PEACH NEWSLETTER

WINTER ROUNDTABLE

Our winter peach roundtable grower meeting is scheduled for January

Our Winter Central Florida Peach Grower Roundtable will be held on January 13, 2015. Registration information is located on the last page of the newsletter. The Roundtable program will begin at 11:00 a.m. and be held at the Brenneman Auditorium, located at the UF/IFAS Polk County Cooperative Extension Service Office in Bartow. Lunch will be provided by Ronnie Chandler of TWC Distributors, Inc., so please make sure you register before the deadline.

At our winter roundtable we will have Dr. Russ Mizell, Professor of Entomology from the UF/IFAS, North Florida Research and Education Center, speak on insects affecting peach trees. The following describes his current research projects: peaches are one of the most nutritious foods available and once were an important crop in Florida. They still have much potential as a crop, but are attacked by many arthropod and disease pests. Currently, projects are looking at several aspects of the biology, behavior and management of peach insects, including plum curculio and stink bugs. With colleagues in Georgia and the USDA, ARS, the use of nematodes as biological control agents of plum curculio and the peachtree borers is being investigated.

As always if you have any questions, comments or suggestions for us, simply click on the agent of your choice from the email links at the bottom of each page or give us a call.

UF & IFAS
The SCIENCE of LIVING

This newsletter is a product of UF, IFAS and County Cooperative Extension Services, in partnership with the participating Boards of County Commissioners and University of Florida

"The Foundation for the Gator Nation"

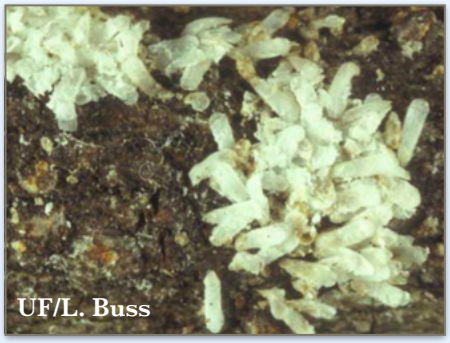
Chris Oswalt - wcoswalt@ufl.edu 863-519-1052• Gary England - gke@ufl.edu 352-343-4101• Alicia Whidden - awhidden@ufl.edu 813-744-5519 et 54134• Cami Esmel- cami13@ufl.edu 352-793-2728

PEACH

Additional Information

Closeup of scale infested limb. (UF/Whidden)

Adult female white peach scales.



Adult male white peach scales

The Time to Scout Your Trees for Scale is Now!

Alicia Whidden
Extension Agent Hillsborough County

In previous editions of the newsletter at this time of year, checking your peach trees for scale has been talked about. I wanted to bring this up again after having personal experience this fall with white peach scale. I have a peach tree planted in my yard that I walk by frequently. The growth this year had been very vigorous and there was excellent leaf canopy the whole season. When the weather started getting cooler the tree started dropping leaves. A couple of weeks ago I looked across the yard and was surprised to see that the lower part of a main scaffold branch was white with scale. The tree had looked fine, and I walked by that side of the tree all summer and never noticed a thing! My tree has white peach scale, *Pseudaulacaspis pentgona*. This is a serious pest of peach trees and also many other woody ornamentals. There is a document on white peach scale at http://entnemdept.ufl.edu/creatures/orn/scales/white_peach_scale.htm. This will give you an excellent overview on this pest. Since my tree was doing so well and I never noticed a thing wrong while it had leaves, I wanted to remind everyone that now that your trees are dormant, to go through and look at each tree for scale. White peach scale will be easy to spot now that the leaves are gone. A full canopy of leaves can hide many pests so now is the time to check things out. Here are a couple of pictures of my tree. You will notice that you only see the scale on 1 main branch. I have 2 other trees in different parts of the yard. I will be spraying all the trees with oil to control the white peach scale and any other scale that I may not have spotted yet. Even though I do not see scale on the other trees I am spraying to be sure I am not missing a light infestation since 1 tree has scale. Oil is used to get the crawler stage of the scale. Also it is safe for the handler to use. I will be sure to spray when temperatures, in a 24 hour window around the spraying time, will not be below 40° or above 75-80°F. As I write this the temperature has been below 40 every morning for nearly a week, so I will wait until I get the ideal 24 hour temperatures. It is important to the health of my tree to control the scale as soon as possible, and every year I will scout the trees for scale. So a resolution for the New Year is to get scouting those trees. Give any of us a call if you have any questions.

PEACH

Peach Thinning

Gary K. England
Extension Agent Lake County

One of the most important horticultural practices to attain optimum yield of appropriately sized peaches is proper thinning. If this practice is conducted correctly and in a timely manner, growers should be able to attain optimum crop size (Figure 1). Since larger size fruit tend to garner the highest market price, it behooves growers to have their thinning strategy planned and executed properly.

Most Florida peach growers have learned that dormant pruning of thin or weak flower bud bearing shoots is a good first step in controlling the eventual fruit set later in the season. This can help reduce the expense of manual fruit thinning later in the season.

Developing peach fruit go through three phases of development; cell division, pit hardening and final swell. An article entitled 'Peach Tree Physiology' describes these three phases (http://www.ent.uga.edu/peach/peachhbk/pdf/physiology.pdf). The article indicates that cell division is typically completed within 50 days after full bloom in most peach cultivars, pit hardening lasts a few days to a few weeks and final swell takes about three weeks. This information is useful as a guide for developing a fruit thinning schedule, since it is necessary to thin fruit before the initiation of pit hardening to ensure that carbohydrates are properly partitioned to the fruit that you eventually plan to harvest thus resulting in optimum sizing and yield. Growers should remember that many of the low chill peach cultivars grown in Florida tend to have multiple blooms and that additional thinning may be necessary.

The UF/IFAS Extension Publication HS1109 entitled 'Florida Subtropical Peaches: Production Practices' (http://edis.ifas.ufl.edu/hs348) indicates the importance of thinning peach fruit before the initiation of the pit hardening phase and suggests that growers can cut fruit to monitor development; typically occurring when fruit are about the size of a marble or a nickel. The document indicates that most cultivars will attain optimum size when the best fruit on stems with sufficient leafing are thinned to an average spacing of 6-10 inches and smaller fruit are removed.

Some growers also practice mechanical or chemical bud and/or bloom thinning. While this process can potentially increase efficiency, it also runs the risk of crop failure should a serious frost/freeze event occur. The Southeastern Peach Growers Handbook has suggestions on methods to evaluate for those interested in experimenting with bud and/or bloom thinning but it should only be conducted on a very limited basis.

Figure 1. Peach Fruit thinned to a proper spacing on shoots with sufficient leafing have the potential to attain optimum size. Photo Credit: Gary K. England 12/14.

A properly thinned tree on the left, and an untwined tree on the right. The tree on the right is chlorotic with poorly colored, small fruit: http://hos.ufl.edu/extension/stonefruit/thinning-stone-fruit

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AgroClimate Chilling Hour Tools (http://agroclimate.org/tools/Chill-Hours-Calculator/)

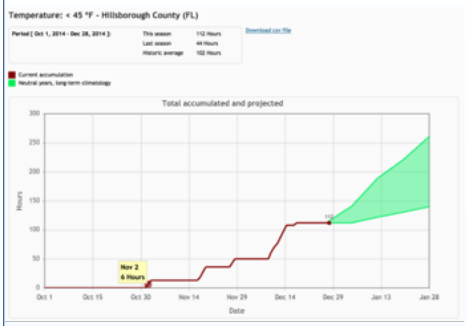


Figure 2. Accumulated chilling hours below 45⁰F for Dover FAWN site. Shaded green area projected chilling hour accumulation.

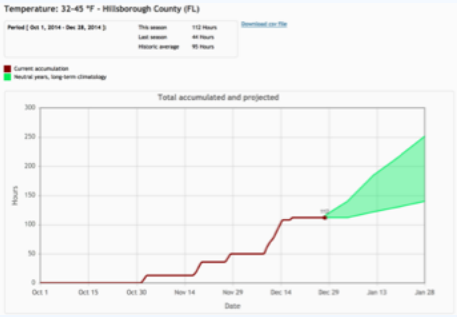


Figure 3. Accumulated chilling hours between 32 & 45⁰F for Dover FAWN site. Shaded green area projected chilling hour accumulation.

The above figures use current climate forecast information to project future accumulation of chilling hours. A six to 14 day temperature outlook can be found at the National Weather Service's, Climate Prediction Center (http://www.cpc.ncep.noaa.gov/products/predictions/610day/fxus06.html).

Calculating Chilling Hours

Chris Oswalt
Extension Agent Polk County

Chilling hours are determined by the accumulation in time that peach trees are exposed to a specific range of temperatures (for our discussion below 45⁰ F) during the winter. In figure 1, you can see that this winter, and most likely all winters, multiple areas will experience significant differences in chilling hours over a small geographical area. The Florida Automated Weather Network (FAWN) weather stations on the ridge have consistently lower number of chilling hours compared to other weather stations off the ridge.

This variation at first glance might resemble variation in summer rainfall patterns in central Florida. It is more likely that these geographical areas have consistent topographical features (ridge versus depressional areas) that cause this variation. Everybody knows about cold pockets on freeze nights and these (colder areas) would be consistently cooler even on nights when freezes don't occur, hence more chilling hours.

Chilling hours, depending on the crop or chosen chilling model (figures 2 & 3) can be calculated differently. At the AgroClimate website (http://agroclimate.org/tools/Chill-Hours-Calculator/) you can see a map that displays the number of chilling hours acquired to-date from weather stations located in the southeastern United States. There is also additional and more detailed information on calculating and displaying chilling hours for the identified weather stations. Once you get the idea, it is fairly simple to do your own calculations from your weather station data.

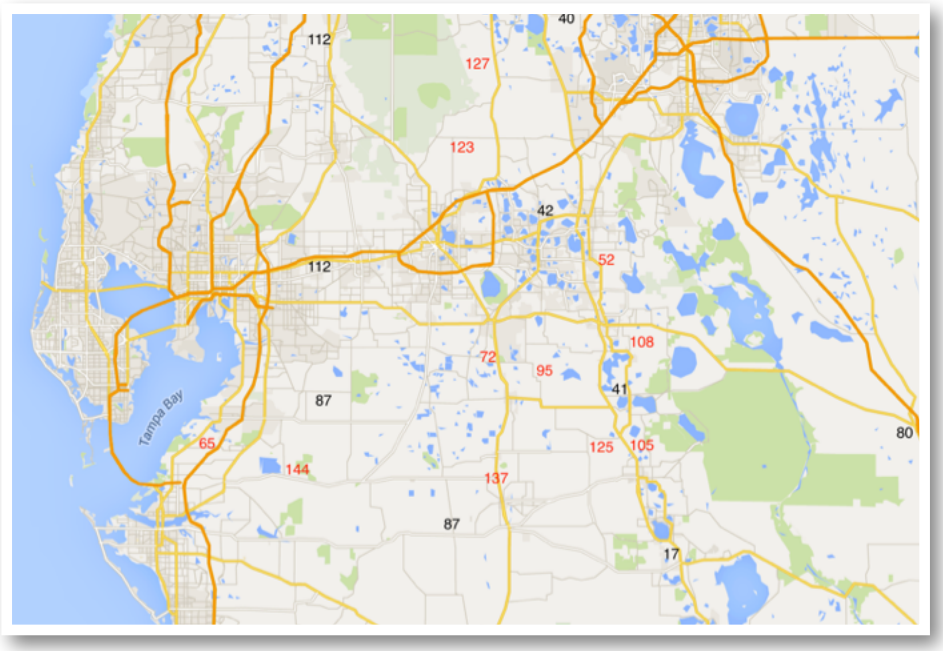


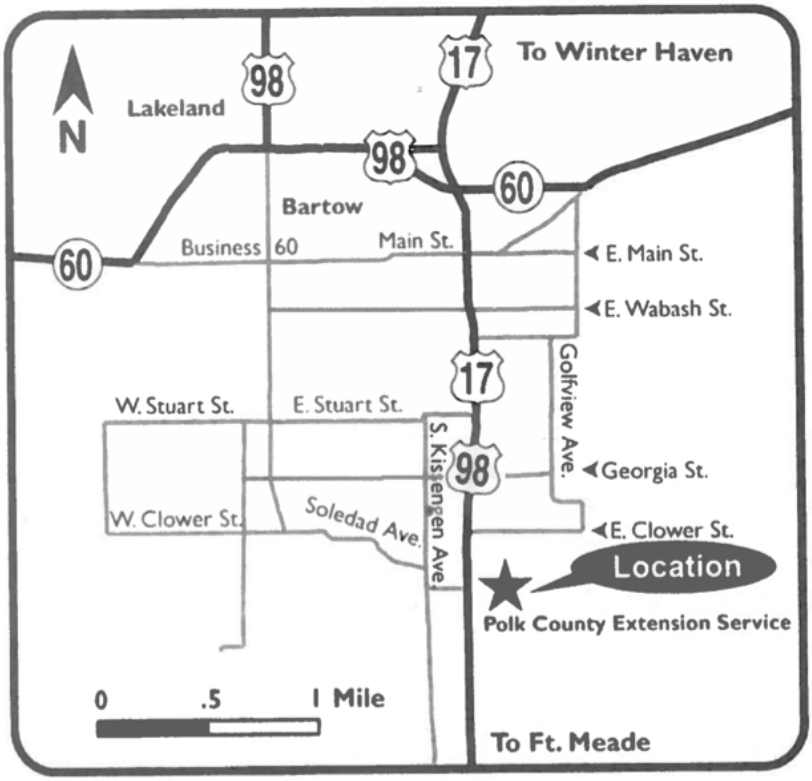
Figure 1. Accumulated chilling hours for Central Florida as of December 30, 2014. Hours in black are from Florida FAWN sites. Hours in red from historical (since 11/1/14) Florida farm weather network data.

CHRIS OSWALT - WCOSWALT@UFL.EDU 863-519-1052• GARY ENGLAND - GKE@UFL.EDU 352-343-4101• ALICIA WHIDDEN - AWHIDDEN@UFL.EDU 813-744-5519 ET 54134• CAMI ESMEL- CAMI13@UFL.EDU 352-793-2728

Winter Central Florida Peach Grower Roundtable

Our winter Central Florida Peach Roundtable will be held in the Brenneman Auditorium, UF/IFAS Polk County Cooperative Extension Service Office in Bartow. The meeting will be on Tuesday, January 13, 2015, beginning at 11:00 a.m. and will conclude with lunch. Our sponsor for this Roundtable will be Ronnie Chandler of TWC Distributors, Inc.

To attend we will need you to preregister by calling Gail Crawford at 863-519-1042 or email her at: dorothyc@ufl.edu. We will need to have this done by Friday, January 9, 2015. The address of the Brenneman Auditorium is 1702 US Highway 17/98 S. Bartow, FL.



We hope to see you on the 13th,

Chris Oswalt

Chris Oswalt
Citrus Extension Agent
Polk/Hillsborough Counties
Phone 863-519-1052
P.O. Box 9005, Drawer HS03
Bartow, FL 33831-9005

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