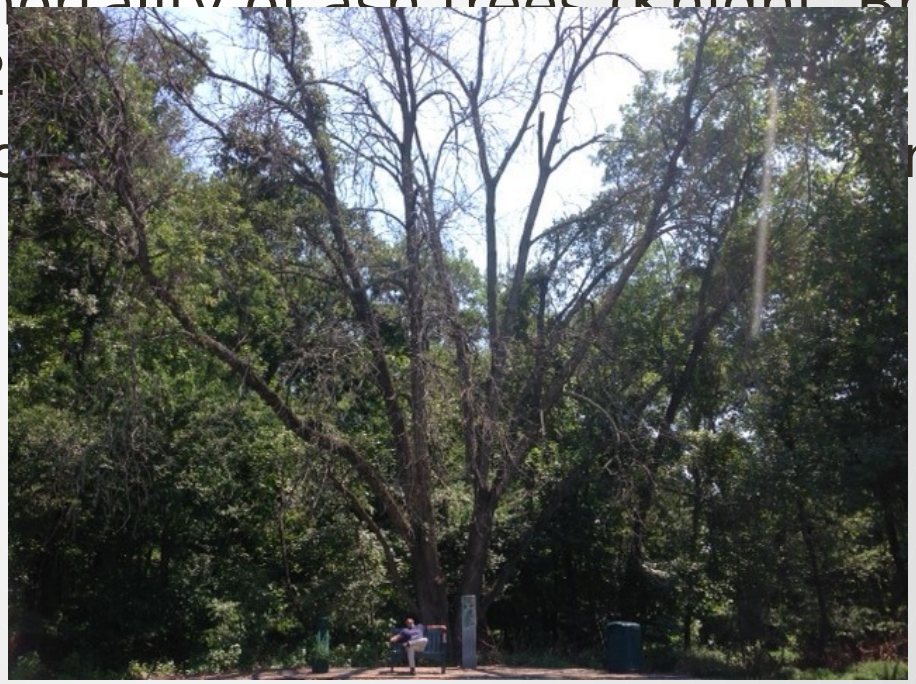
Emerald Ash Borer in Montgomery Parks

“Little bug, big problem”

Emerald Ash Borer, *Agrillus planipennis*

- Invasive insect from Asia (identified in 2002, Detroit)
- Infests all species of ash, *Fraxinus spp.* (Green, White, and Black) (Rebek, Herms and Smitley 2007)
- 99% mortality of ash trees (Knight, Brown and Long 2
- Signs o



Life Cycle of EAB

May-June

July

July-Sept

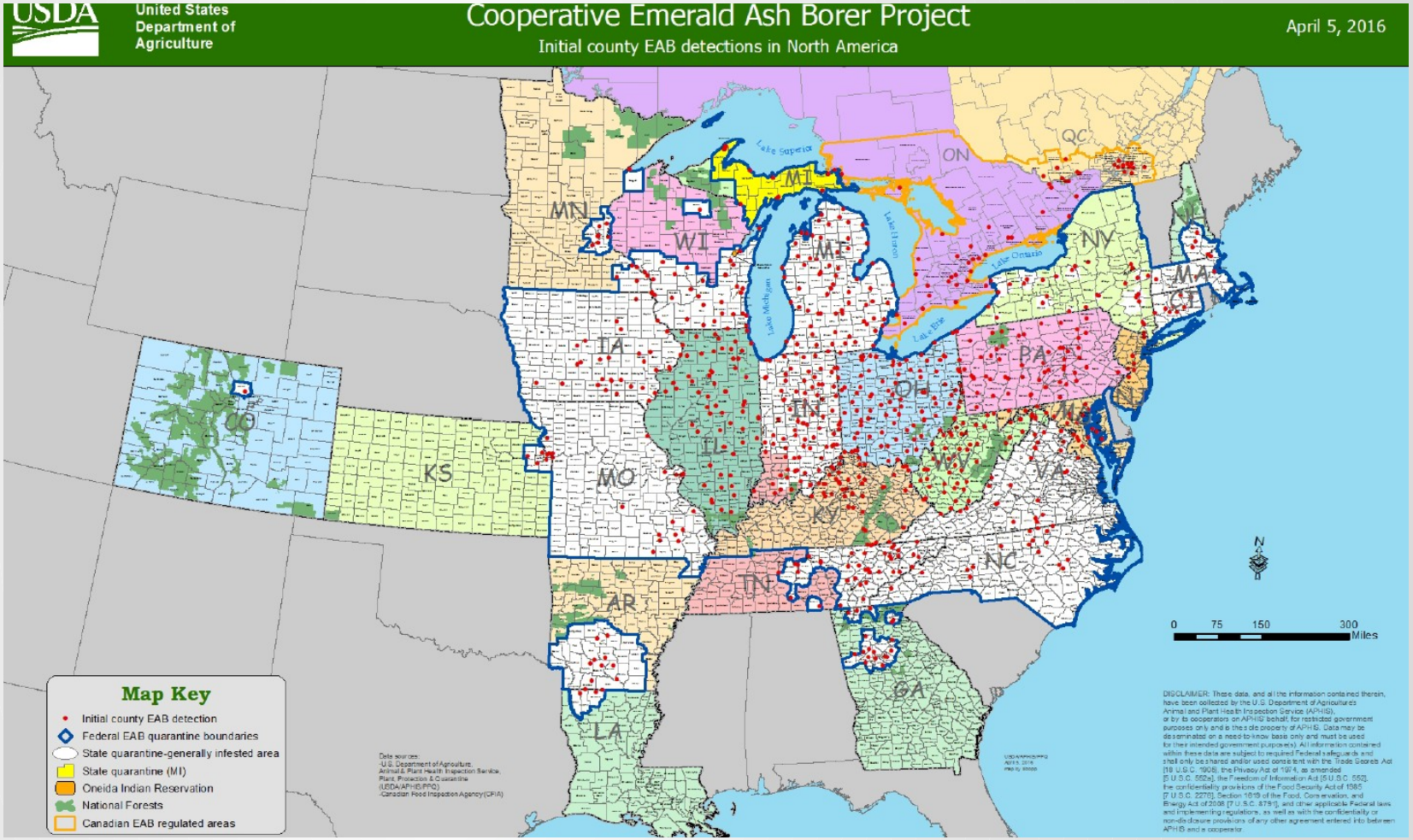
May

Oct-April

Serpentine Galleries

Woodpecker Damage

D-shaped exit holes


United States Department of Agriculture
Cooperative Emerald Ash Borer Project
Initial county EAB detections in North America
April 5, 2016
Map Key
Initial county EAB detection
Federal EAB quarantine boundaries
State quarantine-generally infested area
State quarantine (MI)
Oneida Indian Reservation
National Forests
Canadian EAB regulated areas
Lake Superior
Lake Michigan
Lake Huron
Lake Erie
Lake Ontario
MN
WI
MI
ON
QC
NY
MA
CT
IA
PA
OH
IN
IL
WV
VA
MO
KY
NC
TN
AR
SC
GA
LA
CO
KS
N
0 75 150 300
Miles
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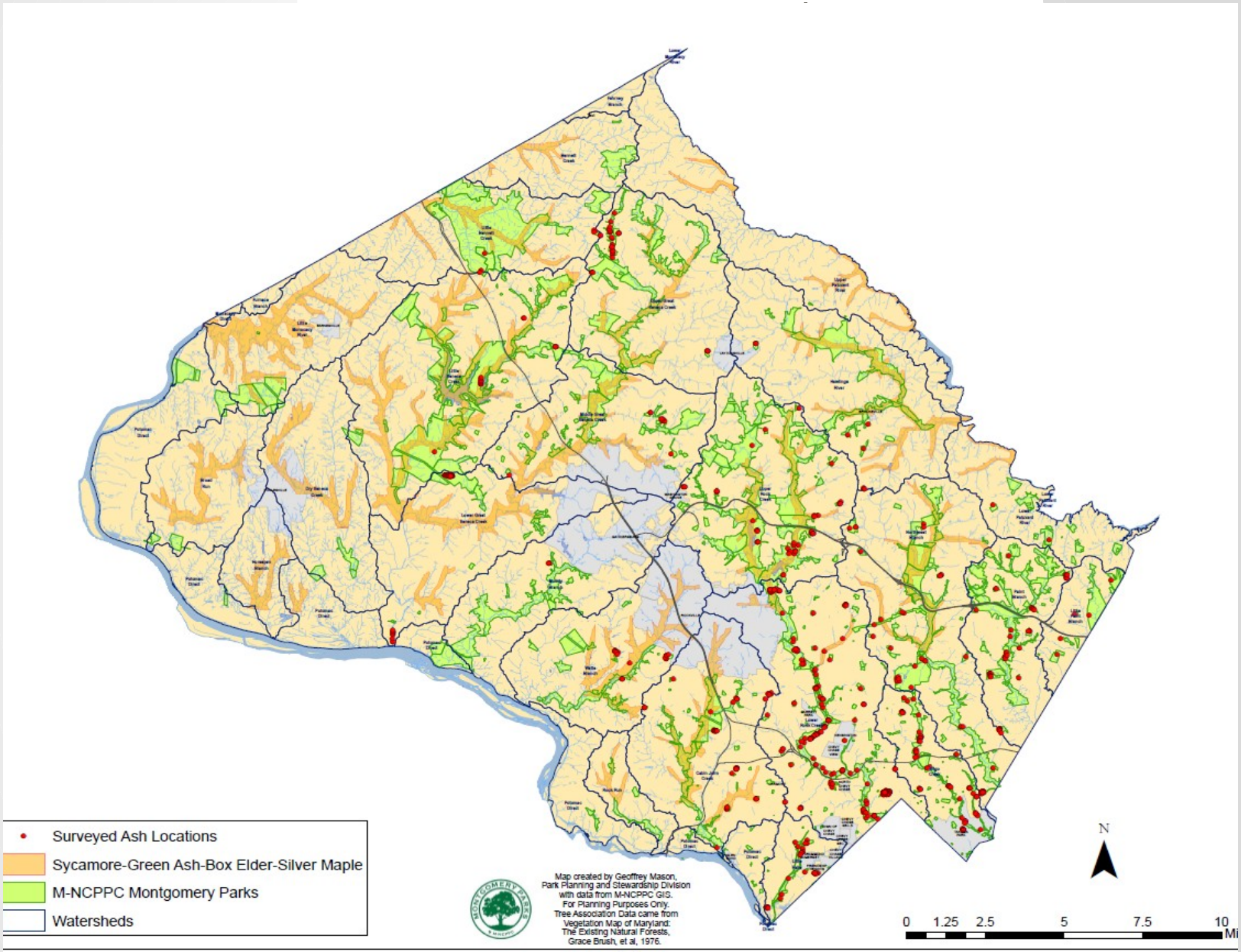
Where in Montgomery County?

- Ash comprise ~2-4% of forest trees concentrated in stream valleys (USFS EVAILDator tool)
  - Could be up to 20% of some stream valleys
- First found in MD, August 2003
- First found in Montgomery County, June 2012
- EAB found countywide (APHIS Federal Order DA-2015-39)

Surveyed Ash Locations in

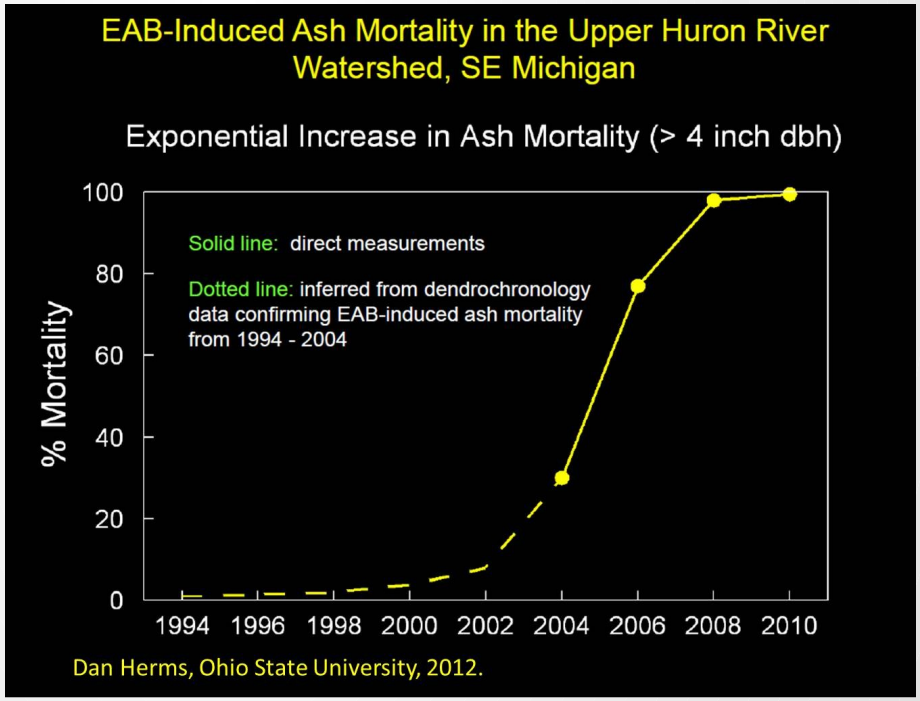


Rock Creek Trail (18.6 miles)

- Cedar Ln to Connecticut Ave (0.7 miles)
  - (73) 15” and greater DBH trees
  - (57) 6-15” DBH trees
  - ~$86,220 to remove

When?

- EAB death curve (Knight et. Al. 2008)
  - Following model, 50%- 98% mortality within 1-3 years in areas where we currently see signs of infestation



Dead Ash trees in August 2015, PG County, MD

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Dead Ash trees in August 2015, PG County, MD

Why?

- Safety for park patrons and staff
  - Significant loss of structural strength with decline of tree health (Persad et. Al. 2013)
    - Trees at greater risk of windthrow
    - More dangerous and expensive to
- Damage to water resources
- Loss of tree canopy
- Invasion of Non-native invasive p

How?

- Inventory
- Monitor
- Remove
- Treat
- Reforestation
- Biological Controls

Parkland in PG county

Ash Tree marked for removal

EAB Reforestation in Sligo Creek Stream Valley Park

Resources

www.emeraldashborerinfo.com

Or

http://mda.maryland.gov/plants-pests/Pages/eab.aspx

Or

Maryland Department of Agriculture: search EAB

Look at the hot links on the right side of the page

http://www.emeraldashborer.info/documents/Potential_Side_Effects_of_EAB_Insecticides_FAQ.pdf

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- United States Forest Service EVAILDator tool, http://www.fia.fs.fed.us/tools-data/