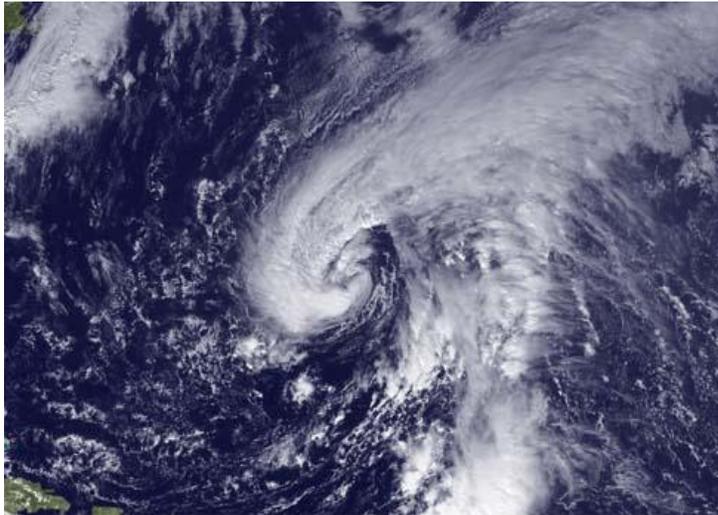




THE SENTINEL

NEWSLETTER OF THE FLORIDA STATE AGRICULTURAL RESPONSE TEAM

Slow 2013 Atlantic Hurricane Season Ends



TROPICAL STORM MELISSA TROPICAL CYCLONE UPDATE
NWS NATIONAL HURRICANE CENTER MIAMI FL AL142013
1145 AM AST THU NOV 21 2013
...MELISSA A LITTLE STRONGER THAN PREVIOUSLY ESTIMATED...
...STRONG WINDS EXPECTED IN THE WESTERN AZORES SOON...

SATELLITE DATA RECEIVED AFTER THE RELEASE OF THE LAST NHC ADVISORY INDICATE THAT MELISSA IS STRONGER THAN PREVIOUSLY ESTIMATED. THE SATELLITE DATA SHOWED THAT MELISSA HAS MAXIMUM SUSTAINED WINDS OF NEAR 65 MPH...100 KM/H. WINDS IN EXCESS OF 50 MPH WILL LIKELY REACH THE WESTERN AZORES WITHIN THE NEXT SEVERAL HOURS.

LOCATION...40.1N 34.5W
ABOUT 180 MI...290 KM WNW OF FLORES ISLAND IN THE AZORES
MAXIMUM SUSTAINED WINDS...65 MPH...100 KM/H
PRESENT MOVEMENT...ENE OR 70 DEGREES AT 32 MPH...52 KM/H
MINIMUM CENTRAL PRESSURE...984 MB...29.06 INCHES

No major hurricanes formed in the Atlantic basin in 2013, the first time since 1994. In fact, the last storm of the season was one you probably did not even notice, a subtropical storm named Melissa.

The 2013 Atlantic hurricane season, which ended on Saturday, November 30, had the fewest number of hurricanes since 1982, thanks to persistent, unfavorable atmospheric conditions over the Gulf of Mexico, Caribbean Sea and tropical Atlantic Ocean. This year ranks as the sixth-least-active Atlantic hurricane season since 1950, in terms of the collective strength and duration of named storms and hurricanes.

Vol. 9, No. 12
December 2013

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Thirteen named storms formed in the Atlantic this year. Two, Ingrid and Humberto, became hurricanes, but neither became major hurricanes (Category 3 and above). Although the number of named storms was above the average of 12, the number of hurricanes and major hurricanes was below their averages of six and three, respectively.

Unlike the U.S., which was largely spared this year, **Mexico** was battered by eight storms, three from the Atlantic and five from the Pacific. Of these eight, five struck as tropical storms and three as hurricanes.

NOAA will issue its 2014 Atlantic Hurricane Outlook in late May, prior to the start of the official season on June 1. [The complete text of this story is available at http://www.noaanews.noaa.gov/stories2013/20131125_endofhurricaneseason.html]

The difficulty of prediction

To illustrate the profound difficulty of making specific predictions based on fluid dynamics in complex systems, consider these regularly scheduled updates for the 2013 hurricane season from Philip Klotzbach and William Gray at the highly respected Department of Atmospheric Science, Colorado State University <http://typhoon.atmos.colostate.edu/>. This as yet imperfect science of meteorology has profound readiness and training implications for response agencies.



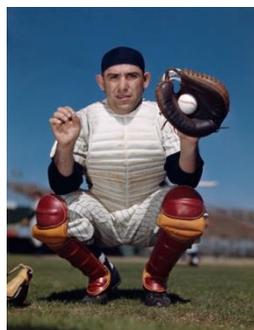
William Gray and Philip Klotzbach

December 2012: One of the big uncertainties for the 2013 Atlantic basin hurricane season is whether or not El Niño will develop.

April 2013: We anticipate an above-average probability for major hurricanes making landfall along the U.S. coastline and in the Caribbean.

June 2013: Given the above-average forecast, we are calling for an above-average probability of U.S. and Caribbean major hurricane landfall.

August 2013: We continue to anticipate an above-average season in 2013, although we have lowered our forecast slightly due to anomalous cooling in the eastern subtropical and tropical Atlantic. We expect an above-average probability of U.S. and Caribbean major hurricane landfall.



Aware of the difficulty of their predictive task, Klotzbach and Gray include the following quote in their August 2013 report: "It's tough to make predictions, especially about the future." Yogi Berra

December Training Completes 2013 Year

The Florida State Agricultural Response Team (FL SART) is collaborating with several training partners to offer a series of six DHS-certified Agroterrorism Prevention courses in Florida. All courses are open to U.S. citizens and are free of charge through DHS grant funding. Training partners include the Western Institute for Food Safety and Security, University of California Davis, the Rural Domestic Preparedness Consortium, the University of Florida-Institute for Food and Agricultural Sciences and the Regional Domestic Security Task Forces.

AWR 153

Principles of Detection and Diagnosis, Strategies and Technologies

The course goal is to inform members of frontline response teams about the importance of early detection and diagnosis, proper sample collection and the steps involved in an agroterrorism-related outbreak investigation. The course includes strategies to improve and increase detection and diagnosis efficiency as well as the epidemiological and criminal investigation process. *This training has been approved for 4.5 CEUs for Certified Environmental Health Professionals.*

December 11 in Brooksville

8:30 am registration, 9:00 – 4:00 pm training

Hernando County Emergency Operations Center, 18900 Cortez Blvd.

December 12 in Immokalee

8:30 am registration, 9:00 - 4:00 pm training

IFAS Southwest Florida Research and Education Center, 2685 State Rd. 29 N

If you have questions regarding any of these courses or about the 2014 schedule, contact Art Johnstone at ajohnstone@grantpartnersinc.org or (850) 251-4184. To register you're your name, agency/company name, e-mail address and telephone number to ajohnstone@grantpartnersinc.org. Be sure to specify which course(s)/location(s) you want to attend.

Training Takes Quantum Leap

Story and Photos by John Haven



Trailer Extraction



Rescue Glide Training

On December 7 and 8 at the Quantum Leap Farm in Odessa, 16 deputies, police officers, and horse rescue responders participated in the two-day University of Florida Large Animal Technical Rescue Operations Level Course.

This was truly a multi-agency training event, with deputies from Polk County Sheriff's Office bringing the regional cache of SART Technical Rescue Equipment, other deputies from Pasco County, police officers from the St Petersburg and Tampa mounted patrol units, and horse experts from Equestrian Inc. and Hope Equine Rescue.

Training included simple uses of webbing to rescue a horse, to building basic rope hauling systems for lifting the horse, to dealing with a trailer accident. At the completion of the training, using just the equipment in the Polk County trailer, and unassisted by the instructors, the team performed a complete rescue scenario including using the webbing, rescue glide and A-Frame lift system to demonstrate the skills they learned in the class. The course was coordinated by Equestrian Inc. Horse Rescue.



Quantum Leap Farm – Class Photo

Florida SART has 7 Large Animal Technical Rescue Kits stationed around the state. Go to <http://www.flsart.org/RegionalEquipment/> for a map and to find the nearest kit to your agency. Florida SART is attempting to provide every-other-year update training and advanced training for responders in each RDSTF, thus giving them an opportunity to use the equipment.

The next scheduled trainings are in RDSTF 1 (Walton County Sheriff's Office coordinator) and RDSTF 2 (Gadsden County Sheriff's Office coordinator) during the second week of February 2014. Training in late February is committed to Brevard County Sheriff's Office (RDSTF 5), and one in March for Marion County (RDSTF 3). For additional information contact John Haven - havenj@ufl.edu.

FACA Animal Control Officer Training



FACA, the Florida Animal Control Association, believes there are numerous reasons for an initial mandatory certification program, special certification training, and ongoing certification training for animal control and protection officers. A mandatory certification program for county animal control officers became effective on January 1, 1990. It required animal control officers to complete a minimum 40 hour training curriculum approved by FACA before they could issue citations, as outlined by FL Statutes, 828.27. The objective of the certification program is to impart the knowledge and skills needed to perform the job in a professional manner.

Several introductory animal control and protection officer (ACO) courses are already scheduled for 2014 (<http://floridaanimalcontrol.org/training-1/>):

January 27-31, 2014 - Broward College

Tigertail Lake Center, 580 Gulfstream Way, Dania Beach

For information contact: Alan Nichols (954) 201-7872 anichols@broward.edu

January 27-31, 2014 - Valencia College

Valencia's Criminal Justice Institute, 8600 Valencia College Lane, Orlando

To register call (407) 582-6688 - Course Number: 13867

Fees: \$485 for FACA members, \$585 for Non-FACA members

June 2-6, 2014 - Broward College

Tigertail Lake Center, 580 Gulfstream Way, Dania Beach

For information contact: Alan Nichols at (954) 201-7872 or anichols@broward.edu

August 18 thru 22, 2014 - St. Petersburg College

3200-34th Street South, St. Petersburg

To register <http://cpsj.spcollege.edu/calendar.htm>

Because of the importance of imparting Florida law and Florida-relevant information as part of its statutory mandate, FACA does not recognize ACO certifications from other state or national organizations. Only those who complete FACA-approved curriculum will be included in the FACA database. Course participants who fail the final examination are allowed one opportunity to retake a different examination for a fee of \$100.

Invasive Update: The Tegus

Tegus lizards are an invasive species which reproduces quickly and eats a wide variety of foods: fruits, vegetables, insects, cat or dog food, eggs and small animals such as lizards and rodents. The Tegus is native to South America (Brazil, Paraguay, Uruguay and Argentina). Probably founded by escaped or released pets, Tegus now have breeding populations in Miami-Dade, Polk and Hillsborough counties.



Tegus are black and white with banding along the tail. They can grow to four feet and spend most of their time on land, though they can swim and may submerge for long periods. Tegus can often be seen on roadsides or other disturbed areas. Like many reptiles, they are primarily active during the day and burrow or hide overnight. Tegus spend the colder months of the year in a burrow or under artificial cover and can survive temperatures as low as 35 degrees. A mature female will lay around 35 eggs a year; eggs hatch in early summer.

The solution? Don't leave pet food outside. Cover openings under structures and clear debris to minimize hiding and burrowing areas. Report all Tegus sightings to the exotic species hotline at [1-888-Ive-Got1](tel:1-888-Ive-Got1) or online at www.IveGot1.org. Never release exotic animals. It's illegal and harmful to do so.

The FWC does not recommend that you attempt to capture the animal! Rarely aggressive the Tegus will defend itself if threatened. Tegus have sharp teeth, strong jaws and sharp claws. The best method for removing Tegus is by trapping. If you see a Tagus contact a wildlife trapper to remove it. A list of trappers by county can be found at www.MyFWC.com. Tegus are not protected by any of Florida's wildlife laws, but local ordinances will apply depending on the location.

Holistic Grazing

How Cows Can Repair the World

For decades people have pointed to overgrazing by cattle as the main cause of once-fertile grasslands turning to rapidly eroding, nearly lifeless deserts. These desertified landscapes are then incapable of supporting the livestock themselves, agriculture, or large wild animals that once lived in great numbers on the same land. This leads to famine and conflict in different areas around the world.



Growing up in Kenya, Allan Savory was terribly moved by this. "I grew up loving wildlife and hating livestock," he said at a TED Conference in Long Beach, California in March, 2013. Now he believes he was wrong.

Read the story written by Andrew Howley of *National Geographic* and watch Savory's TED talk at: <http://newswatch.nationalgeographic.com/2013/03/06/how-cows-could-repair-the-world-allan-savory-at-ted/>.



Protecting People | Protecting Agriculture | Protecting Wildlife

The Wildlife Services (WS) program in Florida helps citizens, organizations, industries and government agencies resolve conflicts with wildlife to protect agriculture, other property and natural resources, and to safeguard human health and safety. WS wildlife biologists and management specialists implement effective, selective, and responsible strategies that value wildlife, the environment, and the resources being protected.

WS manages wildlife damage according to its public trust stewardship responsibilities as a federal natural resource management program. WS supports the North American Model of Wildlife Conservation, based on the principle that wildlife resources are owned collectively and held in trust by government for the benefit of present and future generations.

Top 5 major assistance activities in Florida

- Protecting civil and military aviation from wildlife strikes
- Protecting threatened and endangered species and their habitats from wildlife damage
- Managing damage caused by vultures, feral swine, beaver and coyotes
- Protecting aquaculture and other agricultural interests from wildlife damage
- Reducing impacts of invasive species

Top 5 research projects of interest to Florida

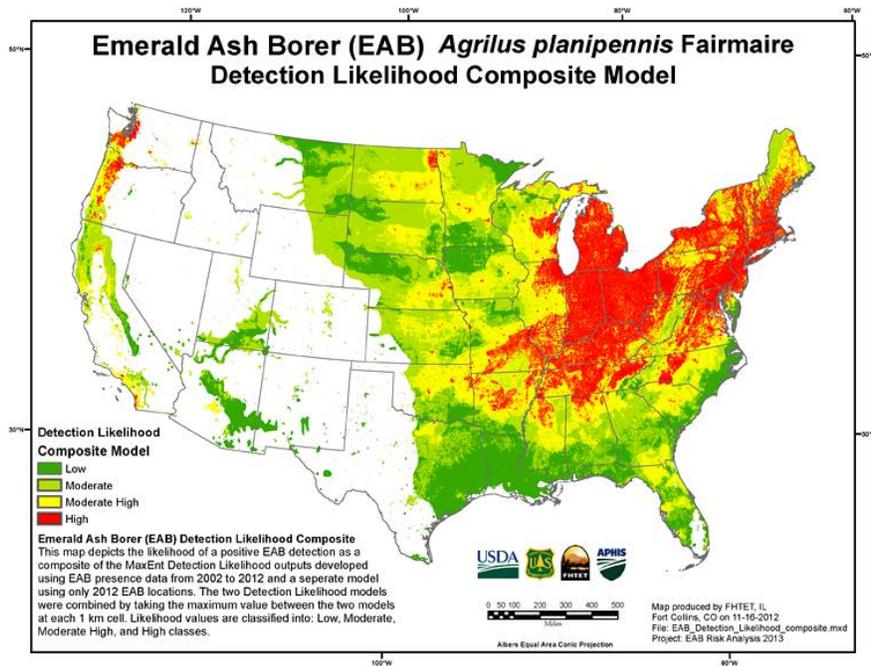
- Defining and reducing wildlife hazards to aviation
- Identifying and refining methods to control predators of endangered species
- Improving surveillance and monitoring techniques
- Improving techniques for reducing wildlife damage to aquaculture and agriculture
- Defining and reducing impacts of invasive species

To read the brief summary of WS activities and interests in Florida, follow this link:

http://www.aphis.usda.gov/wildlife_damage/informational_notebooks/2012/WS%20State%20Operations/9-florida_report.pdf.

Emerald ash borer – coming to a community near you?

ABOUT EAB – Emerald ash borer, *Agrilus planipennis Fairmaire*, is an exotic beetle that was discovered in southeastern Michigan near Detroit in the summer of 2002. Adult beetles nibble on ash foliage but cause little damage. Larvae feed on the inner bark of ash trees, disrupting the tree's ability to transport water and nutrients. Emerald ash borer probably arrived in the United States on solid wood packing material carried in cargo ships or airplanes originating in its native Asia.



THE SPREAD – Emerald ash borer is also established in Windsor, Ontario, was found in Ohio in 2003, northern Indiana in 2004, northern Illinois and Maryland in 2006, western Pennsylvania and West Virginia in 2007, Wisconsin, Missouri and Virginia in the summer of 2008, Minnesota, New York, Kentucky in the spring of 2009, Iowa in the spring of 2010, Tennessee in the summer of 2010, Connecticut, Kansas, and Massachusetts in the summer of 2012, New Hampshire in the spring of 2013, North Carolina and Georgia in the summer of 2013, and Colorado in the fall of 2013.

ITS DESTRUCTIVE EFFECTS – Killed tens of millions of ash trees in southeastern Michigan alone, with tens of millions more lost in Colorado, Connecticut, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Massachusetts, Maryland, Minnesota, Missouri, New Hampshire, New York, North Carolina, Ohio, Ontario, Pennsylvania, Tennessee, Quebec, Virginia, West Virginia, and Wisconsin.

Caused regulatory agencies and the USDA to enforce quarantines (Michigan, Connecticut, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Maryland, Massachusetts, Minnesota, Missouri, Ohio, New Hampshire, New York, North Carolina, Ontario, Pennsylvania, Tennessee, Virginia, West Virginia, Wisconsin, and Environment Canada) and fines to prevent potentially infested ash trees, logs or hardwood firewood from moving out of areas where EAB occurs.

Cost municipalities, property owners, nursery operators and forest products industries tens of millions of dollars. <http://www.emeraldashborer.info/#sthash.hc2kznWh.lrxYP6SH.dpuf>



Size of emerald ash borer compared to a penny.



Damage from borer.

The movement of firewood and other EAB host wood products is a key pathway for this pest to spread. USDA APHIS as well as state and local agencies are asking NPDN First Detectors (see www.npdn.org) to be aware of this pest and to report any suspect sightings of it.

Under the Radar

Florida Population

According to the Florida Department of Health, a SART partner, Florida's population reached 19,042,458 residents in 2012. This was a 0.6 percent increase from the 2011 population of 18,934,175. The U.S. Census Bureau projects that by 2030 Florida's population will rise to 28,685,769.

The Flower That Blooms In Adversity

The story of a dog that started a movement

By Frances L. Faulkner, CVT

Armed robbers broke into Florida Highway Patrol Trooper Bobby Boody's home on November 19, 2012. Retired K-9 Trooper Drake jumped from his dog bed and into action, defending his master's home. In doing so, Drake was shot several times by these nefarious juveniles. Despite the best efforts of some of the most skilled veterinarians in Palm Beach County, Drake succumbed to his wounds and was humanely euthanized.

A life-sized, bronze sculpture of Trooper Drake has been erected on the grounds of Simmons Veterinary Hospital in Lake Worth, Florida to commemorate Drake along with many other fallen canine heroes. The base of the sculpture includes inscriptions with the names, dates and departments of other working dogs that have passed away; whether in the line of duty or during retirement. A video of the unveiling of the "Remembering Drake" memorial (and other videos about this incident) can be viewed at http://www.youtube.com/watch?v=rzdH2ZjweJk&list=PLB-vW8tKuxgj6MGLyKVk9KXAGZGrz_nDF.



Photo courtesy Simmons Veterinary Hospital, Greenacres, FL www.simmonsvet.com

Drake's story has tugged at the heart strings of many of us. It has also revealed what can only be described as a great disservice to our working canines. The "Police K-9 Bill Of Rights" is determined to improve the treatment of these amazing dogs. The bill's specific goals include:

- Change the classification of working police dogs from "equipment" to K-9 Officers.
- Provide medical benefits for retired K-9 Officers to include veterinary care, food and other items for their well-being for the remainder of the dog's life.
- K-9 Officers will receive the benefits of safety equipment while on the job including bullet proof vests, paw protectors and other equipment to help them with their daily job functions.
- Provide cremation and memorial services for all K-9 Officers.

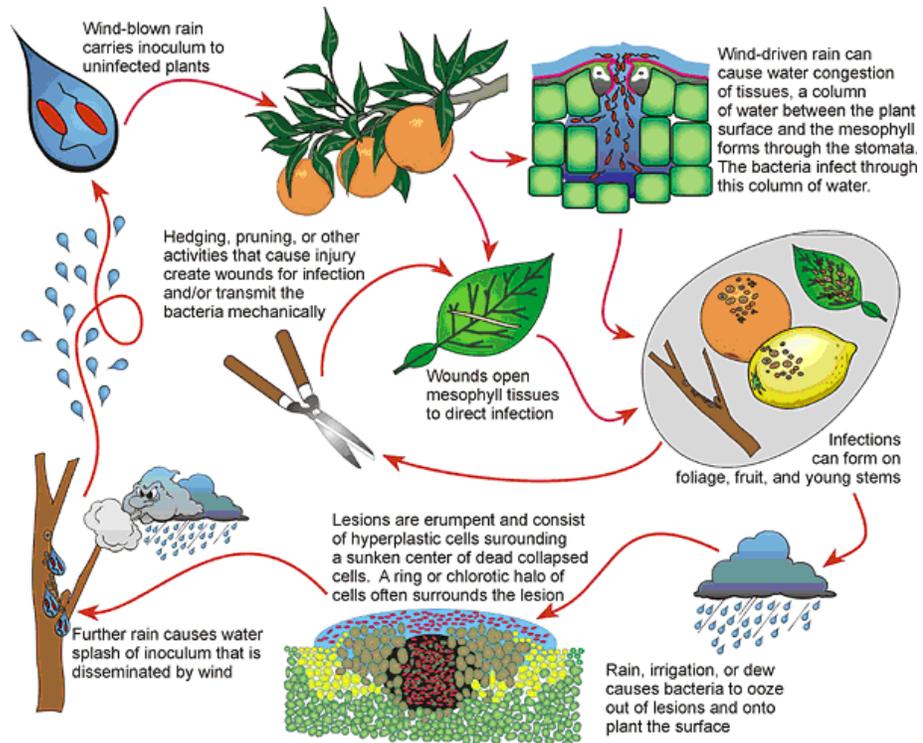
Citrus Canker Spreads

Citrus canker has spread into the Florida Panhandle. FDACS spokesman Mark Fagan says the disease has been found in Santa Rosa and Escambia Counties.

Citrus canker is a bacterial disease that's easily spread by wind and rain or by the movement of infected fruit. It causes premature fruit drop and discolored fruit, and eventually causes a tree to become unproductive.

How to combat it? Fagan says there's little residents can do, but to slow its spread, try to not move citrus plant material. "Say, you pick up a tree from Aunt Mary in Brevard

County and you plant it in your backyard in Milton or Pensacola, you can move the disease that way. Once canker expresses itself in the form of corky-like lesions on the fruit, the bacterium is already being picked up by wind-blown rain and moved about."



Canker is not as serious as citrus greening but residents should take the bacteria seriously. Those who suspect trees are affected can call the Division of Plant Industry Helpline Center at 1-888-397-1517. Additional information and videos are available at <http://www.saveourcitrus.org/index.php/citrus-canker>.



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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