

PENNSYLVANIA'S CHRISTMAS TREE SCOUTING REPORT

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Weekly newsletter compiled by Sarah Pickel, PA
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This week's report includes scouting information from: Jim Fogarty (Halabura Tree Farm), Karen Najda (PDA), Susan Newhart (Arcadia Trees), Linda Signarovitz (scouting consultant), Brian Schildt (PDA), and Cathy Thomas (PDA).

Growing Degree Day totals as of Tuesday, June 15th, were 1088.5 in Elizabethtown, Lancaster County, 1051.5 in New Cumberland, Cumberland County, and 851.5 in New Ringgold, Schuylkill County. As of Monday, June 14th, there were 599 GDD in Montrose, Susquehanna County. Regional GDD totals collected last Wednesday, June 9th in Northwest PA were as follows: 681 in Clarion County, 639 in Crawford County, 709 in the Millcreek area of Erie County and 796 in Mercer County. [Northwest data courtesy of Ruth Benner, Extension Educator – Penn State Cooperative Extension, Erie County.]

This week in Dauphin, Schuylkill and York Counties, increased numbers of Cryptomeria scale crawlers emerged and were beginning to settle on true firs. Growers should look on the undersides of lower branches



Figure 1: Top to bottom:
Active crawler, settled crawler
and adult scale covering [S.
Pickel, PDA]

with needles showing yellow spotting to find scale crawlers. Viewed through a hand lens, crawlers will be much smaller than the adult scale coverings and will be oval shaped and bright yellow. [Fig. 1] As the crawlers settle, they will become more rounded and will develop a thin white ring around their bodies, which is the start of the scale covering. The crawler

emergence typically begins within the range of 600 – 800 GDD, so growers in the northern counties of Pennsylvania could still be waiting to see crawlers. Crawler emergence can continue over a period of 6 weeks, but the peak emergence is typically 2 -3 weeks long. For this reason, 2-3 insecticide sprays are

recommended with an interval of a week to 10 days between each spray, or 3-4 applications of an ultra-fine horticultural oil with a week interval between each application. The *2010 Insecticides and Miticides Update for PA Christmas Tree Pests* can be found at the site: <http://ento.psu.edu/extension/christmas-trees/scouting-reports>.

Striped pine scale crawlers continued to emerge on Scotch pine in Lancaster County this week, to the point that only a few crawlers remained under the adult female scale coverings. Feeding from this scale pest will weaken the tree [Fig. 2], but the most noticeable problem brought about by striped pine scale is the black sooty mold that develops on the scale excretions.



Figure 2: Striped pine scale
on Scotch pine [B. Schildt,
PSU]

To control this pest, may 1 – 2 insecticide applications when the crawlers are present.

Also continuing to emerge this week on true firs and Douglas-fir (less common) are crawlers of elongate hemlock scale in Adams, Dauphin, Schuylkill and York Counties. This emergence will be staggered over approximately 12 weeks. For this reason, insecticide applications should continue over this 12 week period, either every 3 weeks (4 applications) or every 4 weeks (3 applications).

Growers should be monitoring trees (mainly true firs and spruce) for both Eriophyid and Spruce spider mites. These mites continue to be active in Schuylkill and York Counties this week. These populations can increase rapidly and cause noticeable damage to trees. Look for spider mite damage on branches near the trunk of the tree. There will be yellowing or browning on the needles close to the twigs. For Eriophyid mites, or rust mites, damaged branches will have a bronzed or faded appearance. Application of a registered miticide or insecticide may be necessary to prevent further damage to trees.



Figure 3: Wilting damage from White pine weevil [R. Lehman, PDA]

Last week in York County, damage caused by white pine weevil was evident. This is the time in the season when wilted leaders are clearly visible. [Fig. 3] Eggs that were laid inside the bark of leaders by adults back in late March or early April had matured in to larvae, and have been feeding on the trees' vascular tissue for several months. Growers can prevent the emergence of adult weevils by cutting out the wilted leaders and

removing them from the fields. It is important to cut the leaders below the point where the larvae were feeding, so growers should cut down until they reach healthy looking wood.

Damage from another wood tunneling pest, Zimmerman Pine Moth, may be evident at this time. This pest of pines was found in Douglas-fir last week. Zimmerman pine moth larvae tunnel under the bark of host trees, commonly near the crotch of a branch. [Fig. 4] This tunneling weakens the branch joint and may cause branch or leader



Figure 4: Zimmerman pine larva inside trunk [R. Lehman, PDA]

browning and eventually breakage. [Fig. 5] In pines, clumps of white pitch will be found at the tunneling point of the trees. On the Douglas-fir trees, the sap was less



Figure 5: Broken branch caused by Zimmerman pine moth damage [MN Dept. of Natural Resources, Bugwood.org]

noticeable. The larvae have a dark head and may be green, pink or light brown in color. At this point in the season, they are tunneling in the wood. They will pupate and then emerge as adult moths in late July – early August. Females will lay eggs in late August which will hatch into larvae which

overwinter on the bark within a silk covering. The time to apply insecticide controls is a short window in early spring, after larvae leave their overwintering silk, but before they tunnel into the bark.

The next scouting report will be available June 23, 2010.