CITY OF WHITEWATER, WISCONSIN

EMERALD ASH BORER ACTION PLAN FOR PRESERVING SELECTED ASH TREES

SUMMARY INTRODUCTION: This action plan details the steps to be implemented by the City Forester to preserve selected public ash trees in our parks and along city streets by treating them with a systemic insecticide.

The unfortunate truth is that ash trees which are in an area where EAB has been detected and are not treated with a systemic insecticide will die from Emerald Ash Borer (EAB) larvae. All ash trees which are not selected to be saved should be cut down in order to reduce the intensity of the beetle invasion upon those trees we are trying to preserve.

DETECTION TREES OR TRAPS: The use of traps have been used by the Wisconsin Department of Agriculture, Trade and Consumer Protection. IN 2010 these purple color traps were hung randomly in ash trees in the City of Whitewater and within a 20-mile radius. This year of 2011, Traps have been located…to the west in the Lake Koshkonong. Next year federal funds may not be available for any traps. If the City Forester can purchase such traps, they can be placed in and around the City.

If man made traps are not available for sale or budget moneys are not available, the city forester will select "detection trees" within, the radius of the city. Trees shall be those already in decline for reasons other than EAB. The limbs and branches of these trees and other ash trees which need to be trimmed or taken down during the course of the year, starting in June of 2012, shall be looked at to determine if EAB is present. The bark shall be peeled off of sample branches and limbs to see if any tunneling has occurred. When beetles are detected anywhere within 15 miles of Whitewater, the city forester shall notify the Wis. DNR, the UFC, city staff and the community. Treatment of trees will begin the first week of June the following year.

Suspect larvae which are collected will be sent to the U. S. Department of Agriculture, APHIS lab in Brighton, Michigan for identification.

SELECT AND IDENTIFY ASH TREES TO BE PRESERVED: The City Forester shall select public trees to be treated/saved, marked with green ribbons. This will alert the community and will remind private land owners to select the trees they will be treating. Public trees not identified for treatment can be saved if anyone cares to donate $25.00/year for the city to treat them.

Public trees to be cut down shall be marked with black ribbons in order to highlight the EAB problem with the trees location also reported to the (UFC) Urban Forestry Commission.

As soon as EAB has been detected within fifteen miles of Whitewater, the city and private land owners should be encouraged to begin cutting down all ash trees which will not be preserved. Disposal of and use of the wood, prior to infection, will not be subject to the DNR restrictions which become effective once trees are infected.

Trees which are larger than 25 inches diameter at breast height (DBH) are difficult to protect because of their extensive mass of branches and leaves. Additional injections are often required, without consistent results. An experienced arborist should evaluate privately owned larger trees to determine the best approach.

Trees selected to be preserved should be healthy. Trees which have damaged bark due to storm damage, lawn equipment or construction machinery are probably not worth saving because their life span is already limited. Compacted soils and crushed roots from construction or regular vehicle traffic do not provide favorable conditions for a long lived tree.

Ash trees which are already infested with EAB have less chance of being saved than fully healthy trees. There is no possibility of saving an infected ash tree whose canopy is around 50% in decline.

TREATMENTS FOR EAB:

1. Biological controls are still in the process of being studied. The latest printed information regarding the release of three Chinese parasitoid species (small stingless relatives of ants and wasps) in Michigan, in 2007 has yet to confirm the ability to help control EAB.

2. Injection of systemic insecticide directly into the trunk of the tree. Use of special equipment and the need for training is required. The city staff will receive training for this method with larger trees. Three insecticides can be used.

   A. "Imidacloprid" is used world-wide and has low toxicity to mammals. It is used to control fleas and ticks on pets. Very degradable in sunlight, it is good for one year treatment.

   B. "Emamectin benzoate" is very effective, but it is very toxic and kills a broader range of insects including beneficial ones. It is effective for two to three years.

   C. "Bidrin" is very toxic, a category 1, which indicates it has corrosive effects to skin and eyes of humans.

3. Injection of systemic insecticide 2-4 inches directly into the soil within 18 inches around the trunk where the large root sections can absorb the insecticide. This method reduces the chance of runoff due to rain and puts the insecticide below any organic mulch which absorbs and holds the chemical. Special equipment and training are needed for this method. The insecticides available are the same as for Method #2.

4. Spray systemic insecticide on the lower 5-6 feet of tree trunk. This can be done easily with a home, hand held, garden sprayer. No special training is needed. The insecticide specified for this method is "Dinotefuran". Use of this insecticide is most effective on younger trees with thin bark. The advantage of this method is that the tree/bark is not injured by the drilling of holes as with the injection method. The city will use this method where applicable.

5. Drenching the soil within 18 inches around the trunk with systemic insecticide. This method does not require special equipment or training. "Imidacloprid" is the safest insecticide to use for this method. Any runoff due to rain is mitigated by the lower toxicity of this insecticide for beneficial insects, birds and mammals. The soil should be moist, not too dry or too wet.

   This method, as the others, should be implemented in early June, when black locust trees (Robinia pseudoacacia) are in bloom.

6. Cover spraying the whole tree is not recommended due to the wide area affected by wind drifting.

IN CONCLUSION

The public will need to be educated on the subject of EAB, how to identify ash trees, and which ones are worth treating. This document will be distributed, on the city website. A public informational forum will be held when the time is appropriate.

The city must post signs on trees being treated, if the general public and neighbors could come in contact with the insecticide. See "State Environmental Resource Center" on the internet for details regarding posting.