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Foot-and-Mouth Disease Troubles Britain ... Again

The name sounds like something from the 19th century, an odd disease related to "trench foot," the soldier's plague of World War I. But foot-and-mouth disease or

hoof-amd-mouth as it is sometimes called, can be an extremely serious and highly infectious health problem for cattle.

Today, Britain is again struggling to contain foot-and-mouth and the European Union is so concerned about its spread to the continent that the Union is considering a ban (another ban!) on British meat products. In a recent article, *The Telegraph* of London (on line at www.telegraph.co.uk/news/main.jhtml;jsessionid=Y23ZSCENYGQJBQFIQMFSFGGAVCBQOIVO?xml=/news/exclusions/footandmouth/nosplit/footandmouth.xml) noted that the last outbreak in 2001 cost United Kingdom agriculture £8 billion (roughly \$16.5 million by today's exchange standards). In the overall scheme of Britain's farm economy, that was a small

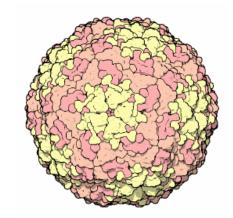
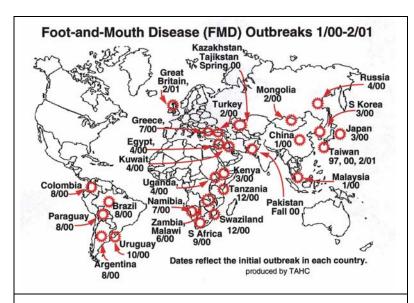


Illustration of foot-and-mouth virus coating a protein. (David S. Goodsell, Scripps Research Inst.)

amount, but if you were one of the ranchers involved, it could be devastating.

Unfortunately, as this issue of the SART Sentinel "goes to press," there is evidence that the current outbreak stems from security mishaps at the nearby Pirbright research laboratory! Pirbright houses both governmental and private facilities. It is



Hoof-and-mouth or foot-and-mouth disease outbreaks around the world in just a little more than one year, from January 2000 to February 2001.

the private labs of Merial Ltd. (www.merial.com), internationally headquartered in Duluth, Georgia, which are suspected as the source, via human transmission, of the infection. Merial has been working on a vaccine for foot-and-mouth disease.

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A short, but highly readable research paper titled "If Foot-and-Mouth Disease Came to Florida: Potential Impact on White-tailed Deer in Florida" is available on line at http://edis.ifas.ufl.edu/U W183. For more general information about the

disease, see another University of Florida IFAS publication, "Foot-and-Mouth Disease: What Every Consumer Should Know," on the Web at http://edis.ifas.ufl.edu/RM004 (in HTML) and http://edis.ifas.ufl.edu/pdffiles/RM/RM00400.pdf (in PDF).

Currently, the World Organization for Animal Health recognizes countries to be in one of three disease states with regards to foot-and-mouth: *FMD present with or without vaccination*, *FMD-free with vaccination*, and *FMD-free without vaccination*. Countries that are designated FMD-free without vaccination have the greatest access to export markets, and therefore many developed nations, including Canada, the United States, and the UK, work hard to maintain their current *FMD-free without vaccination* status.

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Electricity – Did you know?

Our friends at Southeast Milk (www.southeastmilk.org) want to remind all agricultural producers that effective July 1, 2006, electricity used directly and exclusively for the production or processing of agricultural products on a farm is sales tax exempt (Section 212.08(5)(e)2. Florida Statutes). This exemption only applies, however, if the electricity is separately metered from the electricity used for non-production or non-processing purposes. If the electricity is centrally metered and electricity is used for both tax-exempt and taxable purposes, all of the electricity is subject to sales tax.

To qualify for the exemption, the purchasing producer must furnish his or her utility provider with an exemption certificate stating that the electricity will be used directly and exclusively for the production or processing of agricultural farm products.

A suggested format for the exemption can be found by clicking the link below http://www.myflorida.com/dor/tips/pdf/exempt cert 06a01-09.pdf

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Animal Disaster Preparedness Day

Florida Governor Charlie Crist declared July 31st Animal Disaster Preparedness Day. The declaration asked all Floridians to properly identify the animals in their care, to assemble a disaster kit for each animal and to make evacuation plans for their families and all animals under their care. The motto for the day was "No pet left behind."

According to Matthew Standish, Emergency Services Director of the Central Panhandle Chapter, American Red Cross (redcross.es@knology.net), "In Panama City our Red Cross Chapter set up displays in the four largest pet supply stores here; PetSmart, Pet Supermarket, and two Panhandle Pet Supply stores. The displays have disaster preparedness information from several agencies: the Red Cross, Humane Society of Bay County, Paws & Claws, ARC of Bay County, Lynn Haven Animal Shelter,

and Bay County Animal Control.



"Is your pet Red Cross ready?"

"The displays were up all week, but on July 31, we had volunteers at the displays to interact with customers. We gave information on emergency preparedness, safety, pet CPR and first aid training (which we now offer), and we are holding a giveaway of Red Cross Pet First Aid Kits. While the volunteers were present, we displayed our dog CPR mannequin too. It was a good day and a lot of information went out."

Through the Grapevine

Offensive and defensive strategies

"Today, I'm giving a lecture about epidemics and how they rapidly move around the world. It's very important that we study epidemics overseas, but that has to be complemented with planning for what we would do if an epidemic suddenly hit Florida. In that context, SART is very important. As in football, there are essentially two components to epidemiological studies: the offense works on diseases overseas while the defense gets prepared through SART and other organizations and levels of government to get ahead of and prepare for these diseases should they appear here in Florida."



Dr. Paul Gibbs, Professor of Virology College of Veterinary Medicine, University of Florida (As quoted at the Florida SART Conference May 31, 2007)

Sign-Up to Restore Hurricane-Damaged Forests Resumes August 6



The Farm Service Agency (FSA) has extended the sign-up for the Emergency Forestry Conservation Reserve Program (EFCRP) from August 6 to December 31. EFCRP helps restore and enhance 5.6 million acres of forest damaged by the 2005 hurricanes. "Extending the sign-up helps landowners re-establish stands of trees to prevent further damage, and helps improve the land's wildlife habitat, water and air quality," said Kevin Kelley, Florida FSA Director.

Forest damage typical of areas severely affected by hurricanes. The dominant species on this site was loblolly pine.

(www.sisef.it/forest@/)

In Florida, 36 counties received disaster designations from damage caused by Hurricanes Dennis, Katrina and Wilma: Bay, Brevard, Broward, Calhoun, Charlotte, Collier, Dixie, Escambia, Franklin, Gadsden, Glades, Gulf, Hardee, Hendry, Highlands, Holmes, Indian River, Jackson, Jefferson, Lee, Leon, Levy, Liberty, Martin, Miami-Dade, Monroe, Okaloosa, Okeechobee, Palm Beach, St. Lucie, Santa Rosa, Sarasota, Taylor, Wakulla, Walton

and Washington.

To be eligible, in general, a producer must have experienced at least a 35 percent loss to merchantable timber on private non-industrial forestland from one of the 2005 hurricanes. FSA will rank offers quarterly based on the evaluation of foresters who will then work with landowners to develop conservation plans. Fact Sheets are available at FSA Service Centers or on-line at http://www.fsa.usda.gov/Internet/FSA File/hurrcounties06.pdf.

Notable Quotes

What we learned from 9-11

In Minneapolis, firefighter Raul Ramos was one of the first responders on the scene of the recent Interstate 35 bridge collapse. He is quoted as saying, "One thing we learned since 9-11 was how to work together, how to work with each other, between departments and civilians." His comment testifies that all of the training, all of the coordination and the hours of meetings and study will be worth the effort when and if the time comes for a massive, coordinated response here in Florida

The Power of Volunteers

On site at the bridge collapse, firefighter Tim Dziedzic said that he kept wondering when the thousands of tons of bridge elements teetering above him were going to fall. At first, the responders were overwhelmed ... and then volunteers, people out of the crowd began to lend a hand. "I don't think we could have done it without the civilians," Dziedzic said. "It was interesting to see the civilians taking over, almost."

And So ... What Species?



SART member Doyle Conner, Jr. cast suspicion on the "manliness" of the Ankole-Watusi in the original photo and so we provide this supplementary image, taken at the same time, for additional inspection ... (Rick Sapp photo)

Bull, as we know, arrives in numerous shapes and species. In a recent email soliciting information items for the SART Sentinel, we pictured a "mystery bull" and asked SART members to identify it. (All in fun, of course, as we have no pretense of being particularly erudite at identifying or understanding critters in general – human, wild or domestic.)

As background, I was charting scenic Florida bicycle routes while writing a book on that subject for publication next year with Falcon Guides (Globe-Pequot), when I spotted the animal pictured. It seemed both unusual and familiar. It was one of a herd of cattle grazing on the north side of US Hwy. 27, west of Mayo in Levy County. Its body was unremarkable,

but the size and conformation of its horns reminded me of cattle I had seen on a business trip to East Africa.

Responses fell into three categories:

1. A Florida "cracker cow" crossed with a Texas longhorn. (www.crackertrail.org and www.florida-

agriculture.com/livestock/cracker_cattl
e.htm)

2. A genuine Texas Longhorn. (Texas Longhorn Breeders Assn.

(www.tlbaa.org)

3. An Ankole-Watusi from Africa. (World Watusi Assn. www.watusicattle.com and International Watusi Registry www.awir.org)

I believe #3 to be correct. Here are a few of the comments from SART members about the Ankole-Watusi cattle:

- an ancient breed appearing in African cave art and Egyptian pictographs,
- first came to the US in the 1960's,
- lean meat, relatively gentle,
- able to utilize poor quality and limited quantities of food and water.
- tolerant of temperature and weather extremes.
- relatively straight horns with thick bases that can grow six feet or more, tip to tip, and are used to defend against predators.
 Blood flowing through the lower sections helps regulate body temperature,
- the Ankole Watusi International Registry founded in 1983. Breed

has grown slowly, with fewer than 1,000 purebreds across the U.S., says Kansas veterinarian Elizabeth Lundgren, registry executive secretary and owner of about 150 Watusi.



Texas Longhorns, probably an Anglo-Spanish collaboration, are known for their hardiness and ornery disposition.

(TLBAA.org photo)



Florida's "cracker cows" have scratched a living from the scrub since the days of the earliest Spanish explorers. (FDACS photo)

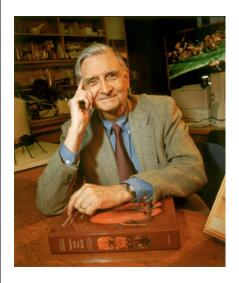
Correct answers were emailed by Nancylee Bielawski, Heather Brown, Doyle Conner, Jed Dillard, Sharon Gamble, Deborah Halin, David Perry and Glenn Wade. Winner of the first ever Florida SART Sentinel prize drawing is Mr. Jed Dillard, Livestock Extension Agent, Jefferson County. For his agricultural acumen Mr. Dillard received a celebrated Elvis Presley – King of Rock 'N' Roll bookmark. (Drawing held at the

offices of the SART Sentinel; entirely conducted and supervised by the Editor's teenage daughter, occasional technology mentor and frequent critic-at-large.)

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And it is written

In his remarkable book *The Future of Life*, biologist Edward O. Wilson says that human life on Planet Earth is poised in an alarming bottleneck of overpopulation and wasteful consumption.



Edward O. Wilson at 72 years of age is the Pellegrino Research Professor in Entomology for the Department of Organismic and Evolutionary Biology at Harvard University. Wilson grew up in South Alabama and the Florida Panhandle. It was here at age 13 that he discovered the first known fire ants in North America.

"The situation is desperate," he writes, "but there are encouraging signs that the race can be won. Population growth has slowed, and, if the present trajectory holds, is likely to peak between eight and ten billion people by century's end. That many people, experts tell us, can be accommodated with a decent standard of living, but just barely; the amount of arable land and water available per person, globally, is already declining. In solving the problem, other experts tell us, it should also be possible to shelter most of the vulnerable plant and animal species." [The Future of Life, page xxiii: 2002, Vintage Books/Random House, NY]

Wilson is an optimist. In his concluding chapter, he writes, "I believe we will choose wisely. A civilization able to envision God and to embark on the colonization of space will surely find the way to save the integrity of this planet and the magnificent life it harbors." (page 189)

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Because Wilson's fundamental proposition bears perfectly on the role of Florida's SART program, although perhaps with a broader and more profound scope than is normally required of us, it is appropriate to ask, in this venue: "Are you as optimistic as Professor Wilson?" We will publish your responses in the next issue of the SART Sentinel.

Red Cross "After-Action" Report on Florida Wildfire Season



It frightens us and breaks our hearts to see school children huddled against a wall in this manner, even preparing for an emergency, but the Red Cross urges organizations, neighborhoods and families to practice tornado response.

According to Chris Floyd, COO of the Capital Area Chapter of the American Red Cross (www.cacarc.org), a draft consolidated after-action report for the Red Cross response to the May and June 2007 Florida wildfires is available on line at http://redcross.tallytown.com/situation/wildfire-2007-aar.pdf. The Red Cross served 13,032 snacks and 6,921 meals during those smoke-choked days, and opened seven shelters that served 71 individuals.

In the "Lessons Learned" section of the report, all items are important for the Red Cross (It

stresses pre-disaster inter-agency cooperation and networking.), but one item stands out for everyone involved in Florida disaster preparedness and response: that there are other sheltering needs that communities must be aware of than tropical storms, upon which we are necessarily, but sometimes perhaps too narrowly focused.

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The Red Cross operates www.FloridaPreparesNow.org, a site with multiple links and lots of health and safety information for SART members and Florida residents generally. Everything from the current UV and heat indexes to brochures that guide businesses in the development of their emergency plans.

Our SART Neighbors in North Carolina



With 100 counties in all, North Carolina has 94 county CART programs that are either active or currently in activation. (North Carolina SART photos)

The landfall and aftermath of Hurricane Floyd on September 16, 1999 at Cape Fear, North Carolina precipitated that state's SART movement. Floyd was a Category 4 storm that weakened to Category 2 with 105 mph sustained winds prior to landfall. Otherwise, the enormous damage sustained in North Carolina and Virginia could have been catastrophic. (http://en.wikipedia.org/wiki/Hurricane_Floyd)

Even as a smaller storm, though, Hurricane Floyd triggered the second largest evacuation in U.S. history (behind Hurricane Rita) when 2.6-million coastal residents of five states including Florida were ordered from their homes as the counter-clockwise swirling cyclone approached. Floyd produced torrential rainfall in the eastern Carolinas, adding more rain to an area hit by Hurricane Dennis just weeks earlier. Rain caused widespread flooding over a period of several weeks; nearly every river basin in the eastern part of North Carolina exceeded 500-year flood levels. In total, Floyd was responsible for 57 fatalities and \$4.5 billion (\$5.7 billion in 2006 U.S. dollars) in damage, mostly in North Carolina. It is estimated that more than three million domestic and farm animals were lost.

The North Carolina State Animal Response Team – NC SART – was founded in North Carolina following Hurricane Floyd, because in 1999 no coordinated statewide emergency response plan was in place. The Tar Heel SART (http://sartusa.org/) is organized based on the principles of the Incident Command System (ICS) as developed by FEMA and involves the coordinated effort of more than 30 government and animal organizations. Using ICS as a set of core principles, North Carolina SART prepares to address all aspects of disaster animal response. (The Department of Homeland Security recognizes the Incident Command System (ICS) as the most effective system for managing emergencies, and it has been adopted as part of the National Emergency Response System.)

The North Carolina structure is organized on the grassroots level with County Animal Response Teams or CARTs. These teams report to county Emergency Management, and include animal control officers, Cooperative Extension Service personnel, county sheriff's deputies, private veterinarians, forestry officers, animal industry leaders and concerned citizens. North Carolina currently has 94 CARTs (out of 100 counties) that either are active or are actively in development.



Hurricane Floyd makes landfall as a Category 2 storm with 105 mph winds on September 16, 1999. (NASA photo)

According to Leonard Bull, a state-level SART 501(c)3 organization coordinates training as well as information and deployment of CART and other SART-trained groups on a need basis.

In concept, North Carolina's CARTs are more narrowly focused than Florida's County SARTs. While in Florida, the program is designed for all animal and agricultural interests – even though a preponderance of effort at this time is focused on pet and equine issues – the North Carolina effort is aimed strictly at preventing and responding to animal emergencies.

According to Leonard Bull, Professor of Animal Science at North Carolina State University in Raleigh, USDA's APHIS (Animal Plant Health Inspection Service) made grant funding available to develop the NC SART model and take it to other states. With matching funds from PetSmart Charities and several pharmaceutical companies as well as other animal interest groups NC SART has helped or is helping over 15 other states develop their own SART programs. The website developed through this effort (www.sartusa.org) provides a way for communicating not only to CART members in North Carolina but also for communication with SART members in other states. In addition, efforts are underway to use the website and attending database for selective and rapid emergency communication in emergencies when traditional landline communications may be unavailable.

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Exotic Update: Brazilian pepper

Brazilian pepper (*Schinus terebinthifolius*), called Florida-holly although it is neither from Florida nor a holly, is one of our worst exotic pests. An aggressive tree and relative of poison ivy, it out-competes native flora for space, growing to 40 feet with multiple trunks and foliage that becomes a dense, tangled mass. Clusters of white flowers may be observed throughout the year, but the intense flowering season is September to November. Around Christmas it displays copious red berries.



A fine looking tree with beautiful red berries, the exotic Brazilian pepper is a wolf-in-sheep's-clothing that quickly becomes a dense tangle with noxious health effects. (Jeff Hutchinson, Archbold Biological Station photo) In Brazil, it is cultivated as an ornamental, a shade tree and a hedge. Its wood is used in construction and for posts; twigs are made into toothpicks. A bark extract helps preserve fishing nets, and decoctions from crushed leaves or bark may relieve various ailments.

Otherwise, many people report respiratory problems when Brazilian pepper is in bloom, and contact can cause severe itching, rashes and skin lesions. Some domestic animals become severely colicky after eating leaves or fruits, and while robins eat its berries and spread the seed, other bird may die from eating the fruits.

It's History In Florida

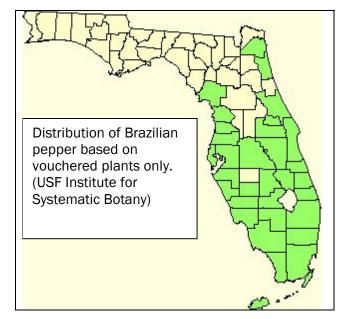
Brazilian pepper seeds were given to USDA by explorer Walter Swingle in 1898. The plant was thought to be well suited as an ornamental, and seeds or seedlings were sent to Miami's Plant Introduction Station for further distribution.

Horticulturalist George Stone made Brazilian pepper popular along the west coast in the late 1920s and, as late as 1944, Henry Nehrling wrote in Volume I of "My Garden in Florida," that "[Stone] distributed these seedlings freely among his friends and plant lovers, and many were planted out along the city streets. While strolling along one of these thoroughfares the writer was struck by the unique beauty of a fine specimen in full fruit. He collected quite a number of the berries, from which all the specimens in his Naples garden have sprung ... It ought to be in every garden in Florida." Brazilian pepper soon became a yard and municipal staple.

Unfortunately, this adaptable exotic pepper quickly outgrows its allotted space and becomes a dense tangle. It also emits chemicals that inhibit the growth of other plants. It has spread through Central and South America, the Bahamas, West Indies, Africa, southern Asia, Mediterranean Europe and several US states.

The best way to eradicate Brazilian pepper is to remove the plants and the soil in which they grow, because even when the plant is killed, seeds remaining in the soil will soon germinate. So shrubs are felled and mulched by machines; then the soil is piled into large mounds; finally, the rock is scraped. This bare rock is then left to itself, and almost miraculously the native flora returns on its own.

Brazilian pepper removal is a costly, labor intensive process and may not work in all environments, but a wasp species (*Megastigmus transvaalensis*) has been discovered feeding on the plant's drupes. The insect probably arrived in Florida about 15years ago from Reunion or Mauritius via France in Brazilian pepper fruits sold as spices in exotic food stores. So far, the berries have been found to be the wasp's only host in Florida, and the wasp effectively destroys up to 75 percent of the fruits.



(Copy edited from Maika Woodmansee - 2001 Everglades hike for Florida Int'l University at http://everglades.fiu.edu/fiu/idh4007/woodmansee1.html Distribution map www.plantatlas.usf.edu/maps.asp?plantID=52)

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