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**MAINE REPORT TO THE EASTERN PLANT BOARD - April 2005  
EGG HARBOR, NEW JERSEY**

**SUMMARY OF THE 2004 ACTIVITIES**

**Nursery and Phytosanitary Inspection** – In 2004, 1292 inspections were made at nurseries, greenhouses and plant dealers. A variety of insects and diseases were found but were minor or common. Our first case of daylily rust (*Puccinia hemerocallidus*) did show up at a Bangor garden center and the infected plants were destroyed. Bacterial blight of geraniums (*Xanthomonas sp*) was detected at 5 businesses last spring from one source. 982 lots of plant materials were inspected and certified for shipment using phytosanitary certificate forms. 327 federal certificates were for seed and other nursery/forest materials and 655 were for potatoes, feed barley and wheat.

**CAPS Surveys** – The following CAPS surveys were conducted in 2004 and yielded negative results. These included surveys for; exotic bark beetles, leek moth, swede midge, soybean rust, soybean pod borer, chrysanthemum white rust, sudden oak death and emerald ash borer. Soybean aphid was detected in Maine for the first time. Another site for giant hogweed was added to the state records.

**Apiary Inspection** - In 2004, 379 beekeepers registered 6,296 hives. Approximately, 45,600 hives managed by 33 migratory commercial beekeepers entered Maine for blueberry, apple and cranberry pollination. Hives were also used to pollinate canola, small fruits, squash and buckwheat. Hives entered Maine under certification from AR, FL, GA, LA, SC and TX. In addition, 480 colonies were shipped to Maine from New Mexico under AR certificate and 5,000 colonies from Kern Co, CA without certification because these states and Kern Co. terminated apiary inspection services. In 2004, 13,779 hives were issued ME health certificates for interstate movement to MA, RI, FL and GA for cranberry pollination, honey production and wintering. The remaining imported hives moved to honey production areas after blueberry pollination under AR, FL and TX certification.

Throughout the year 6,011 colonies were surveyed at random with 2,234 opened and inspected for disease and parasites. American foulbrood (AFB) was found in 19 (0.8%) of inspected hives. The low incidence of AFB is primarily due to the use of Tylan (tylosin) antibiotic in the majority of commercial beekeeping operations. European foulbrood (EFB) was found in 10 hives (0.4%) and sacbrood virus in 6 colonies (0.2%). The emergence and spread of Varroa mites with resistance to pesticides has interfered with commercial beekeeper's ability to maintain hive numbers. Inspections identified additional operations with Varroa mite strains highly resistant to fluvalinate, coumaphos and amitraz. In 2003, 164 colonies were surveyed for Varroa via the ether roll method with 91 found positive. Many additional hives were found to be infested via

drone brood removal, alcohol wash, bottom board detection and during resistance testing (Pettis method).

On April 13, 2004 the Department was granted a repeat of Section 18 Emergency Exemption for Api Life Var (thymol, menthol, eucalyptol, camphor), Chemicals LAIF, Italy for the suppression of Varroa mite. The revised label reduced the pre-harvest interval from 150 to 30 days and now allows a spring treatment. In addition, the Section 18 Emergency Exemption was repeated for Checkmite (coumaphos) in 2004.

90 hives were sampled from 9 migratory beekeeping operations and tested Africanization via the first step of the FABIS technique (Fast Africanized Bee Identification System) and for honey bee tracheal mite (*Acarapis woodi*) infestation (33 bees examined/hive).

Throughout the year, the state apiarist presented workshops on honey bee management and also responded to nuisance complaints involving bees and wasps.

**Forest Insect and Disease Conditions** (Courtesy of the Maine Forest Service, Insect and Disease Management Division, Maine Department of Conservation).

**Balsam Woolly Adelgid (*Adelges piceae*)** – Balsam woolly adelgid populations continued to be a very low levels in 2004 apparently as a result of winter mortality. While mortality from past years is striking, the consistent rainfall of 2004 coupled with low population levels of the adelgid allowed a number of the light to moderately damaged trees to recover. Mortality of heavily damaged fir continues to occur but it becomes less obvious as old stands are salvaged or fall to the ground. Patches, two to ten acres in size, of dead fir will remain a common sight in eastern Maine for several more years. Firs grown for Christmas production should be watched closely for signs of this pest.

**Beech Bark Disease(*Cryptococcus fagisuga* and *Nectria coccinea* var. *faginata*)** – This disease, which was introduced to Maine in the early 1930's, continues to kill or reduce the quality of beech stems statewide. But beech bark disease does not threaten to eliminate beech from the Maine forest because some trees are resistant, and even susceptible trees sprout profusely from roots when trees are damaged, killed or harvested.

Infected trees exhibit rough patches of dead bark which may contain small, reddish fruiting bodies of the causal fungus. Scattered through most stands are a few smooth barked, resistant trees. Landowners managing for beech may wish to leave these resistant stems during thinning or selective harvesting operations, while poisoning cut stumps of susceptible trees to prevent root sprouting.

Losses attributable to beech bark disease are extensive but assessment of the damage is complicated by the effects of drought, oystershell scale, late spring frosts, and various hardwood defoliators. MFS and University of Maine researchers are currently initiating a forest health evaluation of the role of BBD and other stress agents/events in elevated levels of beech mortality in northern and eastern Maine.

**Browntail Moth (*Euproctis chrysorrhoea*)** – The Casco Bay region northeast to the Penobscot river continued to support moderate to high population levels of browntail in 2004. Low winter temperatures slowed expansion to inland areas but coastal lands remain heavily infested. Webs collected to assess winter mortality showed that webs located five miles or more

from the coast line exhibited 88% larval mortality while webs adjacent to the ocean had little if any winter losses.

Aerial control projects against the browntail moth were not conducted by municipalities in 2004 due to mixed landowner acceptance in prior projects. Many lots were treated with ground-based applications using various pyrethroids in private projects.

Survey of over wintering webs in the fall of 2004, indicate a continued problem with this pest in 2005. Initial data indicate the 2005 infestation will be similar in acreage to 2004, but will not be as intense in many coastal communities.

**European Larch Canker (*Lachnellula willkommii*)** – European larch canker is a fungal disease which originated in Europe and was first found on native larch (tamarack) in southeastern Maine in 1981. Information gathered from existing cankers indicates this disease has been present in Maine since at least the 1960's and perhaps much longer. This disease may infect any species of the genus *Larix* or *Pseudolarix*. Since larch canker has the potential for causing serious damage to both native larch stands and reforestation projects utilizing non-native larches in Maine and elsewhere, the disease is under state and federal quarantine. The trend for this disease is static; no evidence of spread from infested areas to non-infested areas was noted in 2004.

**Gypsy Moth (*Lymantria dispar*)** – No defoliation of hardwoods resulting from gypsy moth larval feeding was recorded in 2004. *E. maimaiga*, virus and parasites continued to keep the gypsy moth population at low levels through out southern Maine. The 2004 fall egg mass survey indicates that the population will remain at endemic levels in most locations next season.

**Hemlock Woolly Adelgid (*Adelges tsugae*)** – HWA was found for the first time in native hemlocks in Maine a year ago on Gerrish Island in Kittery Point where a low intensity population was confirmed to be established. Delimiting surveys conducted during 2004 have detected scattered light spot infestations over an area of 3500 acres in hemlock stands in Kittery and Kittery Point and York and on 2 abutting trees in a stand in the town of Wells. Detection surveys were performed in every town in York county to determine the presence of HWA. No new HWA infestations were found on hemlock nursery stock in Maine in 2004.

The Maine Forest Service implemented an integrated Slow-the-Spread (STS) management program to reduce the impact of currently established HWA populations and reduce the rate of natural and artificial spread. A total of 7500 *Sasajiscymnus tsugae* (Sasaji and McClure) were released by the Maine Forest Service on Gerrish Island during the late spring and early summer to establish this predator in a forested part of the island. In October the Maine Forest Service treated 9 sites in Kittery Point, York and Wells with Talstar plus horticultural oil to control HWA populations around residential and urban forest areas. In early 2005, the state HWA quarantine will be revised to include the several towns in York County, Maine as infested.

**Pine Shoot Beetle (*Tomicus piniperda*)** – Pine shoot beetle, *Tomicus piniperda* (PSB), is an introduced bark beetle which has been collected in Maine in Oxford and Franklin Counties during trapping surveys performed between 2000 and 2003 by the Maine Forest Service. Maine has both a state and federal PSB quarantine. Oxford and Franklin Counties are designated regulated counties. During 2004 trapping by the Maine Forest Service was only done at 9 mill yards and bark processing plants operating under compliance in the unregulated zone. The USDA APHIS PPQ trapped for PSB at 7 trap sites with red pine in Somerset and Penobscot Counties. No PSB adults were trapped in Maine in 2004.

**White Pine Blister Rust (caused by *Cronartium ribicola*)** – Due to personnel reductions and other work priorities, especially surveys for hemlock woolly adelgid and sudden oak death, no ribes eradication was practiced in 2004 for the first time since 1917. This disease remains static at moderate levels, but is common throughout the state.

**Pesticide Use and Applicator Licensing** - The Board of Pesticides Control (BPC) licenses applicators (Private and Commercial) and dealers (limited/restricted and general use products). As of March 2005, there are 1420 active private licensees, 1422 active commercial licensees, 58 limited/restricted use dealers, and 785 general use dealers. During 2004, the Board proposed a rule to require notification for indoor pesticide applications in public areas.