

FIRST DETECTOR NETWORK NEWS



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Emerald ash borer is still on the move

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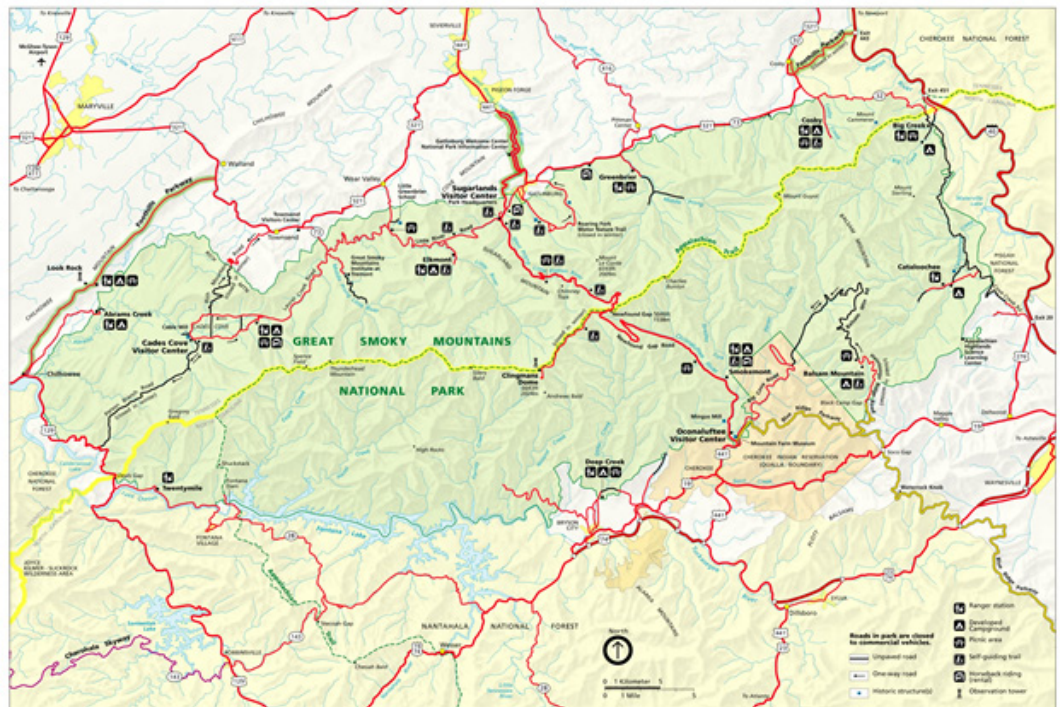
The Great Smoky Mountains National Park has recently announced the detection of emerald ash borer (*Agrilus planipennis* or EAB) in traps at the Sugarlands visitor center and in the Greenbrier area (both in Tennessee). These areas are frequented quite often by visitors as they are easy to access (i.e. they are not backcountry sites).

The park has white ash (*Fraxinus americana*)

which is found at higher elevation and green ash (*F. pennsylvanica*) which is present along the sides of creeks. Historically, the park also had pumpkin ash (*F. profunda*), but this species was extirpated with the construction of the lake systems at the Western end of the Park.

Mapping of ash species within Park

continued on next page



In This Edition:

- Emerald ash borer is still on the move
- Gladiolus rust found (again) in Florida
- Good news from California!
- South American palm weevil found in Texas
- Pale cyst nematode update

boundaries is ongoing and will help track the movement of EAB and determine the impact this invasive beetle will have on various ecosystems within the Park. For example, green ash can represent 40% of the trees in some wetland habitats which will constitute a significant change in these specialized ecosystems if these trees die.

Trapping in areas of the park that are easier to access by visitors (campgrounds, picnic areas, visitor centers, etc.) will continue. Dead or dying trees in these areas that pose a risk to visitors or facilities will be removed. With the advance in biological control agents and new management strategies, backcountry trees may also be treated.

In addition to the detection in the Park, Charlotte, Halifax, Lunenburg, Mecklenburg, and Pittsylvania Counties and the City of Danville in Virginia have been added to the list of regulated areas for EAB. This is in response to the confirmation of EAB in Charlotte, Halifax, Mecklenburg, and Pittsylvania Counties in June (2012).

The Park (as well as all other states) would like to emphasize that the movement of firewood helps spread not only EAB, but other threats to forest health such as the Asian longhorned beetle and thousand cankers disease.

So, please, do not move firewood!

Gladiolus rust found (again) in Florida

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Gladiolus rust (*Uromyces transversalis*) has been detected again in Manatee County, Florida. It was originally detected in 2006, then again in 2010 and 2011 at the same farm. Gladiolus rust is a fungus that is native to southern Africa but has spread to Europe and North America.

Hosts of this fungus include members of the family Iridaceae, including *Gladiolus*, *Tritonia*, *Crocasmia*, and *Watsonia* spp. This fungal infection begins with small, yellowish spots which break down the epidermis exposing pustules filled with small, yellowish spores. These pustules can come together to form

large patches of damaged tissue (left). In addition, orange sori (small blisterlike raised sections of the epidermis that are formed when the spores have emerged) look like typical “rust” signs (right).

Long distance movement of this fungus is through the transport of either infected plants and cut flowers or of spores hitching a ride on plants or cut flowers. The spores can also be transported locally by air.

Gladiolus rust can be treated with fungicides. For more information about this disease of ornamental plants, click [here](#).



Image on the right courtesy of Central Science Laboratory, Harpenden Archive, British Crown, www.bugwood.org, #0656091

Image on the left courtesy of Cesar Calderon, USDA APHIS PPQ, www.bugwood.org, #2173056

Good news from California!

Stephanie D. Stocks, Department of Entomology and Nematology, University of Florida

The Oriental fruit fly (*Bactrocera dorsalis* or OFF) has been declared eradicated in the Stockton area of San Joaquin County, as well as the Anaheim area of Orange and Los Angeles Counties, California. These areas were a part of the OFF regulated area.

The females of this species lay their eggs on the ripening fruit of over 150 recorded hosts including: apricot, avocado, banana, citrus, coffee, fig, guava, mango, papaya, passion fruit, peach, pear, persimmon, pineapple, surinam cherry and tomato (though avocado, mango and papaya are the most commonly attacked).

The adults have a body length of around 8.0mm with a wing span of 7.3mm. Though the color varies, they are primarily yellow with dark brown to black markings on the thorax, and two horizontal black stripes along with a vertical black stripe on the abdomen. The vertical stripe intersects with the horizontal stripe closest to it forming a "T" (though this

pattern can vary considerably). The larvae is creamy white with no head capsule or legs (i.e. the typical maggot appearance) and reaches 10mm at maturity. The larvae leave the fruit when they are ready to pupate and drop to the ground. The puparium is tan to dark brown in color and measures about 5mm in length.



Image courtesy of Florida Division of Plant Industry Archive, Florida Department of Agriculture and Consumer Services, www.bugwood.org, #5193078

NAPPO Phytosanitary Alert System

The **North American Plant Protection Organization's (NAPPO) Phytosanitary Alert System** is featured in this newsletter every month. Remember that this a great resource to keep up to date on the latest pest detections and quarantine information. The website features both official reports and unofficial

alerts of pests for Canada, Mexico, and the United States.

They also have free subscriptions that are available for periodic email notifications of new postings on their website. Be sure to check it out regularly!

About NPDN:

The NPDN is a network of state and federal officials, land grant universities, and First Detectors whose mission is to detect, diagnose, and disseminate information regarding high consequence plant disease or pests. The NPDN was established in 2002 in response to a need for greater agricultural security.

Over the past eight years the NPDN has grown into an internationally respected consortium of plant diagnostic laboratories.

The five regions that make up the **NPDN** are the: **NEPDN**, **SPDN**, **NCPDN**, **GPDN**, and **WPDN**.

Please feel free to browse the links to the various regions to get a better idea of what is going on in your part of the country.



South American palm weevil found in Texas

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The South American palm weevil, *Rhynchophorus palmarum*, has been detected in Alamo, Texas (located within 5 miles on the U.S./Mexico border). APHIS is working with the Texas Department of Agriculture and Texas A&M University to determine the extent of the distribution.

There are three giant palm weevils that are considered important pests of palms. The palmetto or giant palm weevil (*Rhynchophorus cruentatus*) is native to Florida and the southeastern U.S. The adults measure 19 to 30mm and the larvae measure 38 to 40mm. There is quite a bit of variation in color when it comes to the adults. The red palm weevil (*R. ferrugineus*) is native to southeastern Asia and the Pacific Islands where it is a severe pest of date palms. Adults measure 35 to 40mm while

larvae measure 50mm. They also have quite a bit of variation in color in the adults. The South American palm weevil is from Central and South America. The adults measure 40 to 50mm in length while the larvae measure 50 to 60mm in length. They are also a vector of a nematode (*Bursaphelenchus cocophilus*) which causes red-ring disease in coconut. Sugarcane is also considered a host for this species.

All these species can feed on the fruits, stems, buds, and leaves of palms such as coconut, date, oil, and sabal. A good field key for determining which species of giant palm weevil you have can be found in a [Florida Department of Agriculture and Consumer Services – Division of Plant Industry Pest alert](#).



The image to the left is of the South American palm weevil. Image courtesy of Pest and Diseases Image Library, www.bugwood.org, #5321036.

Comparisons of the three different giant palm weevils.



The image below is of the red palm weevil. Image courtesy of Christina Hoddle, University of California - Riverside, www.bugwood.org, #5430200.



The image to the left is of the native Palmetto weevil. Image courtesy of Doug Caldwell, University of Florida, www.bugwood.org, #5429843.

Pale cyst nematode update

Stephanie D. Stocks, Department of Entomology and Nematology, University of Florida

APHIS has added 151 acres to the pale cyst nematode (*Globodera pallida* or PCN) regulated area in Bingham County, Idaho due to the June 12 and 13 confirmations of PCN cysts in two potato production fields in that county. This brings the total number of PCN-infested fields to 17 and the infested area to 1,916 acres.

PCN hosts are found primarily in the potato family (including potatoes, tomatoes, eggplants, and some weeds). The females form cysts that can contain between 200 and 600 eggs. These cysts can stay dormant for up to 30 years with the eggs inside remaining viable.

In large numbers, these nematodes cause wilting, stunted growth, poor root

development, and early plant death. In smaller numbers, they can significantly reduce tuber size. Without management, PCN can reduce yields in potato fields up to 80 percent.

PCN is spread primarily when soil infested with cysts is moved from one place to another such as on farming and construction equipment and through soil adhering to potatoes or other crops that are being transported.

Control of this nematode is difficult as nematicides are no longer available and because the cysts can persist in the soil for so long. Right now, preventing the spread of this pest to other areas is the focus.



Image courtesy of Bonsak Hammeraas, Bioforsk - Norwegian Institute for Agricultural and Environmental Research, www.bugwood.org, #2131077

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To submit news items in future editions of the newsletter, contact: clharmon@ufl.edu or sstocks@ufl.edu or achodges@ufl.edu

You can include a short descriptive paragraph, links, and related images or documents – don't forget to include author and image credits though.



Upcoming Meetings:

- September 13-15, 2012 - the Master Gardener Advanced Education Conference will be held in Pasco, WA - click [here](#) for more details.
- September 28-30, 2012 - the Ohio Master Gardener Volunteer State Conference will be held in Warren, OH - click [here](#) for more details.
- October 1-3, 2012 - the Florida Master Gardener State Conference will be held in Lake Charles, LA - click [here](#) for more details.
- October 4-6, 2012 - the Purdue Master Gardener State Conference will be held in Noblesville, IN - click [here](#) for more details.
- October 24-26, 2012 - the Louisiana Master Gardener Continued Training Conference will be held in Clearwater beach, FL - click [here](#) for more details.
- If you would like your meeting listed in the newsletter, let us know.

First Detector Training Opportunities:

- May 31 - June1, 2012 - the Sentinel Plant Network will hold its South Central Region Training Workshop at the Dallas Arboretum in Dallas, TX - Click [here](#) for more details.
- If you are hosting a First Detector Training Session, please post these on the NPDN First Detector Training website so that they can be listed here.

Do you tweet?

- Click [here](#) for updates.

Employment Opportunities:

- Please click [here](#) for more information.