



## NH Integrated Pest Management Newsletter

March 25, 2008

Volume IV

No. 1

### Newsletter Only on Website

That's my plan for this year. The newsletter will be posted on the website, as it has since March 2003. If you REALLY need a hard copy, contact Suzanne Hebert, and we'll see if we can accommodate you. I'm trying to make this useful, yet minimize costs in time and \$ to distribute it. We'll try this, and see how it goes. You can reach Suzanne by mail (G28 Spaulding Hall, 38 College Rd, Durham, NH 03824), telephone 862-3200 or email [Suzanne.Hebert@unh.edu](mailto:Suzanne.Hebert@unh.edu) I'm expecting to send out the second issue in 2 weeks.

In case you somehow are seeing this as a hard copy, the page where my newsletters reside is at: <http://extension.unh.edu/Agric/AGPMP/IPMNews.htm> Get tired waiting for a new issue? Read some of the back issues! They're still there!

### Good Snow Cover This Winter = Good Survival For Some Pests

Tarnished plant bug, pear psylla, plum curculio, apple blotch leafminer, spotted tentiform leafminer, *Amblyseius fallacis* (predator mite) and others overwinter in plant debris or leaf litter. When we have good snow cover that starts early and lasts well, they have a good insulation blanket and tend to survive well. I'm guessing that they have survived the winter in good shape.

European red mite and white apple leafhopper are examples of pests that overwinter as eggs. ERM's are **on** the twigs, while WALH are **in** them. For them, colder than normal winters would be expected to cause lower survival. So far it doesn't look as though it has been too tough for them, so I'm expecting good survival for them, too. Sorry. Maybe I'm wrong about these predictions.

### Sudden Colony Collapse (Honey Bee)

This Fall, another of George Hamilton's successful grant proposals led to a presentation in Goffstown by USDA ARS Bee Research Laboratory expert Dr. Judy Chen. In case you've been out to lunch for the last year, beekeepers (in many countries, not just US) uncovered a scary problem last year, where thousands of colonies of honeybees just...well...disappeared. Beekeepers opened the hives to find plenty of honey, and larvae waiting to be fed, but almost no bees.



There were numerous proposed causes, including new pesticides, cell phone use, varroa mites and other parasites, diseases, stress from transporting hives and artificial feeding, and others. Now it seems clear that there are several factors that contribute to cause the problem. A key contributor seems to be a virus, IAPV (Israeli acute paralysis virus). Dr. Chen also indicated that heavy stress from varroa mite infestation is a contributor and **a key management opportunity**.

As further details unfold, and management options are determined, we'll see if the number of bee colonies starts to recover. It will take time. Whether or not we have SCCD in New Hampshire, we are affected. The supply of bees available from out of state, to handle pollination needs will still be down. What can you do?

One thing is to make contact with "your" beekeeper early, and find out if he/she can handle your needs. If you manage your own hives, be sure to pay attention to varroa mite. Many of you know that honey bees have suffered with the introduction of **both** varroa mites and tracheal mites. The combined effects of these parasites are that wild colonies of honeybees no longer survive the winters in NH. They have to have the assistance of beekeepers to make it through. Even with that help, beekeepers here have much higher losses than they used to. There are other problems too, with fowlbrood, lesser hive beetles (possibly here but not confirmed to my knowledge), wax moths, and more.

I mentioned last year that some growers are trying to encourage bumble bee populations. We have several species. They are good pollinators, active even in cool, breezy conditions. One method Bill Lord reported to me was to place a bale of hay here and there around "his" blueberry mountain. Mice & voles found the bales and made homes under them. Later, bumble bees moved into the old mouse & vole homes. Setting out new bales each year kept the process going. I can't vouch for how successful this was, but I like the idea of trying to understand where our wild pollinators come from, and protecting them.



The Xerces Society has been distributing "wanted posters" about two species of bumble bees, *Bombus affinis* and *Bombus terricola*. Both of these were formerly very important, abundant pollinators in the Eastern USA. They have literally dropped out of sight. Except for a very few small pockets, *B. affinis* hasn't been seen in most of its range since 2003 and *B. terricola* hasn't been seen since 1989.

I looked at the UNH insect collection and found hundreds of specimens of these two, most collected long ago (photo, right). The last ones I saw there were collected in 1980 and 1981. There are lots of unidentified bees waiting to

be identified and catalogued, but I don't have the expertise (or time) to go through them. Maybe a few are these species, but it looks like these two are pretty much gone here, too. The Xerces society says that an introduced strain of a pathogen (*Nosema bombi*) may be a factor in disappearance of these two natives.

Besides bumble bees, there are many other bees here in the families Collettidae, Megachilidae, Andrenidae and Halictidae. They're all good pollinators. Protecting acreage where they live, and reducing our dependence on chemical pesticide will certainly help. We might have to do still more, like offering nest sites. Some species nest in soil that is relatively bare of vegetation. Soil that is regularly tilled (or paved) isn't a successful home site for them. Others use small diameter cavities in wood or other materials. Specific sizes attract specific species. So brushy areas, woods may be important for those species.

I'm often asked if wasps and flies help pollinate fruit crops. Not really. Theoretically they might occasionally move a few grains of pollen, but they lack the branched hairs that bees have.

## Traps To Monitor Pests

### Tarnished Plant Bug traps (white sticky cardboard rectangles)

Great Lakes IPM is the only supplier that I can find that offers TPB traps.

The mailing address is:

10220 Church Rd, NE  
Vestaburg, MI 48891

Other contact information:

Phone: 1-800-235-0285, FAX: 1-989-268-5311, Email: [glipm@nethawk.com](mailto:glipm@nethawk.com)

They also have a website: [www.greatlakesipm.com](http://www.greatlakesipm.com). They have lots of other traps & supplies, too.

### Apple Blotch Leafminer/STLM traps

Great Lakes IPM is the only supplier I can find. See contact information above.

### Apple Maggot Traps

Great Lakes IPM is one source. Gempler's is another.

The mailing address is:

P.O. Box 44993  
Madison, WI 53744-4993

Other contact information:

Phone: 1-800-382-8473, FAX: 1-608-662-3360, Website: <http://www.gemplers.com>

### Corn Earworm & Fall armyworm traps

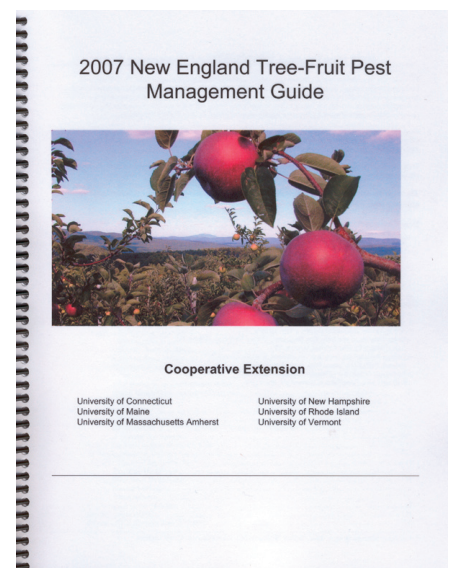
Both Great Lakes IPM and Gempler's have these traps

Both of these suppliers have other traps for codling moth, corn rootworms, varroa mite, greenhouse pests, also sticking agent, insect nets, magnifiers and more.

## 2008 New England Tree Fruit Guide

Last year, we tried something new. We worked with colleagues at Cornell to put out a New England version of their tree fruit guide, instead of revising our New England Apple Pest Management Guide. There were challenges in getting this task done, but the process is going on again. There should be a 2008 version ready soon. We don't know about the final cost yet, but I'll inform you as soon as I have details. Last year, they cost \$35 each (244 pages).

This year, we have secured another IPM grant from NH Dept of Agriculture, Food & Markets - Division of Pesticide Control. As part of the details, the grant will purchase copies for the NH Fruit Growers Association. The first 50 NHFGA members that register to attend the annual meeting will be receiving a copy of the soon to be released (tentatively set for April 1, 2008) "**2008 New England Tree Fruit Pest Management Guide**" (one per member orchard) at a later date. By the way, the secretary of the NH Fruit Growers Association is Katy Surowiec, 286-4069.



## Some Upcoming Twilight Meetings

*Wed. April 16, 2008. 5:30 - 7:30 pm. Joint MA/NH/Vermont Tree Fruit Meeting* at Alyson's Orchard, Walpole, NH. Hosts: Owner, Robert Jasse and Orchard Manager, Homer Dunn. Speakers: UMass Extension, UVermont Extension and UNH CE.

*Wed May 21, 2008. 5:30 - 8:00 pm. Joint MA/NH Tree Fruit Meeting* at Kimball Fruit Farm, Hollis, NH & Peperell, MA. Host: Carl Hills. Since the University of Massachusetts Cooperative Extension is sponsoring this twilight meeting (also located mostly in Mass), there is a \$10.00 per person registration fee (\$20.00 maximum/orchard), pay at the meeting. Speakers: UMass Extension and UNH CE.

*Wed. June 11, 2008. 5:30 - 8:00 p.m. NH Tree Fruit Twilight/Small Fruit meeting* at Butternut Farm, Mead-erboro Rd, Farmington, NH. Hosts: Giff and Mae Burnap.

*Wed. July 9, 2008. 5:30 - 8:00 p.m. Tree Fruit Twilight Meeting.* This meeting was scheduled in response to a request made by Tracy Leskey. Dr. Leskey will have research projects going on at both Poverty Lane Orchard (West Lebanon), and Apple Hill Farm (Concord). We will be finalizing which site for the meeting later. Speakers: Dr. Tracy Leskey, Research Entomologist at the USDA-ARS Appalachian Fruit Research Station in Kearneysville, WV and Dr. Starker Wright, Support Scientist at the USDA-ARS Appalachian Fruit Research Station in Kearneysville, WV.

## Fruit Pest Update Telephone

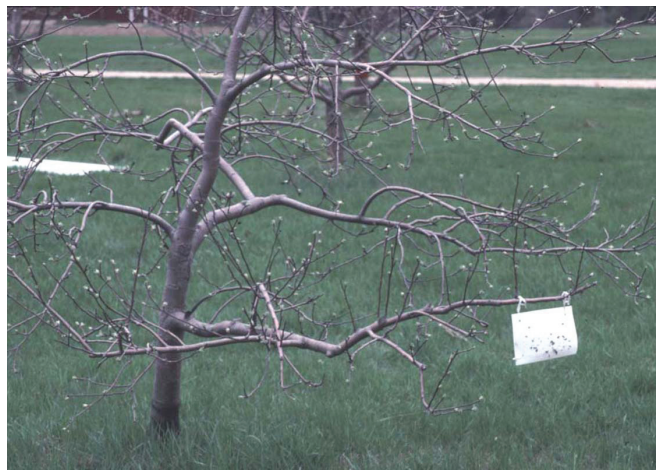
I started this in 1980. The telephone number is still 862-3763. I'll plan on recording a new message every week, starting Tuesday April 1st and running until early September. As usual, this will cover FRUIT pest management and related upcoming events. Messages will usually be 3 minutes long. It runs continuously, so you can call at a time of day when the rates are lowest for you.

## Reminder On Status of Guthion for Apple Pests

The Food Quality Protection Act required that "old" pesticides used in food production be re-evaluated. For guthion, that review has resulted in an increase of the re-entry interval to 14 days, increase in the pre-harvest interval for pick-your-own orchards to 30 days, and stopping all use on apples in 2012. I just thought you'd want to keep this in mind.

## Traps to Monitor TPB in Apples Go Up at Silver Tip

The white sticky rectangle traps we use to monitor tarnished plant bugs in apples should be hung out at silver tip stage. They are helpful because TPB populations vary dramatically from orchard to orchard. Hang them towards the tip of a branch, at knee height, over a grassy part of the orchard floor. I tend to place them towards the perimeter of the orchard, unless there's good TPB overwintering habitat inside the orchard. Blocks close to alfalfa fields or large fallow fields should get much more TPB pressure than those surrounded by woods. By checking them weekly, and writing down the numbers of TPB's caught, we can tell which blocks need treatment, and which ones don't. In the next issue, I'll plan on putting a photo of TPB's on a trap, and discuss thresholds.



## Eastern Tent Caterpillar Egg Masses

Tent caterpillars are rarely a problem on conventionally managed orchards, but organic growers and backyard growers regularly have problems. One method to nip things in the bud (so to speak) is to recognize what the egg masses look like, and remove them when pruning. The shiny egg masses encircle the twigs, and typically the moths choose to lay masses on twigs that are almost pencil diameter. Here's a photo to help you out. Now, keep your eyes open when you are pruning! They are on apple, crabapple, plus cherries (including our native cherries, like black cherry, choke cherry, and others).



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Extension Specialist  
Integrated Pest Management