

## Colorado Walnut/1000 Cankers Disease Survey

### Some Questions & Answers

During the summer and early fall of 2009 a survey is being conducted of walnut trees in eastern Colorado. This effort will attempt to locate all walnut (*Juglans*) trees and assess whether the presence of 1000 cankers disease is present.

**Why is this survey being conducted?** Walnuts in many western states have recently been dying in large numbers. The cause of much of this is a newly identified disease (2008) known as **Thousand Cankers**. This disease is caused by previously undescribed fungus (*Geosmithia*) spread by a tiny bark beetle (*Pityophthorus juglandis*, aka the “walnut twig beetle”).

At present the known range of this disease includes most states west of the Rockies. The eastern edge of the disease is thought to be along the Front Range of Colorado, including the communities of Boulder, Westminster, Arvada, Wheat Ridge and Colorado Springs. This survey will attempt to clearly mark the current eastern boundaries where Thousand Cankers is present.

**What are the goals of the survey?** There are three primary goals of this survey:

1. Identify the present distribution of Thousand Cankers so that efforts to manage the disease can be best focused;
2. Provide a baseline of the distribution of the disease so that its future rate of spread can be determined;
3. Promote awareness of Thousand Cankers disease among communities and landowners in eastern Colorado.

**How is the survey being conducted?** A survey team will be working in eastern Colorado during summer and early Fall of 2009. They will be attempting to locate all walnut trees in eastern Colorado and GPS mapping their location.

At the same time trees will be given a preliminary evaluation for Thousand Cankers disease. This will be based on foliar symptoms (yellow leaf flagging, recent dieback) and given a 0-2 rating: 0 - no symptoms; 1 - possible symptoms; 2 - symptoms strongly suspicious of Thousand Cankers disease. Attempts will be made to later collect samples from the trees with potential symptoms of the disease to confirm whether it is present or not.

**Where will the survey be conducted?** The goal is to locate and survey all walnuts in Colorado that occur east of the Rockies. Within this broad region the survey will largely progress along the three priorities that have been established:

**Priority 1** areas are walnut plantings that occur along the Arkansas River and South Platte River, which are considered sites where the disease may be most likely to naturally progress eastward, potentially into areas of the midwest where black walnut (*Juglans nigra*) is a native tree.

**Priority 2** areas are those communities where Thousand Cankers is not currently (spring 2009) known to occur. These primarily include a number of Front Range cities and towns running from Trinidad to Fort Collins.

**Priority 3** areas are communities where Thousand Cankers is already known to occur in

Colorado.

**Is western Colorado included in this survey?** No. The deepest concern about Thousand Cankers is what it potentially could do should it become established in the native stands of black walnut that grow from the midwest to the Atlantic. Should it prove as devastating to native black walnut as it has in the western states, where all plantings have been established by humans, then there is potential for devastating economic and ecological effects. Therefore the focus is in defining the current eastern “frontier” of the disease.

Thousand Cankers disease is present on the West Slope. It has probably been killing trees in western Colorado and Utah for 10-15 years, although the cause was unknown.

**How will trees be located?** The survey team will attempt to drive along every street where walnuts may be planted, progressing largely along the priority areas defined above and focusing on older neighborhoods where black walnut is more likely to have been planted.

It is greatly hoped that this effort will be assisted by reports of walnut trees. Arborists, tree boards, Master Gardeners, and anyone else with an interest in tree health are being asked to help with this survey by providing information on the location of walnut trees.

**How can I report a walnut tree?** You may email the location of suspected walnut trees to [CAS\\_WalnutSurvey@ColoState.EDU](mailto:CAS_WalnutSurvey@ColoState.EDU). These will be used to help guide the survey team and any submitted walnut tree locations are greatly appreciated.

**When will they visit the tree?** There is no defined schedule. The survey will progress throughout the growing season, largely along the prioritized guidelines, but the speed of this survey can not be estimated so early in this effort. However, if you do submit an emailed location we can reply to you after the trees have been examined.

**Who is coordinating this survey?** The Thousand Cankers disease survey is being conducted by Colorado State University. Survey coordination is by Whitney Cranshaw (entomologist) and Ned Tisserat (plant pathologist) who are researching Thousand Cankers.

**Where can I get more information on Thousand Cankers disease?** A web site is being developed to make more easily available information on Thousand Cankers disease. It should be established by the end of June 2009. In the interim a fact sheet is posted among the Colorado State University Extension publications at:  
[http://www.ext.colostate.edu/pubs/insect/0812\\_alert.pdf](http://www.ext.colostate.edu/pubs/insect/0812_alert.pdf)