THE SENTINEL
NEWSLETTER OF THE FLORIDA STATE AGRICULTURAL RESPONSE TEAM

Toxic Algae Fouls this Florida River in May 2012.

Special Features of this Issue:

- *Health Tips for Blue-Green Algae*
- *The Rescue Dogs That Protect Florida's $120 Billion Agriculture Industry*
- *FDA Takes Action against Zika Virus*

Toxic Blue-Green Algae Impacts Florida's Waterways, Killing Animals, Fish, and Wildlife

Recently, the issue of blue-green algae (cyanobacteria) and its potential impacts to the environment, natural resources, and public health has earned much attention in the U.S. Common in most of Florida's aquatic environments, many cyanobacteria species are capable of producing harmful toxins (cyanotoxins).

Cyanobacteria can cause unsightly blooms; cause taste and odor problems in public water supplies and can kill domestic animals, pets, and fish and wildlife that drink or are otherwise exposed to untreated contaminated water or toxic biota.

Although a major focus for public health officials is cyanotoxins in drinking water supplies, increased concern for the possible risk for human illness through recreational exposure is on the rise.

In 2005, the Florida Department of Health issued health advisories recommending people and their pets refrain from recreational use or contact with blue-green algae blooms in both the St. Johns River (Duval, Clay, and St. Johns counties) and the St. Lucie River (Martin County from the Okeechobee Canal to the St. Lucie Inlet).

In recent years, publicity over blue-green algae has led to the FWC receiving enquiries from the public concerned about human health risks and whether fish are safe to eat from affected areas.

(See *Blue-Green Algae,* page 2)

"Dogs' keen sense of smell is a crucial tool for our early detection efforts to identify invasive pests and disease that could threaten Florida's agriculture industry."

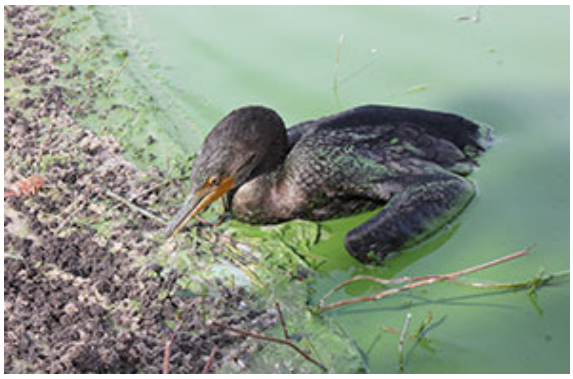
— Adam Putnam
Commissioner of Agriculture
(Story on page 3)

Blue-Green Algae (continued)

There are three main types of cyanotoxins in Florida's freshwater systems: hepatotoxins (affecting the liver), neurotoxins (affecting the nervous system), or dermatotoxins (causing topical skin irritations).

To date, very few cases of human illness related cyanobacteria incidents have been reported in the U.S. In Florida's freshwater systems, some toxic cyanobacteria such as Microcystis, commonly form blooms that can, on occasion, appear in lakes and rivers and in reservoir waters destined for drinking water use. These water treatment plants are designed to remove bad odors and taste associated with blue-green algae blooms and to extract toxins from the source water.

Recreational exposure by direct contact with a cyanobacteria bloom from activities such as jet-skiing, boating, and swimming have been reported to cause hay fever-like symptoms and dermal reactions at high concentrations. Ingesting contaminated water can cause gastrointestinal distress.



The risks of cyanotoxins to natural resources remain relatively unknown. Health problems may occur in animals if they are chronically exposed to fresh water with cyanotoxins.

Livestock and domestic animals can be poisoned by drinking contaminated water, and fish and bird deaths have been reported in Florida water bodies with persistent cyanobacteria blooms.

For more information, visit http://myfwc.com/wildlifehabitats/health-disease/other-wildlife/cyanobacteria/

Health Tips for Blue-Green Algae

The Florida Department of Health (DOH) advocates a common sense approach to eating fish and participating in recreational water activities where blue-green algae blooms occur.

To reduce your risk of exposure:

- Avoid scummy, foamy water where algae mats are present (Heavy blooms often appear as bright or pea green to reddish-brown water, occasionally with a "paint scum" appearance due to dead algae, and may emit unpleasant gassy odors.)
- Don't cook with, eat fish from, or drink scummy water
- Do not let your pets or children eat or drink from affected waters
- Don't eat fish that looks unhealthy
- Do not harvest dead or dying fish or shellfish
- Do not swim in, jet ski over, or play near scummy water or algal mats
- Do not allow your pets or children to swim in, drink from, or play near scummy water
- Do not irrigate with scummy water
- Do not use herbicides to kill blooms (this can release the toxins directly into the water)
- Minimize nutrient runoff and use of fertilizers (this reduces the risk of a potential harmful bloom occurring)
- If contact with suspect or contaminated water occurs, wash off immediately and thoroughly with clean water and soap (make sure to rinse the swimsuit areas and your pet's fur). Consult a doctor if illness occurs. Contact a veterinarian if your pet suddenly becomes lethargic or shows signs of poisoning including vomiting, diarrhea, or seizures.

The Rescue Dogs That Protect Florida's $120 Billion Agriculture Industry

Protecting Florida's $120 billion agriculture industry requires an integrated approach, including the expertise of several four-legged helpers. During the dog days of summer, FDACS is showcasing its lesser-known staff members — rescue dogs trained to detect invasive pests and disease.

"Dogs' keen sense of smell is a crucial tool for our early detection efforts to identify invasive pests and disease that could threaten Florida's agriculture industry," stated Commissioner of Agriculture Adam Putnam.

Among the many tools the department employs to detect, monitor and eradicate pests and disease are six working dogs. From patrolling private parcel facilities to distinguishing giant African land snails (GALS) from 130 other types of terrestrial snails for eradication, these dogs work every day to protect and defend Florida's agriculture industry. Some recent noteworthy discoveries include: olive fruit fly larvae, root mealybugs, GALS and other unauthorized plant materials.

Here is more information on the dogs that defend the agriculture industry:

Audi and Greg Farina at the Epcot Flower Show

Audi is a six-year-old chocolate Labrador Retriever rescue dog who patrols parcel facilities in Orlando, Tampa and Miami.

Jammer is a six-year-old Labrador Retriever who patrols private parcel facilities, primarily in South Florida.

Jammer on duty in a parcel facility

Kojak is a seven-year-old Labrador Retriever-mix rescue dog who inspects parcel facilities in Ft. Myers, Tampa and Orlando for invasive pests and disease.

(See *Agriculture Rescue Dogs,* page 7)

Enrollment Open: Multiple Levels for Small Animal Emergency Sheltering

The Florida State Animal Response Coalition has upcoming opportunities for their *Operations Level Small Animal Emergency Sheltering*.

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

The 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 and their owners during a disaster.

The Operations Level course gives many new job options, in addition to leadership skills and team lead opportunities. This course expands upon information covered in FL-003-RESP and ICS-100 courses. These earlier courses are prerequisites for FL-607-RESP.

Course topics include: Personal Preparedness, Overview of the Incident Command System, Deployment Preparedness, Assisting in Shelter Setup, 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

August 6-7 Course – Naples, FL (Operations Level)

When: Saturday, August 6, 2016, at 8:00 AM EDT to Sunday, August 7, 2016, at 6:00 PM EDT
Where: Collier County Domestic Animal Services, 7610 Davis Boulevard, Naples, FL 34104

August 28 Course – Sarasota, FL (Awareness Level)

When: Sunday, August 28, 2016, from 8:00 AM to 6:00 PM EDT
Where: Humane Society of Sarasota County, 2331 15th Street, Sarasota, FL 34237

September 17 Course – Orlando, FL (Awareness Level)

When: Saturday, September 17, 2016, from 8:00 AM to 6:00 PM EDT
Where: Pet Alliance of Greater Orlando, 2727 Conroy Road, Orlando, FL 32839

October 15 Course – Sarasota, FL (Awareness Level)

When: Saturday, October 15, 2016, from 8:00 AM to 6:00 PM EDT
Where: Cat Depot Education Resource Center, 2542 17th Street, Sarasota, FL 34234

FDA Takes Action against Zika Virus

The U.S. Food and Drug Administration (FDA) is engaged with partners across the U.S. Government, the private sector, and the international community—including the World Health Organization and ANVISA (the Brazilian Health Regulatory Agency)—to help minimize the impact of the Zika virus outbreak.

Zika virus is spread to people primarily through the bite of an infected Aedes species mosquito. Most people never know that they have been infected with the virus.

It is estimated that four out of five people with Zika virus infections have no symptoms at all. When symptoms do occur, the most common symptoms are fever, rash, joint pain, and conjunctivitis (red eyes). Even in those who develop symptoms, the illness is usually mild, with symptoms lasting from several days to a week.

Prior to 2015, Zika virus outbreaks had occurred in areas of Africa, Southeast Asia, and the Pacific Islands. However, in May 2015, the Pan American Health Organization (PAHO) issued an alert (PDF, 199 KB) regarding the first confirmed Zika virus infection in Brazil. Currently, outbreaks are occurring in many countries.

As of June 14, 2016, no locally transmitted Zika virus disease cases have been reported in the Continental United States, but imported cases have been reported in returning travelers. These imported cases could potentially result in local spread of the virus in some areas of the United States. Locally transmitted Zika virus has been reported in the Commonwealth of Puerto Rico, the U.S. Virgin Islands and, most recently, American Samoa.

For more information, visit
http://www.fda.gov/EmergencyPreparedness/Counterterrorism/MedicalCountermeasures/MCMIssues/ucm485199.htm?source=govdelivery&utm_medium=email&utm_source=govdelivery

SAVE THE DATE

The 2017 SART Planning Meeting

March 28-30, 2017

Stay up-to-date at www.FLSART.org!

FDA Releases Foods and Veterinary Medicine Strategic Plan

The U.S. Food and Drug Administration (FDA) last month released the Foods and Veterinary Medicine (FVM) Program's Strategic Plan for fiscal years 2016-2025, which outlines goals and objectives for the next 10 years. The FVM program encompasses the Office of Foods and Veterinary Medicine, the Center for Food Safety and Applied Nutrition, and the Center for Veterinary Medicine, as well as the related activities under the Office of Global Regulatory Operations and Policy and the Office of Regulatory Affairs.

The strategic plan is organized under four goals: food safety, nutrition, animal health, and organizational excellence. It is based on the following principles: (1) public health is the first priority, (2) partnerships are the key to success, (3) scientific expertise and research are the foundation of the FVM Program's work, and (4) the FVM program is committed to operating openly and transparently. Comments can be submitted on the strategic plan at any time.

For More Information, visit FDA Foods and Veterinary Medicine Program's Strategic Plan for Fiscal Years

Three Ways USDA Helps Consumers Keep Foods Safe

Have you ever wondered how to safely grill your burgers? How about determining the latest food safety recalls? USDA provides a number of resources to ensure that you have access to the most up to date information on food safety.

1. Ask Karen

Ask Karen provides expert knowledge on preventing foodborne illness by sharing food handling, storage, and safe preparation of meat, poultry, and egg products. Using a web page link, you can search for such topics as—how long you can safely keep meat in the refrigerator, how long it takes to boil an egg or whether it's better to use wooden or plastic cutting boards. The Ask Karen page is available 24/7 and includes the capability to chat live with a food safety advisor.

2. USDA Meat and Poultry Hotline

If you prefer to speak directly to a food safety specialist, USDA Meat and Poultry Hotline personnel can answer your food safety questions on weekdays year-round. This toll-free telephone service provides answers about the safe storage, handling, and preparation of meat, poultry, and egg products. The Hotline can be reached Monday through Friday from 10:00 a.m. to 4:00 p.m. Eastern Time and provides information in English and Spanish. Outside of these days/hours, there are recorded food safety messages available 24 hours a day. You may also send email questions to MPHotline.fsis@usda.gov.

USDA Meat and Poultry Hotline toll free at 1-888-MPHotline (1-888-674-6854).

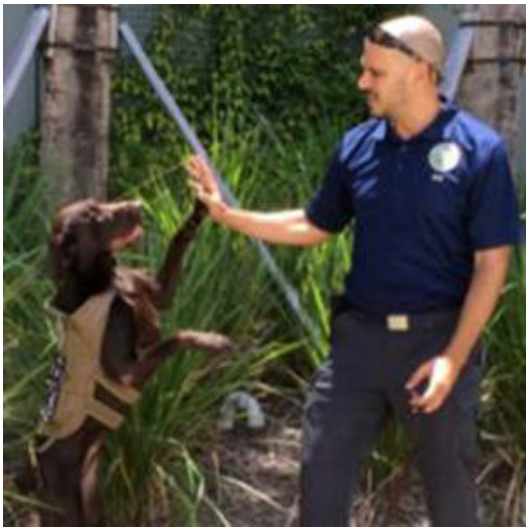
3. Email Updates

The USDA Food Safety Inspection Service provides an email subscription service that sends email updates targeted to selected topics you have chosen. You may add or delete your selected subscription items at any time.

These three, easy-to-use resources can help keep the food on your dinner table safe. If you would like more information, please visit www.foodsafety.gov.

Agriculture Rescue Dogs (continued)

Sierra is a four-year-old chocolate Labrador Retriever rescue dog who single-handedly quadrupled the number of live giant African land snails found on a property following a snail outbreak in Broward County.



Sierra and Omar celebrating a giant African land snail find

Access a video of Sierra and Bear detecting giant African land snails.

Verde is an eight-year-old Labrador Retriever who works in Miami, Hollywood, Homestead and Miramar postal facilities to detect invasive pests. Verde recently helped discover a scale insect species native to Africa that is potentially new to science.

For more information, please visit http://www.freshfromflorida.com/News-Events/Press-Releases/2016-Press-Releases/The-Rescue-Dogs-That-Protect-Florida-s-120-Billion-Agriculture-Industry

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

About the *SART Sentinel*

The *SART Sentinel* is an email 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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