

# 2016 Fruit Report for New Hampshire

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## Weather and crop situation:

This winter we had somewhat good snow cover. Snow came a little late and melted a little early. Winter temperatures were not particularly cold, except for February 14 & 15 sub-zero spell when we lost most of the peach crop. During spring we had 2 periods (one about April 1<sup>st</sup>) when temperatures had significantly warmed, then suddenly dropped very low. We lost fruit in both events, especially peaches, some apples, and some blueberries. Spring had some overcast periods, but was relatively dry. Drought continued in summer, especially in Rockingham & eastern Hillsborough counties, and it was quite warm. Hail: relatively little. The apple bloom was significantly reduced by spring frosts, and the weakened buds & weather made thinning decisions challenging. The crop was relatively light, and fruit size for some (Macoun for example) was very small. Honeycrisp and Cortland both had good fruit size. Bitter pit showed up on Honeycrisp at many sites. The incidence of bitter pit was low, given how dry it was. We still think Bill Lord's teaching about paying attention to calcium chloride sprays and boron levels has kept this low, even after his retirement. The peach crop was a total loss, due to winter injury and spring bud freezing. The cherry crop was modest in size. The blueberry crop was reduced a bit in some areas, and was terrific in many wild sites. Strawberries did well, and ripened when there was good weather for pick-your-own customers.

## Fruit Pest Situation this Year

The incidence of pest injury on apples at harvest time was 5.85% in 2016. That's above the 25 year average of 5.29%, but still well below the pre-IPM incidence of 10 to 12%. The incidence of **apple scab** [caused by *Venturia inaequalis*] on fruit was 0.80% this year, about half the 25 year average of 1.68%. The incidence of **bitter rot**, **calyx end rot**, **flyspeck** and **sooty blotch** were all below the 25-year average.

**Fireblight** [caused by *Erwinia amylovora*] was relatively common in apple trees in Rockingham, Hillsborough and Strafford Counties, and there were some severe cases in the Lakes region and Grafton County. Quan Zeng (CT Agr Expt Station) isolated and analyzed bacteria from 8 of the 10 New Hampshire samples we sent him. He found that all isolates were susceptible to streptomycin.

**Mummyberry** [caused by *Monilinia vaccinii-corymbosi*] was relatively common in some blueberry sites (localized problems) this year.

Insect injury on apples was higher than usual. Injury from **plum curculio** [*Conotrachelus nenuphar*] was 0.89% this year, about 50% higher than the 25 year average.

Caterpillars of **green pug** [*Pasiphila rectangulata*] were especially abundant at one small Strafford county orchard this year.

In 2015, the incidence of **San Jose scales** [*Quadraspidiotus perniciosus* (Comstock)] on apples at harvest was 1.33%...the highest in Alan's 36 years of records. This year the figure dropped greatly, to 0.2%.

**Spotted wing drosophila** (*Drosophila suzukii*) populations were roughly the same as last year. We switched to new Trece lures and traps, and used vinegar as a drowning solution. The first adult trapped

was July 6<sup>th</sup> (usual time). The buildup roughly followed what we expected, with a major jump in numbers about September 5<sup>th</sup> to 10<sup>th</sup>. The cooler regions (lakes region, Sullivan county, and North country) had much lower SWD populations than the southeast, but showed higher counts than in previous years, after September 5<sup>th</sup>.

**Japanese Beetle** [*Popillia japonica*]: adults appeared slightly later than usual, and in lower numbers than usual, like last year.

#### **New/Unusual:**

The incidence of damage from **European apple sawfly** [*Hoplocampa testudinea*] was 1.82%, the highest by far in Alan's 36 years of evaluations. Many growers delayed their thinning spray (often the insecticide sevin) until they could consider the tricky thinning situation. This may have contributed to the high incidence. Also, Alan has emphasized that curculio control is not needed until fruit reach 6mm size. If a significant number of growers delayed their curculio spray, that would allow the damage we saw. We do not monitor EAS numbers with traps, so we do not know if the EAS population was higher than usual this year.

**Codling moth** [*Cydia pomonella*] surprised us by damaging 16% of the fruit at one orchard. There were higher than usual levels at several sites. Much of the injury was on the exposed sides of the fruit, something we rarely see. It was so unusual that initially Alan identified it as oblique-banded leafroller damage, but rearing the larvae confirmed the correct identity. OBLR injury is still rare for us in New Hampshire. The CM injury incidence this year (0.86%) was 20 times higher than the 10 year average (2006 to 15).

Two growers in Merrimack County reported that **honey bees** were feeding on their blueberry fruit, about August 20<sup>th</sup>. We did not hear soon enough to confirm or correct the reports, but did confirm the phenomenon in another blueberry patch in Londonderry on September 7<sup>th</sup>. It was still very dry.

Why are **Fall webworm** [*Hyphantria cunea*] numbers so very low this year? Usually we have significant numbers of webs in apple orchards and blueberry plantings, especially along wooded edges.

#### **Fruit IPM publications finished this year:**

Eaton, A. T. **Raspberry Cane Maggot**. 3pp. Posted in March 2016.  
[http://extension.unh.edu/resources/files/Resource005935\\_Rep8322.pdf](http://extension.unh.edu/resources/files/Resource005935_Rep8322.pdf)

Charles Vincent published the paper on establishment of *Lathrolestes ensator* (Eur apple sawfly parasite): Vincent, C., M. Appleby, A. Eaton & J. Lasnier 2016. Dissemination of *Lathrolestes ensator* (Ichneumonidae), a larval parasite of the European Apple Sawfly, *Hoplocampa testudinea* (Tenthredinidae), in Eastern North America. *Biological Control* 100:1-6.

Some time this winter, Alan's publication describing injuries to apples should appear at the IPM page of our website (under research reports) <https://extension.unh.edu/Integrated-Pest-Management-Impact-Reports> With its 46 color photos, it is 12 pages long.