Thousand Cankers Disease Update

Missouri Invasive Forest Pest Council
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States Included in the Missouri Thousand Cankers Disease Exterior Quarantine
2 CSR 70-11.060
As of June 2014

*WTB and Geosmithia, No TCD

- States included in Missouri TCD Quarantine
- States not included in Missouri TCD Quarantine
- Black Walnut (Juglans nigra) Native Range

Digital Compilation by Elizabeth Rutherford
Missouri Office of Administration,
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Office of Geospatial Information
Tennessee

- 2010
- First detection in the eastern U.S.
- Homeowner report in Knoxville
- No new counties with TCD or WTB since 2014
- Good rainfall in recent years. Infested trees partially recovering from serious decline.
Tennessee

Thousand Cankers Disease
Quarantine and Buffer Regulated Areas

- Thousand Cankers Disease Quarantined Areas
  Anderson, Blount, Jefferson, Knox, Loudon, Morgan, Rhea, Sevier and Union counties.
  Citizens in these counties cannot move walnut tree products and hardwood firewood outside the quarantined counties.

- Thousand Cankers Disease Buffer Regulated Areas
  Bledsoe, Bradley, Campbell, Claiborne, Cocke, Cumberland, Fentress, Grainger, Greene, Hamblen, Hamilton, Marion, McMinn, Meigs, Monroe, Polk, Roane, Scott and Sequatchie counties.
  Citizens in buffer counties/areas can move walnut tree products and hardwood firewood within buffer counties, but not outside. Product can also be moved into a quarantine county, but not taken back out.

November 21, 2014

http://tn.gov/agriculture/regulatory/tcd.html
Virginia

- First detection in 2011 in Richmond area.
- Detection of WTB in Louisa county in 2013 but no detection of TCD.
First detection in 2011

Landowner report

No new counties added since 2014

Years of adequate moisture resulted in lower beetle detections and some recovery of trees.
Butler County, 2012

No WTB detections since 2013
North Carolina

- Haywood County, 2012
- Trees are still standing but in decline
- Appears to not be spreading very far
Maryland

- WTB first detected in 2013
- TCD confirmed from bait logs in 2014
- Later detections of WTB only 100’s of feet away.
- No damage to walnut trees noted
- Cecil county is quarantined
**Geosmithia morbida** detected on *Stenomimus* weevils in 2013 in Brown County
- This site has been heavily trapped since then and no WTB have been detected.

- WTB detected in Franklin County in 2014

- WTB detected Johnson County in 2015

- To date, no diseased trees have been detected in Indiana.
Branch County

2015

Lindgren trap, 1 WTB only

Following up with concentrated survey in the region.

No WTB detected in 2016 survey

No evidence of *Geosmithia morbida* or TCD
Clark, Douglas and Franklin/Jefferson Counties

2016

*Geosmithia morbida* detected on *Xylosandrus crassiusculus*, *X. germanus*, and *Stenoscelis brevis*

No walnut twig beetles or TCD have been found

Trap trees used in research project

Reared insects and processed for fungus

Illinois Dept of Ag intensifying survey efforts in those regions

All on DNR lands. Prohibiting movement of walnut wood off of these lands.
Observations

- Last three years have generally had good moisture
- Some infested trees have partially recovered
- Limited or no beetle detections in some infested areas last three years

Questions

- Is susceptibility to TCD dependent on soil moisture and site conditions?
- Is the *Geosmithia* fungus widespread?
- Can other beetles effectively spread *Geosmithia*?
First Detected
September 2013
- Vicenza, Veneto Region
- ~80 year old trees in a garden
- ~17 year old trees in nearby walnut plantation

- *P. juglandis* and/or
- *G. morbida* detected in 3 other regions since then.
State Regulations

- 2009-2010 many central states worked together, along with advice from TCD researchers to develop uniform TCD regulations

- Very little known at that time

- Very restrictive regulations

- States reviewing current regulations in light of phytosanitary treatment research
Thousand Cankers Disease Research & Management Operational Meeting

June 13–15, 2017

Lafayette, Indiana

Registration Begins March 2017