Current DD accumulations

<table>
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<tr>
<th>Event Description</th>
<th>43°F</th>
<th>50°F</th>
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<tbody>
<tr>
<td>(Geneva 1/1-7/18):</td>
<td>2015</td>
<td>1372</td>
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<tr>
<td>(Geneva 1/1-7/18/2010):</td>
<td>2188</td>
<td>1502</td>
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<td>(Geneva &quot;Normal&quot;):</td>
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<td>1217</td>
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<td>(Geneva 1/1-7/25 Predicted):</td>
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<td>1572</td>
</tr>
<tr>
<td>(Highland 1/1-7/18):</td>
<td>2137</td>
<td>1439</td>
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</table>

Coming Events – Ranges (Normal +/- Std Dev):

American plum borer
   2nd flight peak ..................................1976-2544  1328-1748

Apple maggot
   1st oviposition punctures ..........1605-2157  1144-1544
   1st flight peak ......2104-2542  1413-1743

Codling moth 2nd flight begins...1569-2259  1023-1515
   2nd flight peak......1931-2735  1278-1892

Comstock mealybug
   1st flight subsides.........................1818-2132  1216-1418

Lesser appleworm
   2nd flight begins............................1418-2002  918-1326
Obliquebanded leafroller
  1st flight subsides..................1612-1952  1048-1302
Oriental fruit moth
  2nd flight peak .....................1455-1995  924-1342
Oriental fruit moth
  2nd flight subsides ..............2049-2515  1358-1752
Redbanded leafroller
  2nd flight peak .....................1546-1978  991-1323
Redbanded leafroller
  2nd flight subsides ..............2192-2668  1482-1830
San Jose scale 2nd flight begins..1602-1948  1037-1307
San Jose scale 2nd flight peak.....2115-2503  1422-1752
STLM 2nd gen.
  tissue-feeders present ............1378-2035  913-1182
STLM 2nd flight subsides ............1977-2371  1299-1637
# TRAP CATCHES (Number/trap/day)

<table>
<thead>
<tr>
<th>Location</th>
<th>Date 1</th>
<th>Date 2</th>
<th>Date 3</th>
<th>Date 4</th>
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</thead>
<tbody>
<tr>
<td><strong>Geneva</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Redbanded Leafroller</td>
<td>0.1</td>
<td>-</td>
<td>0.0</td>
<td>0.6*</td>
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<tr>
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<td>17.8</td>
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<tr>
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<td>-</td>
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<td>0.1</td>
<td>1.3</td>
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<tr>
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<td>0.0</td>
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<tr>
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<td>0.1</td>
<td>0.3</td>
<td>0.0</td>
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<tr>
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<td>0.5*</td>
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<table>
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<tr>
<th><strong>Sodus Center (Wayne Co.)</strong></th>
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<th>Date 2</th>
<th>Date 3</th>
<th>Date 4</th>
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</thead>
<tbody>
<tr>
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<td>2.5</td>
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<td>5.5</td>
<td>1.5</td>
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<tr>
<td>Lesser Appleworm</td>
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<td>0.0</td>
<td>0.0</td>
<td>0.5</td>
</tr>
<tr>
<td>Codling Moth</td>
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<td>1.0</td>
<td>1.0</td>
<td>0.5</td>
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</tbody>
</table>

<table>
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<tr>
<th><strong>Highland (Peter Jentsch)</strong></th>
<th>Date 1</th>
<th>Date 2</th>
<th>Date 3</th>
<th>Date 4</th>
</tr>
</thead>
<tbody>
<tr>
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<td>3.0</td>
<td>1.9</td>
<td>0.9</td>
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<tr>
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<td>63.2</td>
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<td>0.1</td>
<td>0.5</td>
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<tr>
<td>Codling Moth</td>
<td>1.9</td>
<td>1.5</td>
<td>1.1</td>
<td>1.9</td>
</tr>
<tr>
<td>Obliquebanded Leafroller</td>
<td>6.9</td>
<td>4.2</td>
<td>1.0</td>
<td>0.5</td>
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<tr>
<td>Apple Maggot</td>
<td>0.1*</td>
<td>0.1</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

* = 1st catch
PEST FOCUS


WNY: Obliquedbanded Leafroller DD43 since biofix (June 7): Sodus, 1032; Williamson, 1080; Farmington, 1057. Albion (June 9 biofix): 1022. Appleton North (June 14 biofix): 779 [estimated 90% egg hatch – 810 DD].

Highland: Very high Fabraea observed on Bosc pear with significant leaf drop occurring. Obliquebanded leafroller DD43 since biofix (June 1): 1176.

ORCHARD RADAR DIGEST

[Box Text: HOT WINGS]

[M = Marlboro, Ulster Co.; G = Geneva]

Roundheaded Appletree Borer
   Peak RAB hatch: July 2 to July 20 [M]/July 10 to 29 [G].

Codling Moth
   CM development as of July 18:: 2nd gen adult emergence at 39% [M]/11% [G] and 2nd gen egg hatch at 8% [M]/1% [G].
2nd generation 7% CM egg hatch: July 17 [M]/July 25 [G] = target date for first spray where multiple sprays needed to control 2nd generation CM.
2nd generation 30% egg hatch: July 24 [M] = target date where one spray needed to control 2nd generation CM.

Oriental Fruit Moth
2nd generation – second treatent date, if needed: July 18 [G].

Redbanded Leafroller
2nd RBLR peak catch and approximate start of egg hatch: July 4 [M]/July 13 [G].

Spotted Tentiform Leafminer
Optimum first sample date for 2nd generation STLM sap-feeding mines: July 15 [G].

White Apple Leafhopper
2nd generation WALH found on apple foliage: July 25 [M].

[Section: INSECTS]

FEEL THE BURN
(Art Agnello, Entomology, Geneva)
[Box Text: WORKING (THE BUGS) OUT]
We're arguably past the midpoint of the summer season now, especially if you follow the orchard calendar rather than the paper one hanging on the wall, so it's only natural to begin paying less attention to the arthropod pests that have either been with us for too long already or may yet make an appearance, but there are still a few to be aware of, including some that have been covered in previous issues.

**European Red Mite**

There have already been a few sites identified with some growing red mite populations in this warmer-than-normal period, perhaps even with some foliar bronzing damage showing up, and we're not done yet. Keep an eye on your foliar populations, using the 5.0 motiles-per-leaf threshold that we recommend during July (see p. 72 in the Recommends), in case there is a need for any mid-season miticide applications; Acramite, Kanemite, Nexter, Portal and Zeal are all potential choices for later-season infestations. Twospotted spider mite can also show up at this time of year, and has a tendency to increase its numbers in response to high temperatures more rapidly than ERM.

**Apple Maggot**
The next two weeks traditionally see the heaviest flight of this pest in commercial orchards, although the drier-than-normal stretch we have been experiencing may delay or impede successful adult emergence of adults from their developmental sites in the soil. Nonetheless, diligent attention to either your protective sprays (in blocks that are perennially high-population areas) or monitoring traps (in blocks that are hard to predict) would be advised.

**Comstock Mealybug**

In pears especially, this begins the period of greatest migration of 2nd generation nymphs into the fruit calyx, where they will be concealed until detected as unwelcome surprises at packinghouse inspections postharvest. Blocks with mealybug "issues" should receive a protective spray of Actara, Assail, Centaur, Diazinon, Movento, Portal, or Provado; Calypso applied for internal worms should also be effective. In apples, infestations tend to result in blooms of sooty mold, particularly over the bottom half of fruits; choices here are restricted to Assail, Centaur, Movento, Portal, plus whatever incidental control you might obtain from Calypso sprays for internal leps.

**Woolly Apple Aphid**
If you failed to prevent their migration from the lower trunk areas in June, there could be aerial colonies evident in canopies now. This is a difficult pest to control completely, but now will be better than later in the month. The best material we have available (still) is Diazinon; Movento and Thionex are other, possibly less effective, options. Assail and Beleaf are also labeled for this pest, but we have no efficacy data on these particular products. Alternatively, if you're not on a captan program, a summer horticultural mineral oil application, using as much water as you can manage, has been shown to be effective.

**Oriental Fruit Moth & Codling Moth**

The earliest feeding injury from the second generation larvae should be starting to become noticeable in problem blocks (apples and peaches). By next week, most western NY sites will reach the 1260 DD mark corresponding to the preferred spray window for contacting the first 20% or so of the hatching second brood CM larvae. And OFM 2nd brood emergence is under way, so an application against these larvae is advised in problem sites.

**Japanese Beetle**
These have become stalwart interlopers until mid-August, so it's mainly a matter of keeping a diligent eye on your trees to try to stem the amount of damage they can do. In stone fruits, protective insecticides include: Assail, Leverage, Provado, Sevin, and Voliam Xpress; in apples: Assail, Calypso, Sevin, and Voliam Xpress.

[Section: CHEM NEWS]

NEW 2(ee) ACTARA REGISTRATION

The NYSDEC has recently approved a 2(ee) recommendation for Actara insecticide (EPA Reg. No. 100-938) against Brown Marmorated Stink Bug for use on pome fruit and bushberries. Actara is a restricted-use pesticide in NYS and is not for sale or use on Long Island.

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