efforts. This is an additional tool to be used in our successful eradication campaign against this plant pest by conducting field inspections on properties previously identified as positive or high risk for infestation.

We currently have four canine teams deployed parcel facilities conducting inspection of packages for high risk plants and plant products. Two teams are located in Central Florida (Orlando & Tampa) and two teams located in Miami. Teams conduct daily inspections at private mail sort facilities targeting plant pests that may negatively impact Florida agriculture and the food supply. Routine inspections using detector dog technology include detections of fruit, vegetables, plants and plant products mailed from within the state and into the state of Florida. High-risk target fruit identified through canine alerts include citrus, mangos, apples, pears, avacodo, lychee, kumquats and peaches.

We have two canine teams deployed on the GALS eradication program in Miami. The focus is to assist with early detection of live GALS on high risk properties. For properties that have been previously positive, the canine teams serve as an additional negative inspection and confirmation that a positive is free of the snails. For helpline calls or new detections, the canines can supplement a thorough survey and help quickly delimit infestations.

In addition to the six canine/handler teams, FDACS-DPI has one program manager headquartered in Miami to supervise the handlers and oversee the detector dog program. The program manager is responsible for conducting annual canine certification, program development and problem solving in all canine inspection areas.

During this reporting period FDACS-DPI personnel dedicated over 15,250 hours associated with the Detector Dog Inspection program.

## **APIARY INSPECTION – REGISTERED FLORIDA BEEKEEPERS**



**2016-2017 Florida Registered Beekeepers      4,622**

**2015-2016 Florida Registered Beekeepers      4,180**

**2014-2015 Florida Registered Beekeepers      3,858**

### **2016-2017**

**Honey Bee Colonies Certified Maintained 366,377**

**Honey Bee Colonies Seasonally Transported Out of State 449,273**

**Number of States to which Bees are shipped 32**

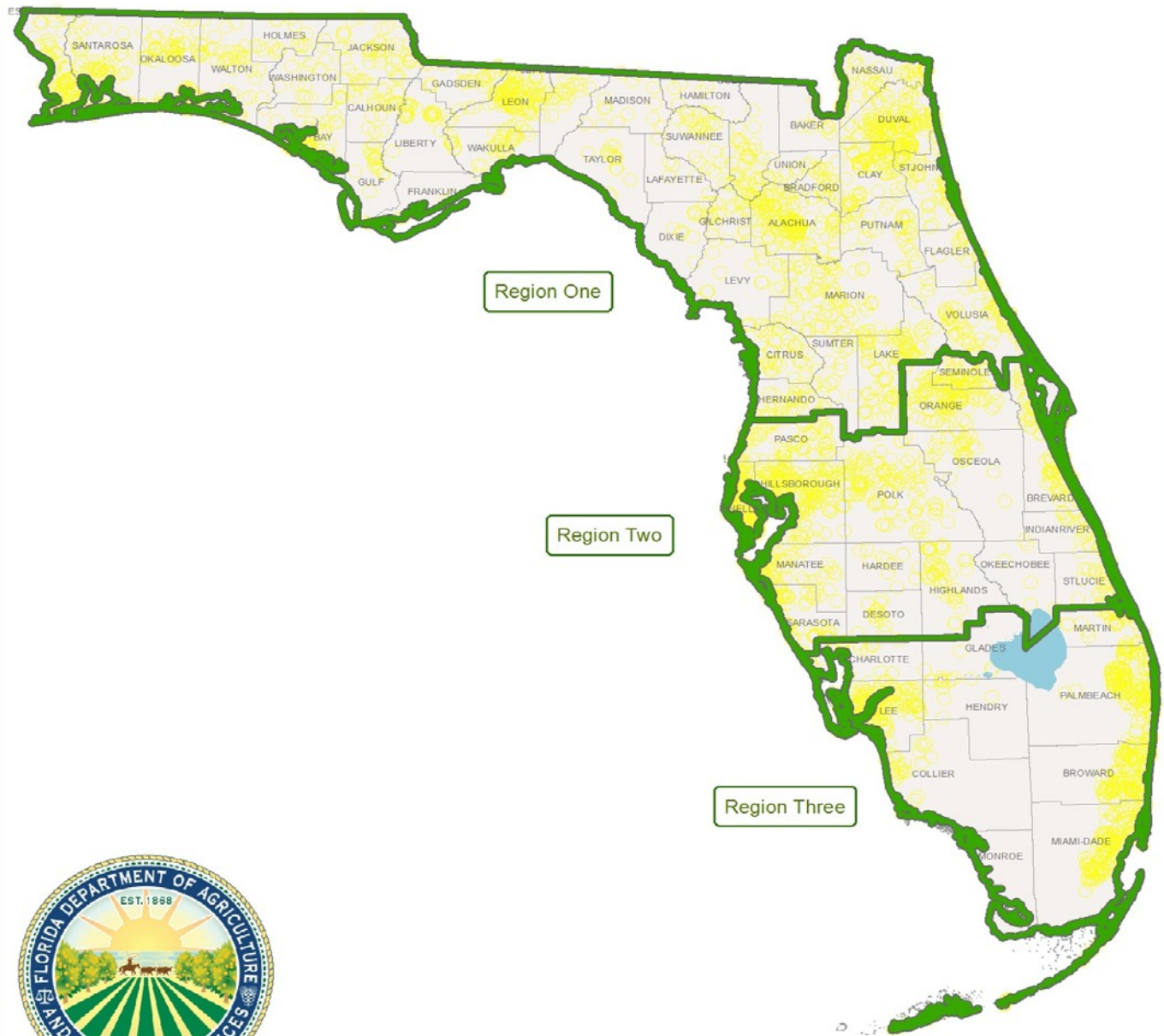
**Honey Bee Colonies Entering the State of Florida 209,772**

**Number of States Shipping Bees into Florida 32**

**Number of African Honey Bee Samples identified in Apiary Bee Laboratory 0**

## Florida Apiaries

July 8, 2016



 Plant Inspection Regions     Apiaries

User: albritm1

0    40    80    160    240    320  
Miles

## COMMERCIAL BEEKEEPING

The Commercial Professional Apiculture (Beekeeping) Industry has for the short term adapted to:

- 1 . Colony Collapse Disorder (CCD)/Significant unanticipated honey bee colony losses. Honey bee total colony losses over the 2016-2017 winter were dropped to 44%. Over the previous three years; winter loss survey data collected indicates an average 24% loss. This is a stressful business model. At this time honey bee biology and astute beekeepers can replace these losses temporarily. Beekeepers have found that keeping strong healthy colonies alive is easier than trying to play catch-up with weak colonies.
- 1 . Varroa mites (invasive/Asia) a robust external parasite of honey bees and as a vector of viral infections continue to negatively impact honey bee colony health. Chemical treatments can temporarily reduce Varroa populations, but create
- 1 . Collateral damage. In the broadest sense, killing a small bug (Varroa) on a big bug (honey bee) is extremely difficult if not impossible without damaging sub-lethally the big bug (honey bee). A new section 3 has been issued for Apivar® mite treatment strips for the control of varroa mites. Commercial Beekeepers are finding it harder to control the Varroa with the treatments available to them Apivar® has been a lifesaver for the beekeeping industry. A section 18 has also been issued for Hops Guard® II giving the beekeepers another tool in the war against varroa mites.
- 1 . Nosema spp. is a microsporidian digestive tract system destroyer. Historically Nosema apis was known and consistently controllable by beekeepers. The newly found Nosema Ceranae (invasive/Asia) are not as responsive to control measures. Beekeepers in the south are seeing more colonies lose in the summer months thought to be from Nosema Ceranae.

The price of honey has hit an all time record high price this year making beekeepers expand their operations to help increase the production of honey even with a 1/3 of a crop they are making a substantial increase in income. Wholesale honey prices; light honey \$2.25 – 3.00, medium \$2.00 – 2.70, dark \$1.85 – 2.50 and Tupelo \$3.85 – 5.00+

## **RECREATIONAL BEEKEEPING**

**As noted in the opening figures, the interest in honey bees and beekeeping has increased remarkably over the last several years. Local and regional beekeeper associations have multiplied from 5 local associations throughout the state to over 35. The Apiary Section's regulatory services and its educational outreach training have increased in parallel with new beekeeper registrations. With the signing of the new Honey Bee law allowing beekeeping in back yards under FDACS**

## **POLLINATION, FEE BASED MODEL**

Florida's leadership in fruit, vegetable, and berry production is dependent on managed honey bee pollination. Without a vital, active, and healthy managed honey bee industry, the production of strawberries, blueberries, watermelons (even seedless), citrus, avocado, lychee, cucumbers, squash, and a host of other agriculturally important products would suffer. Additionally think of all the fruits, nuts, seeds, and berries that support Florida's environment and wildlife that honey bees are responsible for by incidental pollination. Florida has 4,622 registered beekeepers; Niche pollinators (1 - 10 colonies) 3,924, sideliners (11 – 200) 207, and commercial beekeepers (201 +) 456 provide this direct benefits.

The state of Florida serves as a honey bee nursery for 366,367 bee colonies from 32 States during the months starting July through March. Colony losses over the summer migratory pollination season are addressed by dividing the remaining live honey bee colonies to make up losses. This is an intense management time for commercial migratory beekeepers preparing for the next fee based pollination season. Without this market, the commercial industry would shrink significantly. After finishing almond pollination in California in early March beekeepers may travel to Washington or Oregon for fruit pollination or back to Florida to solidify colony numbers for the following Spring, and/or to catch the additional honey flows Florida offer; Citrus, Palmetto, Galberry, Mangrove and Brazilian Pepper and many other ornamental and wild flower. As spring progress north so do the beekeepers; blueberries, strawberries, apples, peaches, cranberries, pumpkins, cucumbers and cherries are awaiting pollination from Florida to Maine.

Beekeepers and their honey bee colonies still alive after the summer season return to Florida in late July to repeat the cycle if they have the critical mass and resources.

## **APIARY RESEARCH ACTIVITIES**

### **Collaborating with the University of Florida/Institute of Food and Agriculture Sciences (UF/IFAS)**

- Collaborating with UF/IFAS, field testing legal mite treatments to compare efficacy and with a goal to improve the Varroa control product in the challenging heat and humidity of Florida and reducing residues.
- Collaborating with UF/IFAS, Mitigating the impact of African honey bees: determining how managed European honey bee colonies affect drone congregation areas.
- Collaborating with UF/IFAS, Assessment of honey bee pathogens in the *Apis mellifera* and non-*Apis* pollinator communities in North Central Florida

