



THE SENTINEL

NEWSLETTER OF THE FLORIDA STATE AGRICULTURAL RESPONSE TEAM



Special Features of this Issue:

- Update on dogs rescued from Apopka dogfighting ring
- You Are Not Alone. Stories from New Zealand
- Awareness Level Small Animal Emergency Sheltering Classes

"We develop a complicated, intensive exercise to test all of our processes, train up those personnel who are new or never been here before."

— Bryan Koon
Director
Florida Division of Emergency Management

June 1 marks the official start of the 2015 Hurricane Season.

Florida Prepares for the Start of Hurricane Season

"It's a storm that intensified rapidly overnight and sped up and caught a lot of people off guard," said Amy Godsey, chief state meteorologist with the Florida Division of Emergency Management (FDEM). Thankfully, this was just a drill.

In May, FDEM conducted a functional exercise testing the state's hurricane preparedness efforts at the State Emergency Operations Center in Tallahassee.

All State agencies and volunteer organizations that comprise the State Emergency Response Team, are grouped into 18 Emergency Support Functions (ESF) to carry out coordination and completion of assigned missions. These functions

represent specific response activities that are common to all disasters. Each ESF is comprised of one or more Primary agency (ies) serving as the lead and several other agencies and organizations providing support.

The Florida Department of Agriculture and Consumer Services is the lead agency for animal and agricultural emergencies. To fulfill its responsibilities as lead to emergency support function seventeen (ESF-17), the Department facilitated the development of the State Agricultural Response Team (SART) as a planning, training, and response support group.

(See Hurricane Season, page 7.)



Where in the World is Rick Sapp?

Editor Emeritus, Rick Sapp, was gracious to provide to *The Sentinel* an update from his recent travels to New Zealand. In comments to *The Sentinel*, Rick said that New Zealand has a growing awareness of the very things that SART is working on so much in Florida. He said, "It might be good for Florida responders to realize they are not alone in the struggle, that our issues are not local, but in a sense shared with everyone else on this small planet."

The Sentinel wishes to thank Editor Sapp for sharing his story, *You Are Not Alone*; while also wishing him safe travels during his journey across Newfoundland in the coming months.

You Are Not Alone. Stories from New Zealand

By Rick Sapp

Among the many issues that Florida SART team members are concerned with, you may at times feel a bit isolated. But governments and citizens not only in the U.S., but around the world, are coping with many of the difficulties that bedevil this Sentinel State's agricultural sector.

During a recent vacation in New Zealand, your former SART Sentinel editor snapped a few photos that represent mutual interests in the health and quality of food and agriculture.

(See *You Are Not Alone*, page 3.)



"No Bees to the South Island. Bee Alert! Stop Varroa!" reads a sign in New Zealand. Photo captured by Editor Emeritus, Rick Sapp.

You Are Not Alone (Continued)

Within the last two years New Zealand farmers have found that CCD or colony collapse disorder has disrupted many honey bee colonies in that South Seas nation. An attempt was made to halt the Varroa mite pest from moving to the South Island and signs were posted conspicuously at ferry terminals on either side of Cook Strait between Wellington on the North Island and Picton on the South Island.

Recently however the biosecurity division of the New Zealand Ministry for Primary Industries (agriculture and mining) noted, "This pest is established in the North Island and as far south as Canterbury and the West Coast in the South Island. It is possibly present throughout the South Island."

Whether or not the fight to discover the causes, and perhaps even the solutions, for CCD and Varroa mites will be successful remains to be seen and depends on both scientific research and public diligence.

New Zealand is a land of 4 million people and perhaps twice as many sheep, cattle and goats. Agriculture and tourism are sustaining pillars of the economy which annually sells millions of tons of dairy products to China.

(See *You Are Not Alone*, Page 5.)



The headline, "Sabotage fear for dairy sheds" as published in NZFarmer.

SART Advisory Board Meeting, September 16, 2015



Mark your calendars! The next SART Advisory Board meeting is set for September 16, 2015 in the Ocala, Florida area.

As the meeting approaches, additional details will be posted online at www.flsart.org.

Enrollment Open: Awareness Level Small Animal Emergency Sheltering Class

The Florida State Animal Response Coalition (SARC) and The Society for the Prevention of Cruelty to Animals (SPCA) Florida has three upcoming opportunities currently available for their *Awareness Level Small Animal Sheltering class*.

When disaster strikes, the team of trained volunteer responders will be there to shelter and protect Florida's companion animals.

This Awareness Level class gives students the knowledge necessary to work in an emergency animal shelter. This class provides expertise and practical experience required to become a professional disaster animal responder. The Awareness Level Small Animal Emergency Sheltering class is certified by the Florida Department of Emergency Management and is required to respond in Florida to help companion animals during a disaster.

Course topics include: Personal Preparedness, Overview of the Incident Command System, Deployment Preparedness, Assisting in Shelter Set Up, Daily Care and Feeding, Proper Cage Cleaning and Disinfection, Animal Behavior, Stress Management, Zoonotic Diseases, and Personal Safety.

For more information about the courses, and to register, please visit: <http://flsarc.org/Training.html>

June 7th Course - Lakeland

When: Sunday June 7, 2015 from 8:00 AM to 6:00 PM EDT

Where: SPCA Florida Adoption Center, 5850 Brannen Rd S., Lakeland, FL 33813

June 20th Course - Tallahassee

When: Saturday June 20, 2015 from 8:00 AM to 6:00 PM EDT

Where: At Home Veterinary Care, 1833 Junwin Court, Tallahassee, FL 32308

June 20th Course - Gainesville

When: Saturday June 20, 2015 from 8:00 AM to 6:00 PM EDT

Where: Alachua County Emergency Operations Center, 1100 SE 27th Street, Gainesville, FL 32641





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all Florida State
Agricultural
Response Team
news and
information at
[www.FLSART.org!](http://www.FLSART.org)

You Are Not Alone (Continued)

A recent anonymous letter threatened to poison those shipments. China immediately discussed halting the purchase of New Zealand agricultural products and the Kiwi agricultural sector reacted in great alarm.

Discussions have centered on a "food defence (sic) mentality with tougher on-farm security." Part of the problem is that the island nation uses a poison called 1080 (Sodium fluoroacetate) to control numerous non-indigenous mammalian populations such as the rabbit and the common brushtail possum. The possum was introduced to New Zealand from Australia in 1837 in an effort to develop a native fur industry. While the fur is soft and luxurious, the possum lacks any natural predator and has "run wild" throughout the nation. The possum is also a natural vector for bovine tuberculosis.



More to bees' deaths than pesticides

Sarah-Jane O'Connor
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1. Pesticide alone not behind bee decline:

Colony declines are a major threat to honeybees and many have speculated that insecticides are to blame. But a new study from the University of Maryland shows the most common insecticide, imidacloprid, does not cause significant harm at real-world doses.

The study, published in *PLoS ONE*, had to expose honeybee colonies to at least four times the insecticide normally encountered to see negative effects.

The researchers said while the study did not absolve imidacloprid, it suggested multiple factors causing trouble for honeybees. They found one possible combination: At the highest dose (20 times the realistic dose) colonies became more susceptible to *varroa mites*.

2. Better sleep with melatonin:



Taking melatonin supplements could provide better quality sleep in noisy and bright environments, compared with using an eye mask and earplugs.

Our bodies secrete the hormone to regulate sleep, usually in periods of darkness. Synthetically-produced melatonin has been used to treat some sleep disorders and sometimes as a means of overcoming jet lag.

A sleep study found those who took melatonin had better-quality sleep and woke up less often compared with those given a placebo or who were using an eye

mask and earplugs.

Though the study, published in *Critical Care*, used healthy subjects, the researchers suggested there could be implications for intensive care unit (ICU) patients. Sleep disturbance for those in ICU has been linked to slower recovery.

3. Future demand for care:

A dramatic increase in the number of adults living with cystic fibrosis has prompted calls for more services to meet future demand.

Improvements in treatment and care over the past three decades has led to an increase in survival for people with cystic fibrosis. Almost all children diagnosed with the disease now live to about 40.

Research published in the *European Respiratory Journal* provided forecasts for the number of adults with cystic fibrosis by 2025. With an estimated 75 per cent increase in the number of adults living with the disease, the French researchers called for healthcare

systems to adapt to the change, particularly in countries with less well-established adult services.

4. Glowing fungi with a purpose:

A glow-in-the-dark mushroom apparently does so to attract insects which then help spread fungal spores.

There are more than 100,000 known fungal species, but only 71 have bioluminescence. In the case of *Neonothopanus gardneri*, a new study has found that the mushroom's glow is controlled by a circadian clock.

It had previously been thought that fungi produced light around the clock, suggesting it was a simple, albeit expensive, metabolic byproduct.

The research, published in *Current Biology*, utilised sticky, fake mushrooms to see what insects were attracted. Those fake mushrooms that were lit up with green LED lights attracted more beetles, flies and other insects which could help the fungi

WHAT WE'VE LEARNT

colonise new habitat by moving spores.

5. World Heritage Sites at risk:

Without better local management, the world's most famous ecosystems are at risk from climate change, new research published in *Science* says.

An international team of researchers warned that localised issues, such as declining water quality from nutrient pollution or deforestation, could exacerbate climate effects like heatwaves and droughts.

The study examined three World Heritage Sites: Spain's Doñana wetlands, the Amazon rainforest and the Great Barrier Reef.

The researchers said local threats to the Great Barrier Reef such as overfishing, nutrient runoff and dredging would reduce the reef's resilience to ocean acidification and coral bleaching.

New Leash on Life for Rescued Dogs

One year ago, authorities in Apopka wrapped up many months of investigation with the arrest of twenty-six people allegedly involved in a sophisticated dogfighting ring that traveled throughout central Florida and coordinated dogfights through social media. During the arrest, more than 25 dogs were found chained up and abandoned in cars, crates, and cages. One of the dogs had a broken leg and was walking on its knuckles.

The rescued animals were taken into the custody of Orange County Animal Services, and during their time at the county shelter, several of the female dogs gave birth.

Today, a year later, the shelter has been able to place 43 of the dogs with rescue groups, which offer foster care until an adoptive family can be found. Many of the dogs remained in Florida, but others were relocated to Utah, New York, and Washington.

For updates on a few of the dogs' stories, see the full story at <http://www.wftv.com/news/news/local/1-year-later-update-dogs-rescued-apopka-dog-fighti/nmNwb/>



Agriculture: Job growth to boom over next five years

CNBC reports that despite challenges such as low commodity prices and farm incomes, drought, and avian flu, American agriculture is thriving – and creating jobs. A recent study by researchers at Purdue University found that an average of nearly 60,000 high-skilled agriculture job openings are expected annually in the United States over the next five years, with only about 35,000 college graduates in related fields each year to fill them.

The study estimates that demand will be strongest for plant scientists, water-resource scientists and engineers, farm animal veterinarians, and precision agriculture and pest control specialists. Nearly half of the job openings will be in management and business within the food and agriculture segments – jobs such as agriculture loan officers, farm labor and marketing specialists, land use managers, and sales and service representatives. Another 15,500 job openings will be in science, technology, engineering, and mathematics (STEM) disciplines. About 8,500 of the jobs will be in sustainable food and biomaterials production, and another 7,200 or so will come from agriculture and food jobs in areas such as education, communication, and governmental services.

One cause of this boom in agriculture jobs is the fact that about 25 percent of the existing food and agriculture workforce is 55 and older – nearing retirement and creating more opportunities for young people interested in agriculture.

To read more about this, Please visit <http://www.cnbc.com/id/102691649>.



Hurricane Season (Continued)

The University of Florida Institute of Food and Agriculture Sciences (UF IFAS), UF College of Veterinary Medicine, and the United States Department of Agriculture (USDA) are all principle partners in the partnership and have specific interests and resources that can be utilized to address the needs of the State of Florida.

According to WTSP (Tampa Bay), every year, the Division of Emergency Management in Tallahassee hosts this mock hurricane exercise. Director Brian Koon said the goal is to test their capabilities and make sure everyone is ready if disaster does strike.

"We develop a complicated, intensive exercise to test all of our processes, train up those personnel who are new or never been here before," Koon said.

Read more at:

<http://www.wtsp.com/story/news/local/2015/05/20/florida-prepares-for-2015-hurricane-season/27669661/>

Please login and
update your
membership
information online at:
<http://flsart.org>



About The SART Sentinel

The **SART Sentinel** is an e-mail newsletter prepared monthly by the members of the **Florida State Agricultural Response Team**. Past issues of the Sentinel are archived on the Florida SART Web Site, www.flsart.org.

If you have a story or photo that you would like to have considered for publication in the **SART Sentinel**, please contact the editors.

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