INC Parks Committee Meeting

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EAB and IPS update

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City and County of Denver

EMERALD ASH BORER:

The Colorado Department of Agriculture (CDA) and USDA Animal and Plant Health Inspection Service are now preparing to repeal it at the end of the year.

The repeal is largely due to the insect's ability to naturally spread to new areas. CDA is also removing the quarantine to allow already-affected communities more options for the disposal of removed trees, and because other means are now in place to help slow the spread of EAB in Colorado.

These include the presence of chemically treated trees in affected communities, and bio controls that prey on EAB now having established populations in Boulder.

QUICK REVIEW:

*First detected in 2002 in southeastern Michigan. Now. in 33 states.

*Ash trees may be infested for up to four years before there are visible signs of decline in the trees.

*EAB was first confirmed in Colorado in 2013, in the City of Boulder. Since then, the pest has been confirmed in several other municipalities in Boulder County within the quarantine, as well as in Broomfield in late August, and Westminster in September, and now Berthoud, Colorado in Larimer County.

*Denver Metro area there are an estimated 1.45 million ash trees, primarily on private property.

*Denver has 30,000+ ash trees along the public right of way; 4500 within parks and parkways.

*Adults can fly several miles if conditions are right, and they can/will reinvest the same tree from which they emerged.

SIGNS AND SYMPTOMS:

*Sparse leaves or branches in upper part of tree;
*D-shaped exit holes approximately 1/8 inch wide;
*new sprouts on the lower trunk or branches;
*vertical splits in the bark; winding,
*S-shaped tunnels under the bark;
*increased woodpecker activity.

WHAT HAS DENVER DONE THUS FAR:

*Began the BE A SMART ASH PROGRAM – robust educational and planting program

*Began treating ash trees 12" dbh or greater within the public-right-of-way. This program is based on a three-year cycle, treating approximately 8000 trees since 2016. 27% of the population of ash

*Forestry Field Operations has begun and continues with a phloem reduction (removal) program of nearly thousand ash trees that were either dead, or in poor and very poor condition.

*Forestry Field Operations also treats slightly over 2000 ash trees on a four-year cycle. 39% of the total Parks and Parkways ash population.

WHAT WE ARE THINKING MOVING FORWARD:

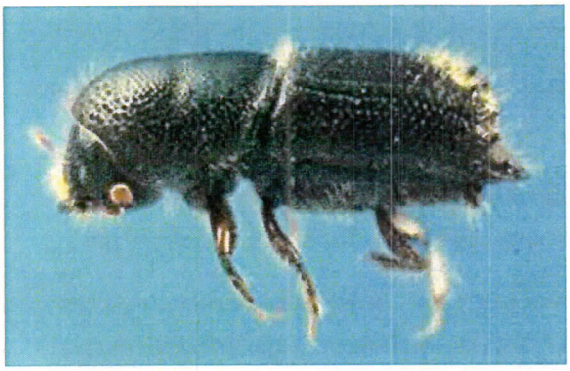
*Continue the BASA educational program, shifting to focus on what private landowners can do to share in the preservation, and renewal of Denver's urban forest.

*Focused, proactive phloem reduction program of ash trees (dead, very poor and poor) in the public rights of way, with replacement provided by the program.

Also, the diameter of the trees in the program will slightly increase to 1.75" instead of 1.25 – 1.5". This may lower the number of trees planted by the program.

*Quick phloem reduction of affected trees, within the parks system, along the public-right-of-way and on private property, not unlike the strategy used for Dutch elm disease in the city in the 1980's – 2000's.

*Identify marshalling sites for wood and get it into the hands of crafts folk who can repurpose it.



SPRUCE IPS

Uptick of Spruce Ips in Northern Colorado (Longmont and Fort Collins), and as we know Denver.

Last month's removal of 18 trees in central Denver not isolated; had incidents throughout the city.

Even trees that have been treated consistently for a few years, faded and crashed.

Currently, no answer to the uptick along the Front Range...possibly more generations per year, timing of treatment, lack of snow cover in 2019, or even the occurrence of statewide drought in 2018??

Ips problems are often an issue for a few years, then lessen naturally to non-threatening levels. This is normal in Colorado, cyclic uptick.

No chemical treatment exists for trees already infested.

Normally, these beetles limit their attacks to trees that are in decline or other stresses. Yet, under widespread conditions which allow improved survival and large population build-ups, Ips beetles are a considerable threat to living trees.

AT RISK

Trees at risk of Ips attack include newly transplanted trees; trees suffering root injuries from construction, and other stresses (drought, over watering).

Trees surrounded by large breeding populations of Ips beetles. these trees can benefit from preventive insecticide applications.

Insecticides are used as drenching preventive sprays on the trunks and larger branches. These insecticides must be applied prior to adult beetle infestation; however, timing can be difficult to determine since Ips beetles can have multiple, overlapping generations and life cycles.

SYMPTOMS

Affected parts of the tree discolor ("fade") and die. These symptoms may be limited to parts of the tree, such as a single branch or the top.

Infestation by Ips beetles does not necessarily mean the whole tree will die, but over time, attacks may progress as later generations "fill" the tree and then ultimately the host can die.

Woodpeckers are common predators of Ips beetles. Woodpeckers often remove the tree bark to obtain this food source. This habit results in ragged holes or patches of missing bark on the tree.

MANAGEMENT

Promote vigorous tree growth.

Properly siting trees in landscape plantings is important to allow optimal growing conditions as the tree matures.

Root injuries caused by mechanical damage, compaction, or disease should be avoided.

Freshly-cut material that results from pruning or thinning practices (called "slash") should be removed from the vicinity of valuable trees.

Ips larvae will not survive standard chipping or debarking treatments.