Cranberry Station Newsletter

AUGUST 2012

UMass Cranberry Station
1 State Bog Road
P.O. Box 569
East Wareham, MA 02538
http://www.umass.edu/cranberry

Bogside Workshop

Pollinators and native bee habitat
Chet Halunen's Plymouth Bog
169R Billington St. Plymouth, MA
(GPS coordinates 41°56' N 70°40' W)
Friday August 24th 2012
10 AM - 12 noon

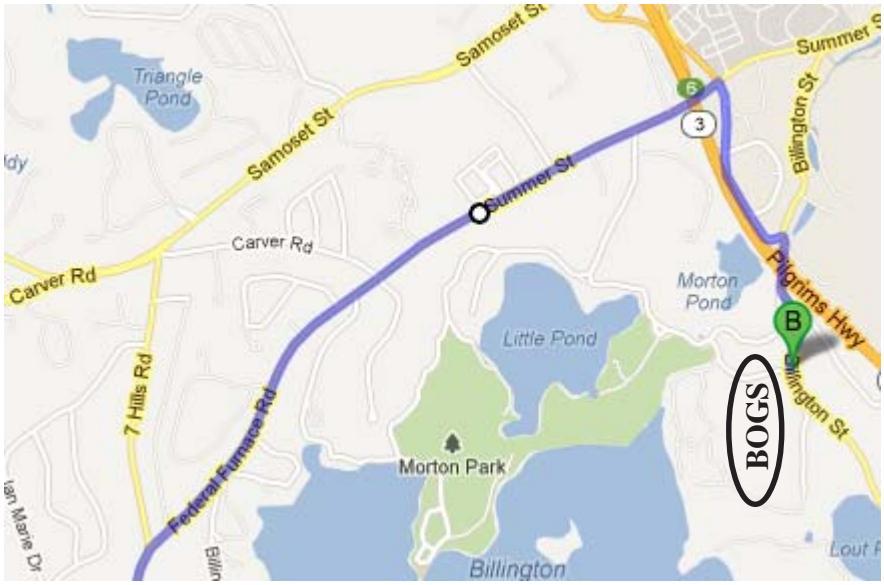
10 AM - Cranberry pollination, mitigating impacts of pesticides and employing new bee-friendly insecticides: *Anne Averill, UMass*
10:30 - Tour and discussion of established bee garden and native bee biology
11:00 - Assessing/creating pollinator habitat, cranberry-specific conservation approaches and what we've learned, using federal programs and practices: *Mace Vaughan, Xerces Society*

Spend the morning considering options to maximize pollination, protect bees from pesticides, and attract native pollinators; discuss and assess two year old pollinators (bee) meadow next to bog

GUEST SPEAKER – MACE VAUGHAN —Pollinator Program Director of the Xerces Society, Joint Pollinator Conservation Specialist for the USDA-NRCS; national leader and collaborator with scientists on studies of habitat needs and protection of crop-pollinating native bees. Co-author of *Attracting Native Pollinators: Protecting North America's Bees and Butterflies* and the *Pollinator Conservation Handbook.*

This bog-side workshop is co-sponsored by UMass Cranberry Station and the Xerces Society.
Thanks to support from the USDA Natural Resources Conservation Service (NRCS) and Plymouth County Conservation District (PCCD).

Please call ahead to register attendance 508-295-2212 x10.



Tissue and Soil Testing

Tissue sampling, along with good observations of growth and yield response is one of our best tools for evaluating the success of our fertilizer programs. Soil testing is valuable for tracking soil pH and organic matter. While soil sampling can be done any time, tissue sampling should be confined to periods when the nutrient levels in the plant are stable, that is, they are not changing rapidly from day to day. Since soil can be collected any time, many growers find it convenient to collect the soil and the tissue at the same time based on the timing for tissue sampling.

It is getting near time to collect tissue samples. The recommended timing for collecting these samples is August 15 to September 15, based on the time when nutrients in the shoots are stable and before the stem tissue becomes woody in the fall. Take samples too early and the nutrients are still changing, sometimes even day to day; but collect too late and woody stem tissue can dilute the sample and results will be lower than expected. The stable period was established based on three years of season-long tissue analysis data, with the beginning of the sampling period coinciding with the period when fruit are well into their sizing (past pea stage).

This year, we had an early season and fruit are already sizing up. The early season may also lead to earlier than usual wood production in the stems. To account for the early season, I would recommend that, this year, tissue samples be taken in the earlier part of the 30 day period if possible, and certainly before the stems in the new growth become noticeably woody.

Directions for sampling and for finding the forms to send samples for analysis at the UMass Amherst Soil and Tissue Lab can be found at our website (in the drop-down menu under Crop Information) and in the nutrition section of the chart book. For the UMass lab, select the soil test form for routine test for fruit, vegetable, and field crops; select the tissue form for small fruit. Make sure to add the organic matter test for the soil and to choose the routine plant test (this includes nitrogen) for the tissue.

Please note that the UMass lab tissue form instructions ask you to rinse the tissue. This is not necessary and may wash out some minerals - send as is in paper bags. Do not send tissue in plastic bags as mold can develop. Soil can be sent in plastic bags or stop by the Station for sample boxes provided by the lab.

Carolyn DeMoranville, Plant Nutrition

Spotted Wing Drosophila on Cranberry? PROBABLY NOT

We do not believe that SWD will be a problem in cranberry based on studies done in WI. WI had access to a SWD colony because of the huge threat to cherries etc. and found that females discriminated against cranberry for egglaying and that larvae did not develop in cranberries.

It certainly could be useful if a bog owner is concerned to work with Barnstable extension and Ocean Spray to put traps out to document if flies are in the bogs and if a threat exists right now; nearby raspberries, blueberries, should support populations.

Anne Averill, Entomologist

For crops other than cranberry Spotted Wing Drosophila: Strategies for Dealing with a New Pest (From Barnstable County Extension)

July 23, 2012: Spotted Wing Drosophila (SWD) was found last week in Falmouth, Barnstable and Dennis in blueberry fields. This invasive pest is a type of fruit fly that has the ability to infest healthy fruit. It was found in parts of New England late last summer after hurricane Irene. SWD was introduced on the west coast in 2008 and quickly spread to other parts of the U.S. and Canada.

SWD is a pest of soft skin fruits like strawberry, raspberry, blueberry and grape as they ripen to maturity. Female flies sting fruit to lay eggs…in the process of egg-laying they also introduce decay organisms like yeast and bacteria. Fruit breaks down fairly quickly.

For more information on this new pest see:
https://extension.umass.edu/vegetable/insects/spotted-wing-drosophila

http://www.ipm.msu.edu/SWD/ManagementRecommendations-RaspberryBlackberryAug2011.pdf

http://www.ipm.msu.edu/SWD/E-3140.pdf

http://www.oregon.gov/ODA/PLANT/docs/pdf/ippm_d_suzukii_id_guide10.pdf?ga=t

Dr. Carolyn DeMoranville, Station Director