THE SENTINEL
NEWSLETTER OF THE FLORIDA STATE AGRICULTURAL RESPONSE TEAM
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Greg Christy Detailed to Washington

Greg Christy (flowered shirt in the EOC, Tallahassee) will serve 2007 with DHS in Washington, D.C.

Beginning this month, Florida ESF-17 Coordinator Greg Christy will spend 2007 in Washington, D.C. on assignment with the Department of Homeland Security.

As an associate in the Infrastructure Partnership Division, Greg will have an opportunity to impact policy and procedures relating to animal, agricultural and food security issues. A university-trained veterinarian from Missouri, Greg has supervised the development of Florida's SART program and has been keenly interested in promoting county-level SART organizations.

"The experience with Homeland Security will primarily be a communication coordinating position," Greg says, "but it also has an interpretative and policy-development element. I'll have a chance to bring state and local perspectives to the federal emergency preparation and response managers in D.C."

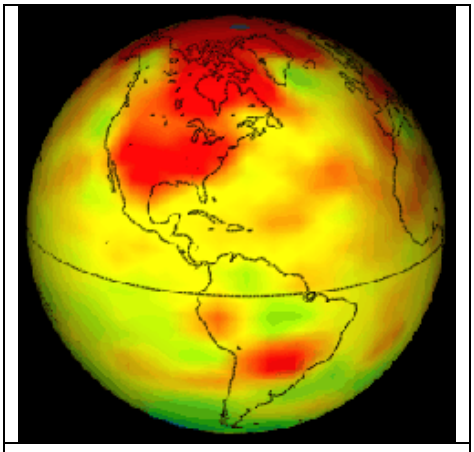
Greg is expected to return to Florida once his partnership year in Washington is completed and he will continue to be available by email at christg@doacs.state.fl.us.

Predictions for 2007 Hurricane Season

Philip Klotzbach and William Gray of the Department of Atmospheric Science at Colorado State University predict that 2007 will bring about 14 named storms to the Atlantic basin. Seven of these storms will be hurricanes, these men say, and three will be intense, in the Category 3 to 5 range. They also predict a 40 percent chance that one of the intense storms will make landfall in Florida.

But they're in Colorado. What do they know? Wouldn't they be better off studying blizzards?

Regardless, the department's studies indicate that a late season El Niño was responsible for the mild hurricane season in 2006. "Whatever it takes!" is probably the whispered prayer of Florida residents who now face dramatically higher insurance premiums even if they live nowhere near damage-prone coastal zones.



Are we due for a difficult hurricane season in 2007 … and how does global warming contribute to rising insurance rates?

Predicting hurricanes is only part of their work at CSU, but this is their 24th year. Visit http://typhoon.atmos.colostate.edu/forecasts/2006/dec2006/ to read the full report. An especially interesting segment reviews the effects of *global warming* on hurricane activity and includes these summary statements:

- "We have no plausible physical reasons for believing that Atlantic hurricane frequency or intensity will change significantly if global ocean temperatures continue to rise."
- "Although 2005 had a record number of tropical cyclones (27 named storms, 15 hurricanes and 7 major hurricanes), this should not be taken as an indication of something beyond natural processes."

Because much of Florida land for homes, business and agriculture is at or near sea level, these are especially interesting observations.

To learn more about the climatological-basis for forecasting and CSU's methodologies, go to http://hurricane.atmos.colostate.edu/Forecasts and even www.e-transit.org/hurricane (Landfalling Hurricane Probability).

What's in a word … or two? "El Niño"

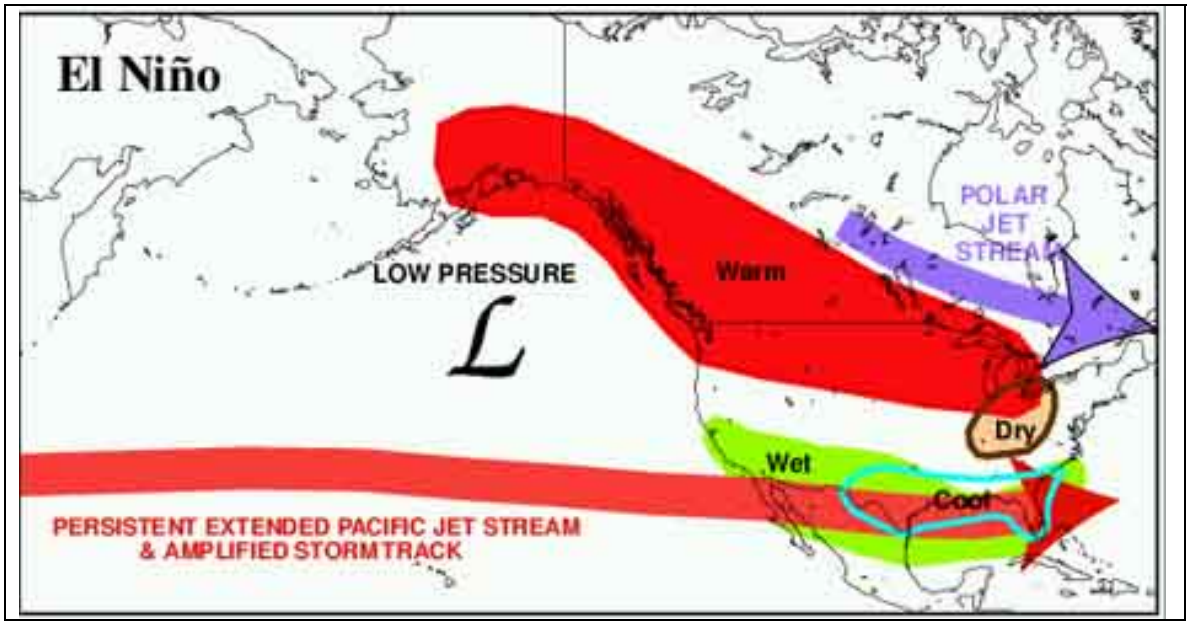
In the 19th century, El Niño was associated with "the Christ child" because it typically became evident in December. Peruvian sailors noted that a warm, southward current, which apparently caused excessive rainfall and flooding on land,

occasionally replaced the usual northward cold and nutrient rich (therefore fish-rich) current, which caused dry-land conditions.

Today, researchers at Colorado State University's Department of Atmospheric Science define El Niño as: "A 12 to 18 month period during which anomalously warm sea surface temperatures occur in the eastern half of the equatorial Pacific Ocean. Moderate to strong El Niño events occur irregularly, about once every three to seven years, on average."

The National Weather Service adds that El Niño years "are characterized by shifts in 'normal' weather patterns."

So lacking the normal upwelling of cold, "nutrient rich" seawater off the west coast of South America regional barometric pressure falls and the trade winds slacken. El Niño is associated with decreased hurricane activity in the Atlantic, especially south of 25° N; and this reduction is largely due to stronger wind shear over the tropics.



New Training Modules On Line

Two SART Training Modules – Lesson Plan (in PDF format), PowerPoint Presentation and Student Workbook (also in PDF format) – have recently come on line at www.flsart.org: *Introducing the Farm Service Agency* and *Introducing Florida's Plant Industry*.

A disaster threatens. Farm Service Agency programs will be there to help in the recovery.

The Farm Service Agency (FSA) module was developed with the extensive direction and cooperation of Tim Manning and Cynthia

Portalatin, both full-time staff members at the U.S. Department of Agriculture's Farm Service Agency office in Gainesville. Its purpose is to give participants a basic knowledge of the FSA's four goals and how it operates through county committees to achieve its objectives. The module further discusses a number of FSA's specific programs, including the programs of direct benefit to participating Florida agriculturalists.

The second module to come on-line introduces Florida's plant industry with an overview of its distribution, the centers and volumes of production, and some basic information about troubling trends. It discusses the Sunshine State's "Big 5:" timber and forestry, nursery and greenhouse, citrus, sugarcane, and tomatoes and field crops. Three very different specialty crops are also reviewed and placed into context in Florida's agricultural scheme: ferns, tobacco and avocados. The module's purpose is to give trainees a sense of the rich diversity of the plant sector of Florida's agricultural industry.

These latest training modules may be accessed and downloaded at www.flsart.org/library/index.htm.

Florida EHV-1 Incident

To date, six horses have died and another seven have become infected following November-December exposure to a neurologic strain of equine herpes virus, type 1 (EHV-1). The Florida Department of Agriculture's personnel have worked more than 2,000 man-hours (including Christmas and New Year's Day) to provide a timely response to the outbreak. The form of EHV-1 that is most common is the respiratory form of equine herpes, commonly known as Rhinopneumonitis. The current outbreak is a neurologic strain and has a much higher mortality rate than the respiratory form, but both forms are highly contagious. Thus, the current EHV outbreak required rapid and effective reaction from state and local cooperators.

EHV-1 is a common virus among horses, but it is also highly contagious and can be fatal.

Apparently, the viral source can be traced to horses imported from Europe through New York to Florida. Ten facilities have been fully or partially quarantined – eight in Palm Beach County (Wellington – seven, Jupiter – one), one in Marion County (Ocala) and one in Martin County (Indiantown).

EHV is spread through the air when horses are stabled or trailered together, by sneezing or by direct contact with each other or contaminated equipment, clothing or even human hands. Although the virus more commonly causes a mild respiratory

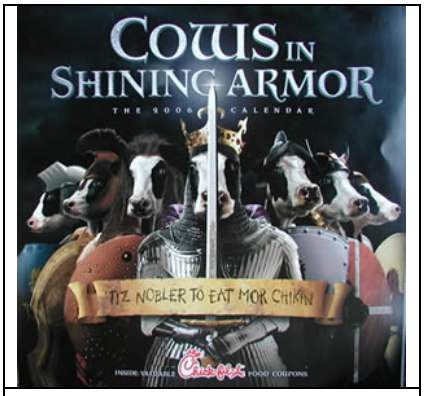
infection, certain strains of EHV-1 cause abortions, lack of coordination, including an inability to stand, and high fevers. Recovery from the neurologic form of the disease may take as many as 18 months and fatality rates are between 30 and 50 percent. Several strains of equine herpes are known and vaccination provides a limited immunity.

For information about the current status of Florida's EHV-1 outbreak, please refer to these web sites: www.flanimalindustry.com or www.doacs.state.fl.us/ai/.

Two Important Calendar Dates

Please note two important SART dates on your new 2007 calendars.

The **first** is the next quarterly Advisory Board meeting and it is scheduled for Wednesday, March 7th at 9:00 a.m. in the Florida Farm Bureau building in Gainesville (same location as the December 6, 2006 meeting). The FFB is located on the east side of Interstate 75 in southwest Gainesville and can easily be reached by taking the SR 121 (Williston Rd.) exit.



Thanks to Chick-fil-A for helping us mooooove safely into the year!

Secondly, the annual Florida ESF17/SART Conference is set for May 30-June 1 at the TradeWinds Island Grand Resort (www.tradewindsresort.com), St. Petersburg Beach. Timed for the beginning of the 2007 hurricane season, it is also the end of the school year, so you can make this a working vacation! Make reservations (attendance is limited to about 300) on line at http://www.flsart.org/pdf/SART%20Registration%20Form.pdf.

Conference sessions are being scheduled on animal, aquaculture and farm/nursery issues; terrorism awareness, emergency management and organizational skills development. Participants can learn how to boost the effectiveness of county SART teams and how to make best use of the SART website. Additionally, ICS-100 and IS-700 training will be introduced.

Room rates are about $100 per night, so this conference should be very affordable as well as informative and fun.

For updates and additional information, please keep in touch: www.flsart.org!

Hydrilla can be easily spread when it clings to the props and trailers of recreational boaters.

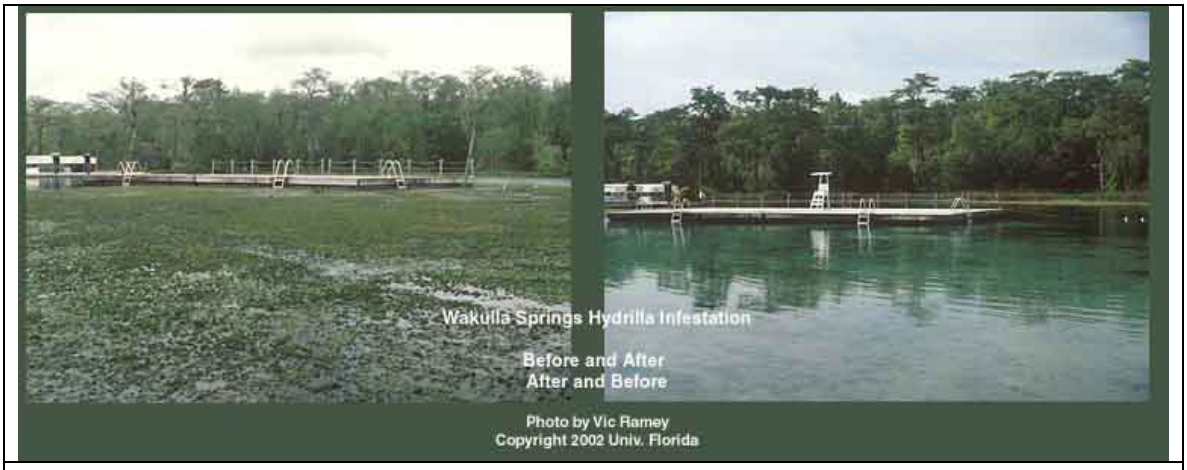
Exotic Update: Hydrilla

Even though the state of Florida and the federal government list hydrilla as a noxious weed, an invasive, exotic plant species now found in 20 states, most of which – like Florida – spend millions of dollars to control it, hydrilla can still be found in many neighborhood pet supply stores!

Hydrilla in Florida is actually *hydrilla verticillata* and it was probably introduced by a careless aquatic plant dealer in 1951 or '52. Apparently the dealer discarded six bundles of the plant in a canal not far from his home near Tampa. Within 20 years, the exotic weed was considered established in Florida.

Hydrilla has a potent effect on infested bodies of water. Growing thickly in a dense, heavy mat of plants from the bottom to the surface, hydrilla chokes out most native plant species, starves native fish, dramatically alters water chemistry, slows water flow, clogs irrigation and flood control drainage canals, clogs water pumps of all sizes and eliminates many recreational opportunities (boating, swimming, snorkeling, fishing).

A number of difficulties prevent elimination of this adaptive weed. First, because it is thick, widespread and grows in water-supply drainages with many beneficial plants and animals, it is difficult to simply poison. Second, it re-grows as much as an inch a day from the smallest shredded remnant after it has been chopped and hauled out of a lake. Third, it thrives in almost any body of water: polluted streams, eutrophic and stagnant lakes and even in water with high salinity.



The 2002 hydrilla cleanup at Waukulla Springs produced dramatic results. Unfortunately, such cleanup must be followed up continuously for years to ensure the eradication of this foreign weed.

Efforts to control hydrilla have been legion the past 35 years. It is dredged and harvested mechanically, but this – along with weed wrapped around the propellers and trailers of recreational boaters – sometimes seems to spread it faster than removing it. Florida has even emptied lakes completely, a process called lake draw-down, and has experimented with Chinese grass carp (which seem to prefer hydrilla to other foods), and plant-specific weevils and flies. Each of these has shown some limited success.

Unfortunately, hydrilla may be here to stay. In Russia, it is documented as far north as 50 degrees, the latitude of the U.S.-Canada border. That means 28 states still must be on guard. For more information about hydrilla, please go to these web sites:

- Florida Department of Environmental Protection, Bureau of Invasive Plant Management www.dep.state.fl.us/lands/invaspec/index.htm
- University of Florida, IFAS, Integrated Pest Management http://ipm.ifas.ufl.edu/applying/invasive-species/index.htm
- Florida Exotic Pest Council www.fleppc.org/
- US Department of Agriculture, APHIS www.invasive.org/

Board Minutes Are Available

The SART Advisory Board Meeting Minutes from the December 6 meeting at the Farm Bureau Building in Gainesville are available through the Member's Area of the SART web site at www.flsart.org/SART/login. Multiple highlights included a tentative agenda review for the state conference May 30-June 1 (please see calendar note above).

About the SART Sentinel

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The SART SENTINEL is an E-mail newsletter prepared monthly by Rick Sapp and 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.