

Oak Wilt: An Emerging Threat to Forests

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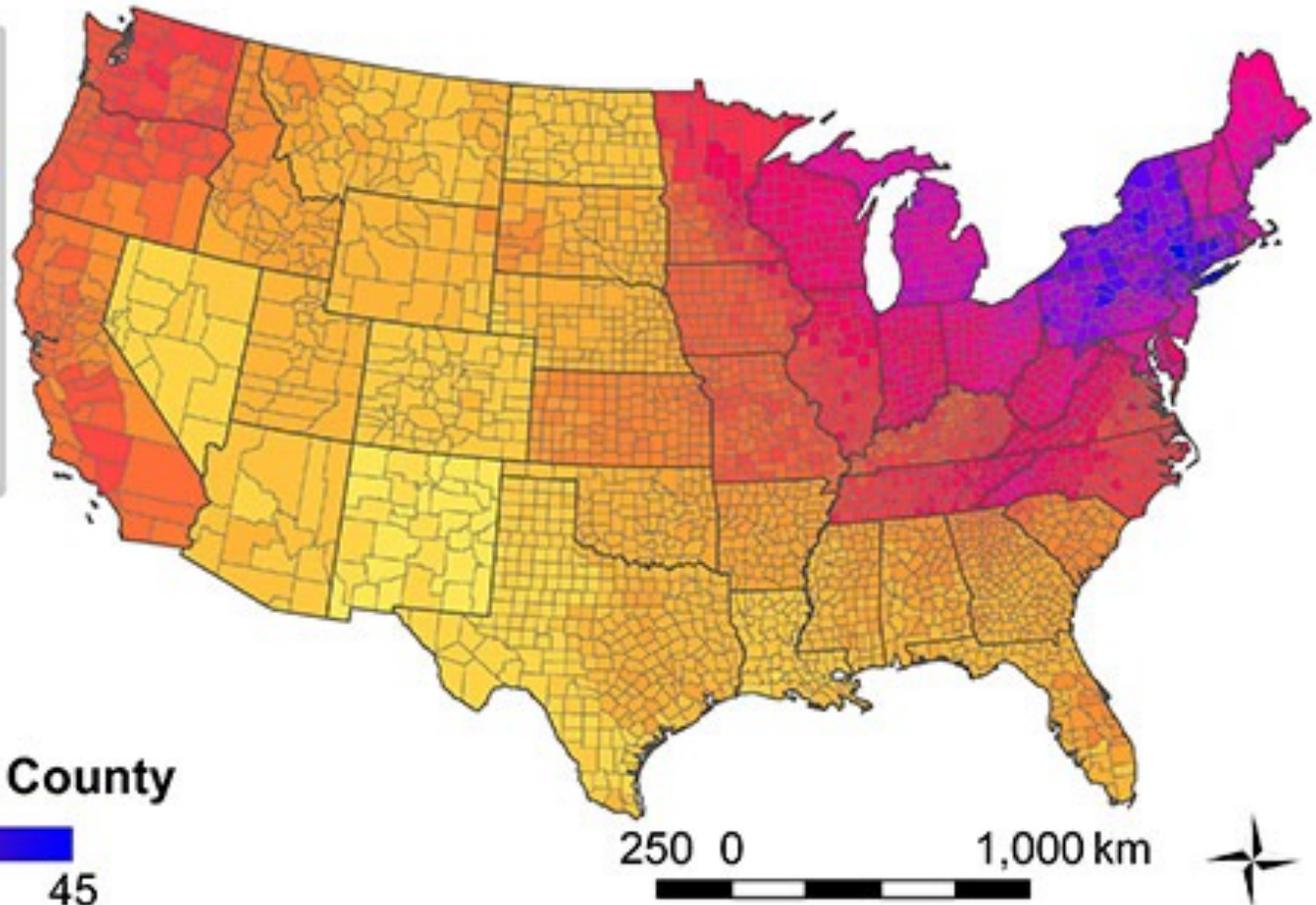
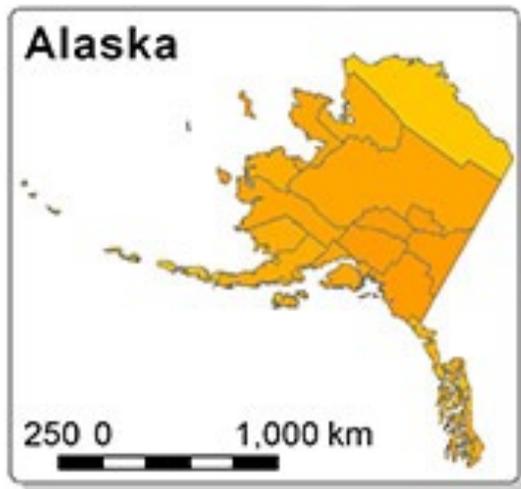
Special thanks to:

Kelsey McLaughlin, NYSDEC Oak Wilt Program



Department of
Environmental
Conservation

Such nice neighbours to share their bounty with us...



Number of Pests per County



The Latest Gift: **Oak Wilt**

Discovered in 1944 in Wisconsin – unknown origin.

Fungal pathogen, *Bretziella fagacearum*, plugs xylem vessels.

Spread mainly by sap beetles, and also through root grafts.



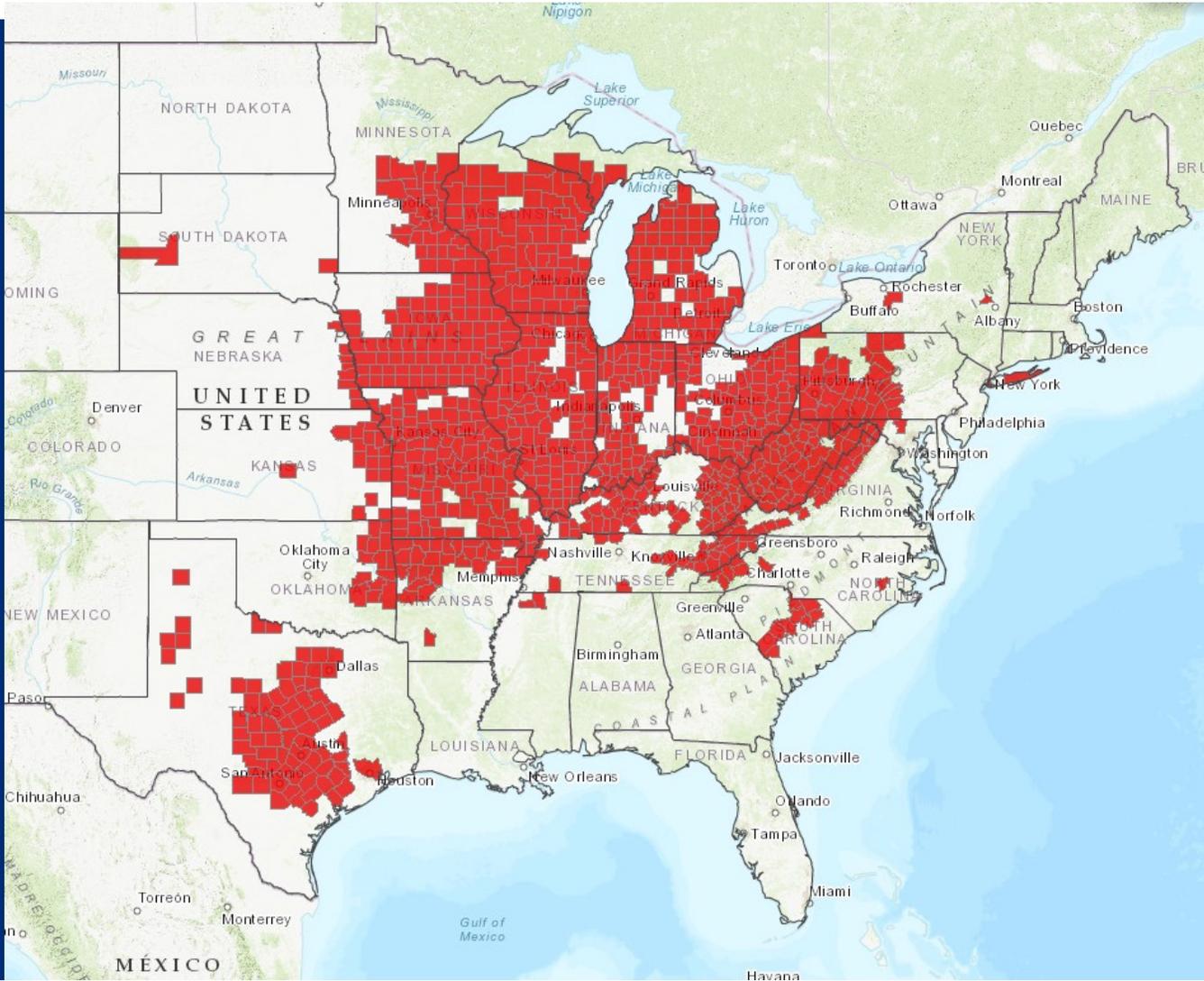
Red vs. White Oaks

Red, Black, Pin, and Scarlet (bristle-tip lobes) are most vulnerable.



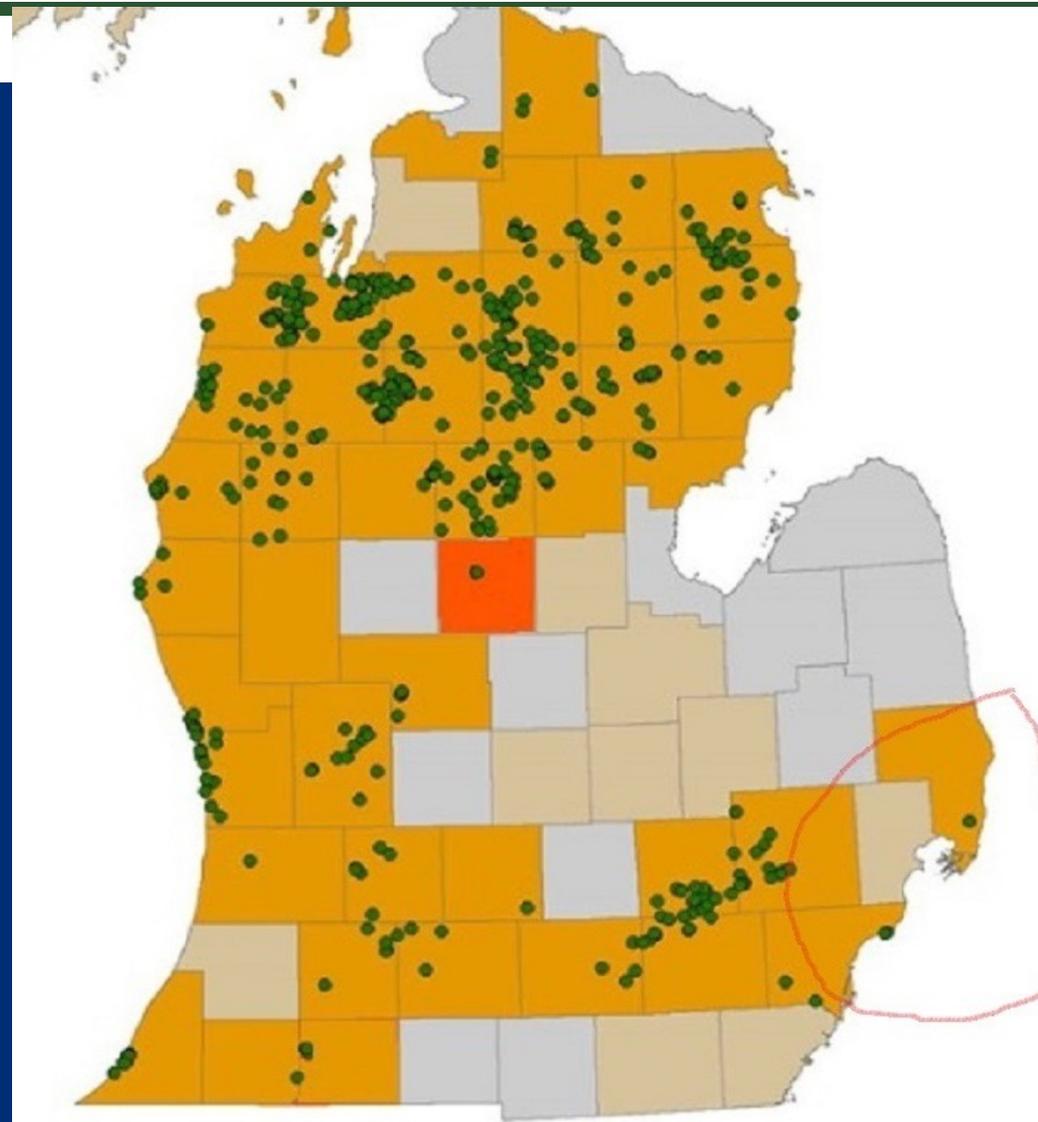
White, Bur, and Swamp-White (rounded lobes) take longer to die.





Forest Health Technology and Enterprise Team, Forest Pest Conditions 2017

Dots = **lab-confirmed**
oak wilt cases.

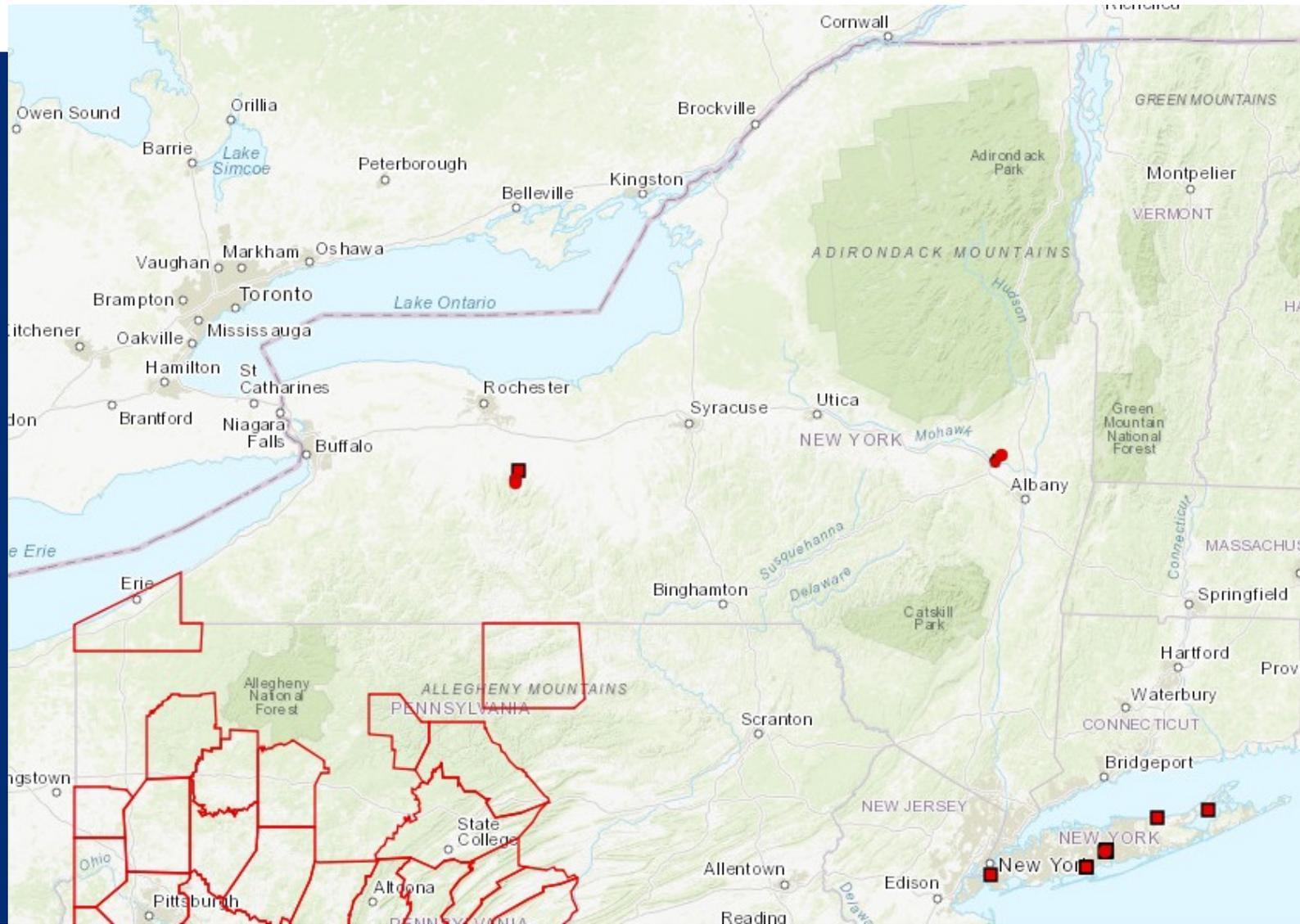


Oak Wilt: How Close is It?

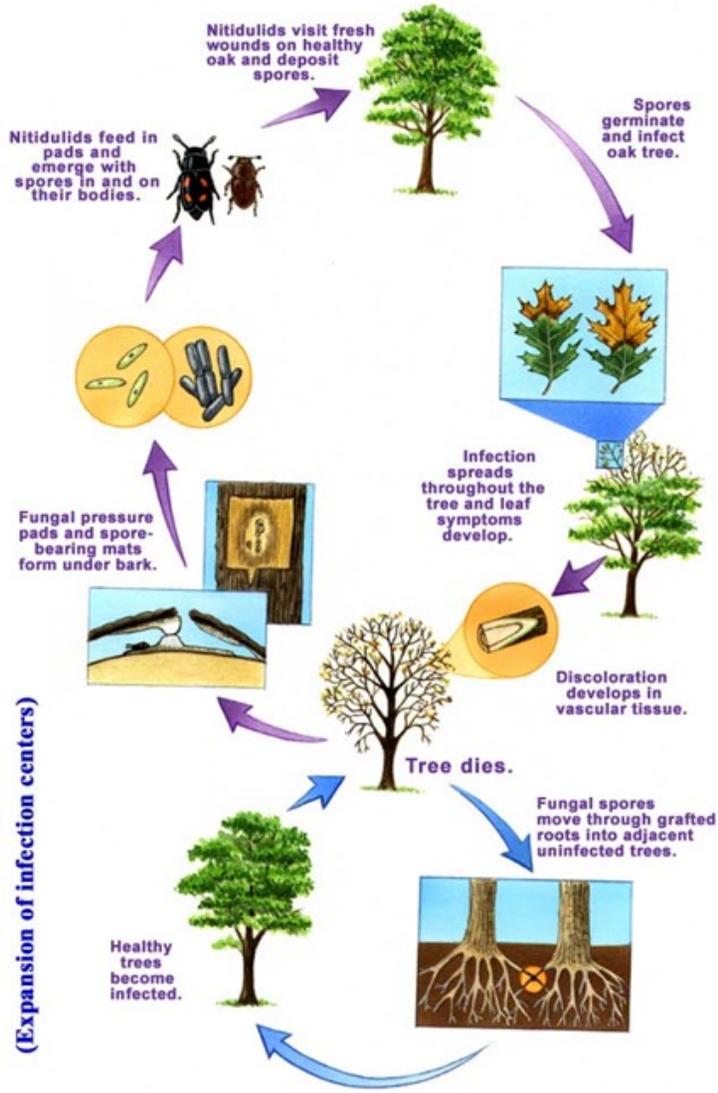
(Please choose the correct answer.)

1. Roughly 6 km from the Ontario border, south of Sarnia.
2. 579 metres from Windsor on an island in Detroit River.
3. Close as the first idiot who brings firewood home from a trip.
4. No one knows for sure.
5. It is almost certainly here already.
6. All of the above.





Overland Spread (Initiation of new infection centers)



Root Graft Spread (Expansion of infection centers)



Karl Higgin 2011, Bugguide.com



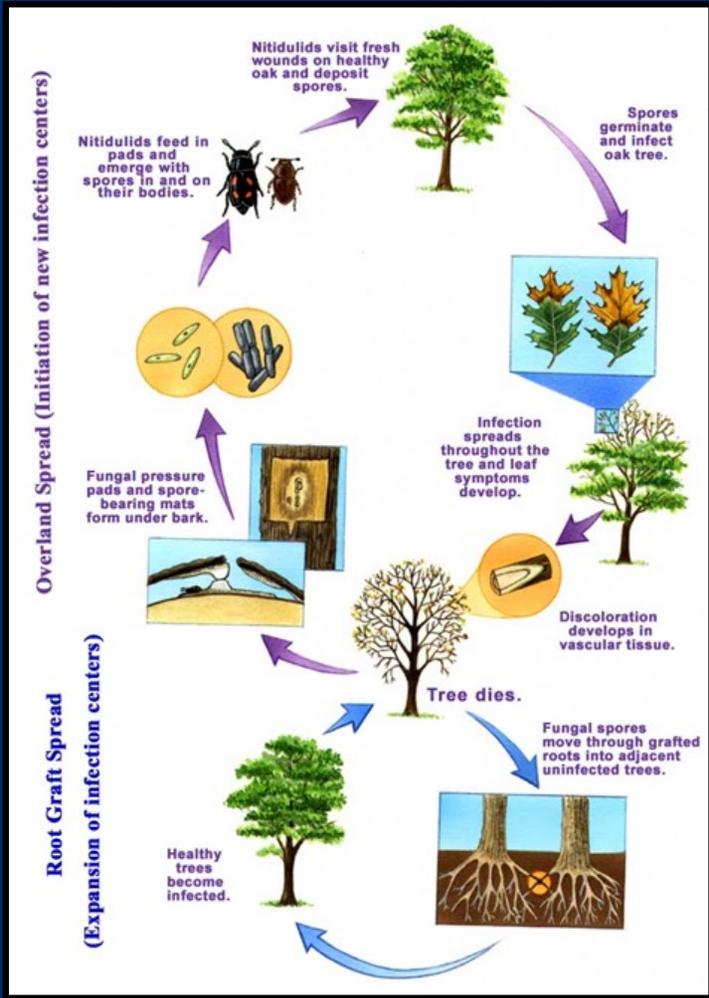
Joe Schuller 2005, Bugguide.com



Sam Houston 2010, Bugguide.com



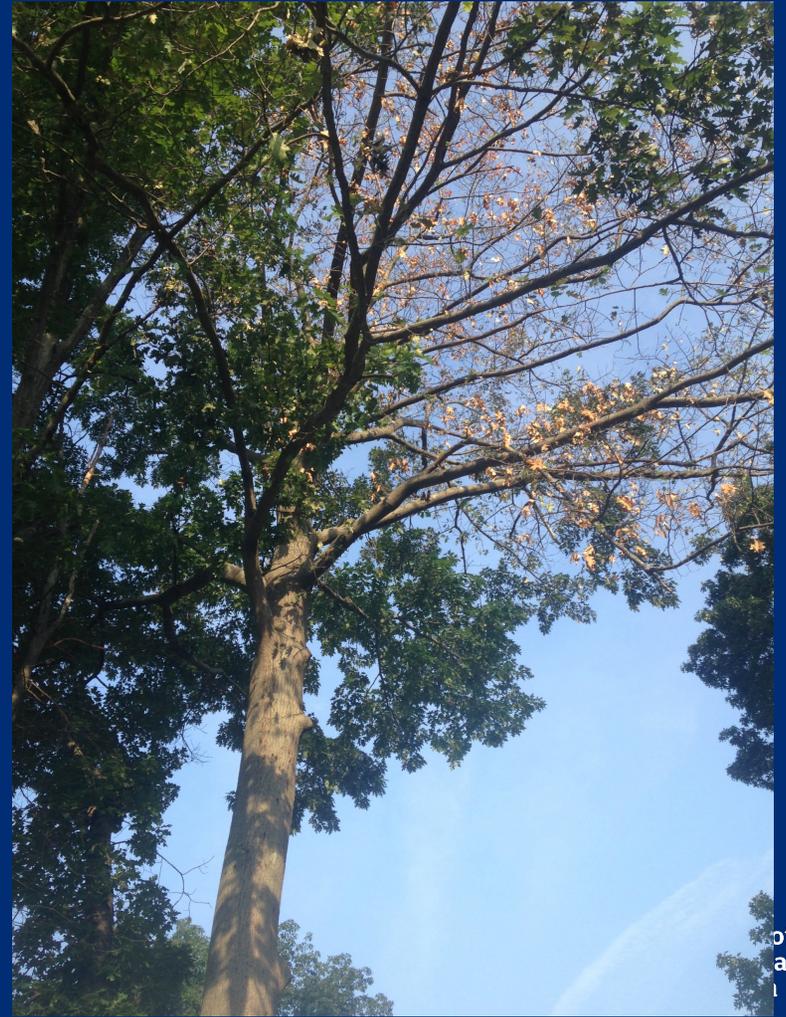
Tom Murray 2010, Bugguide.com

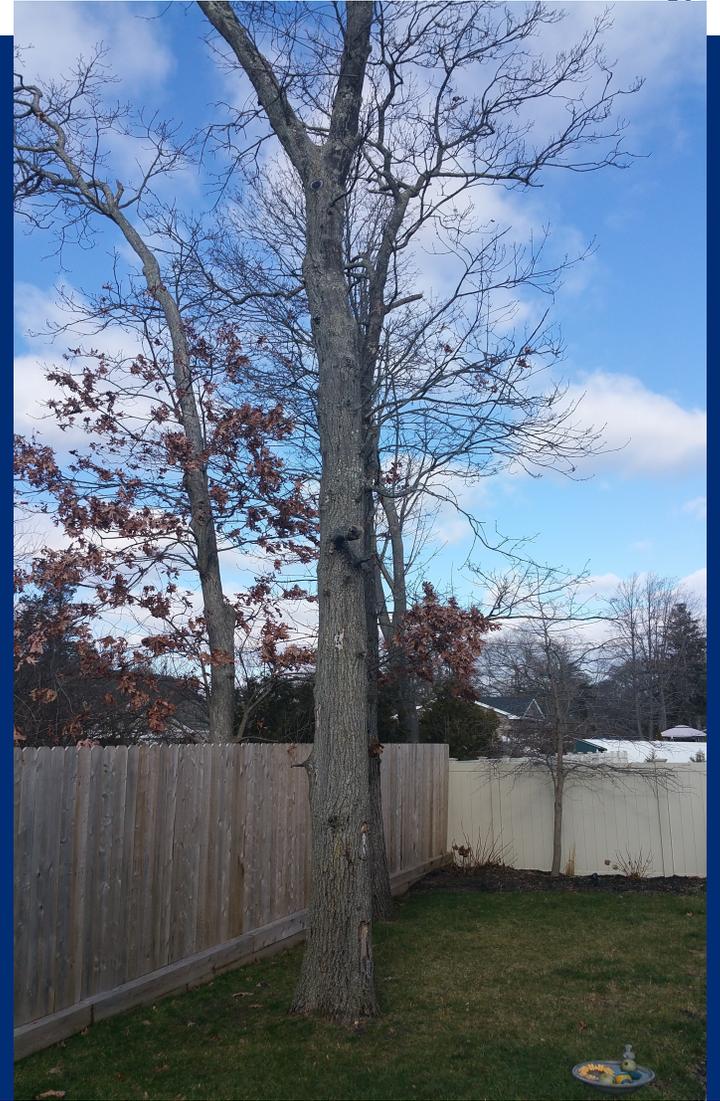






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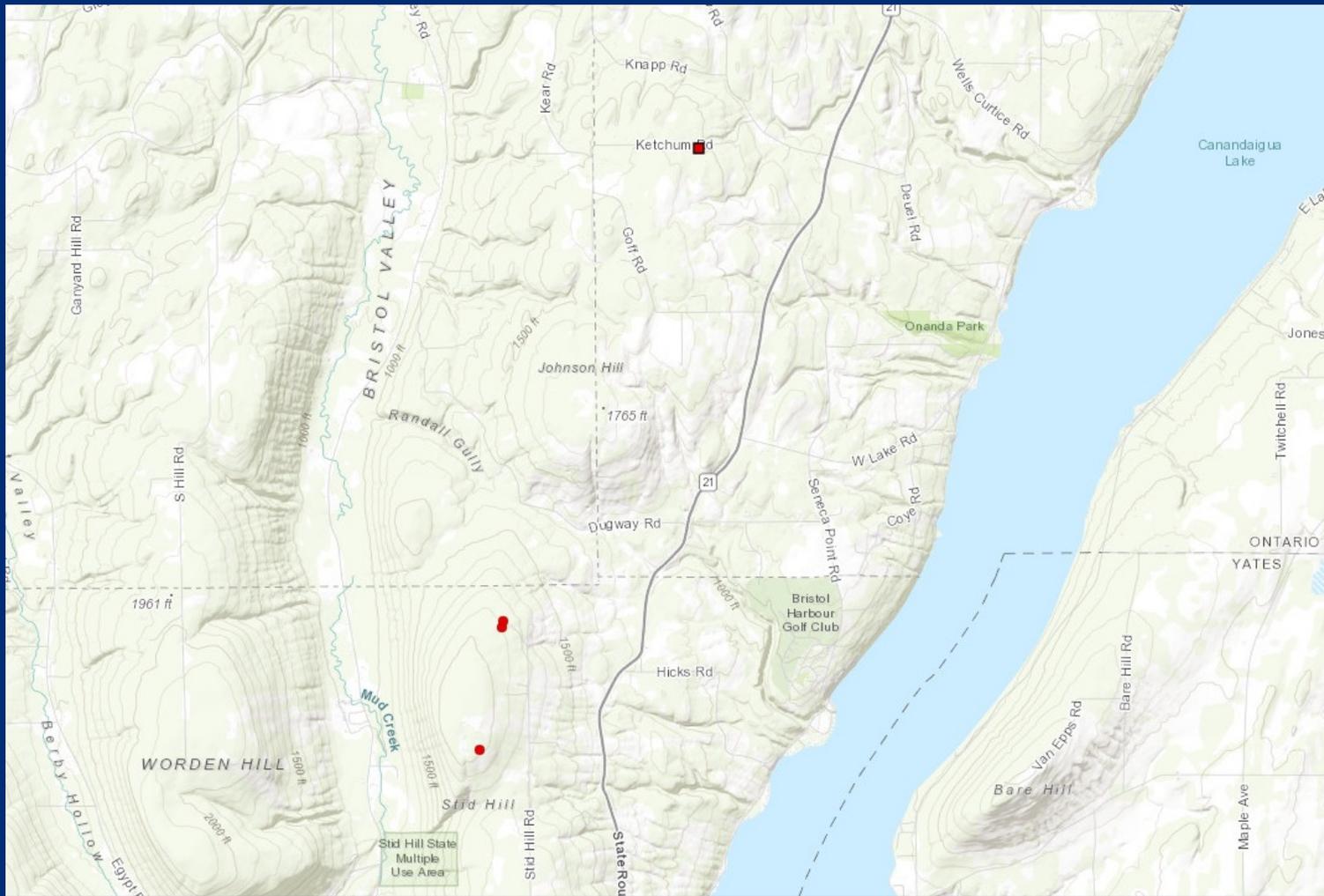






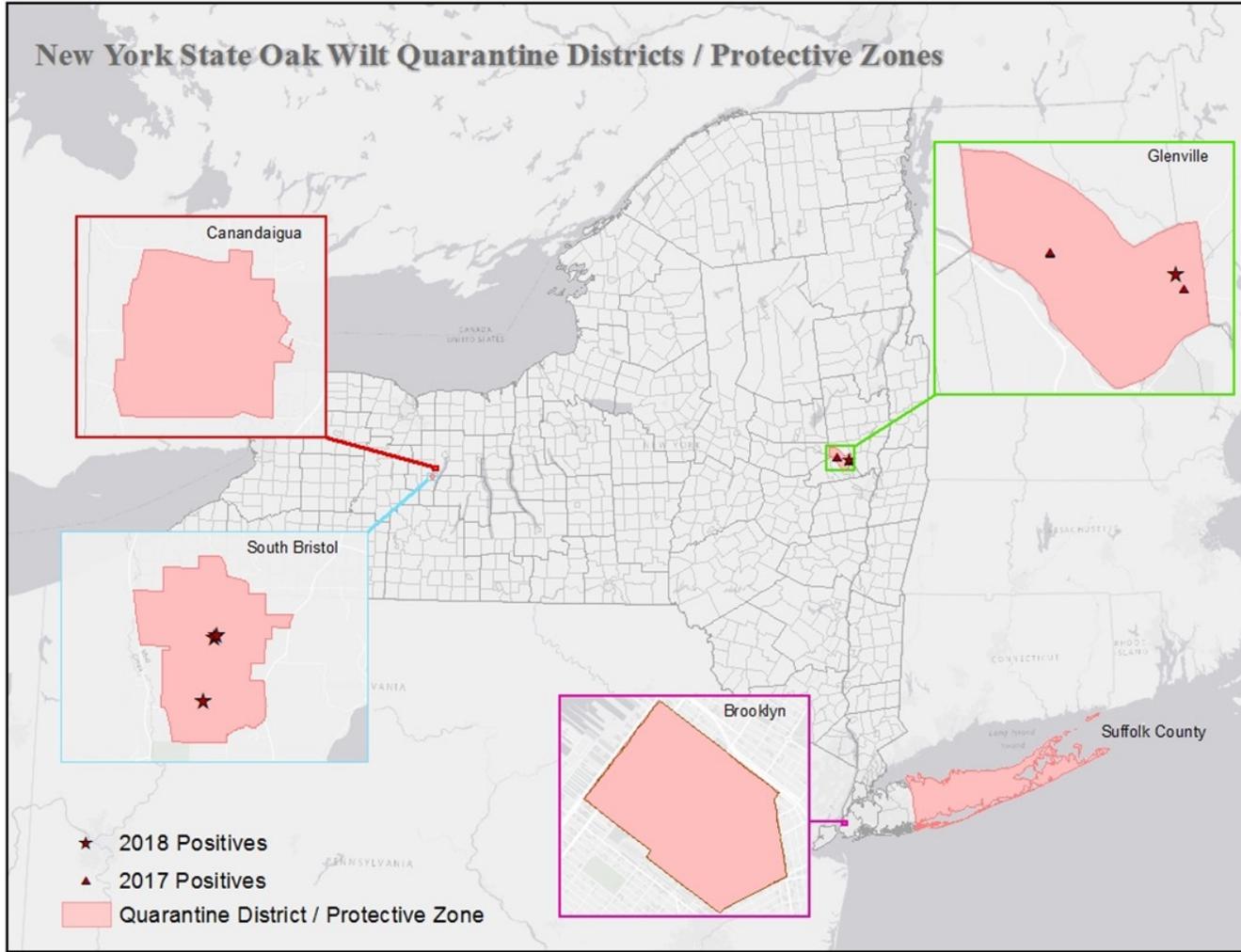


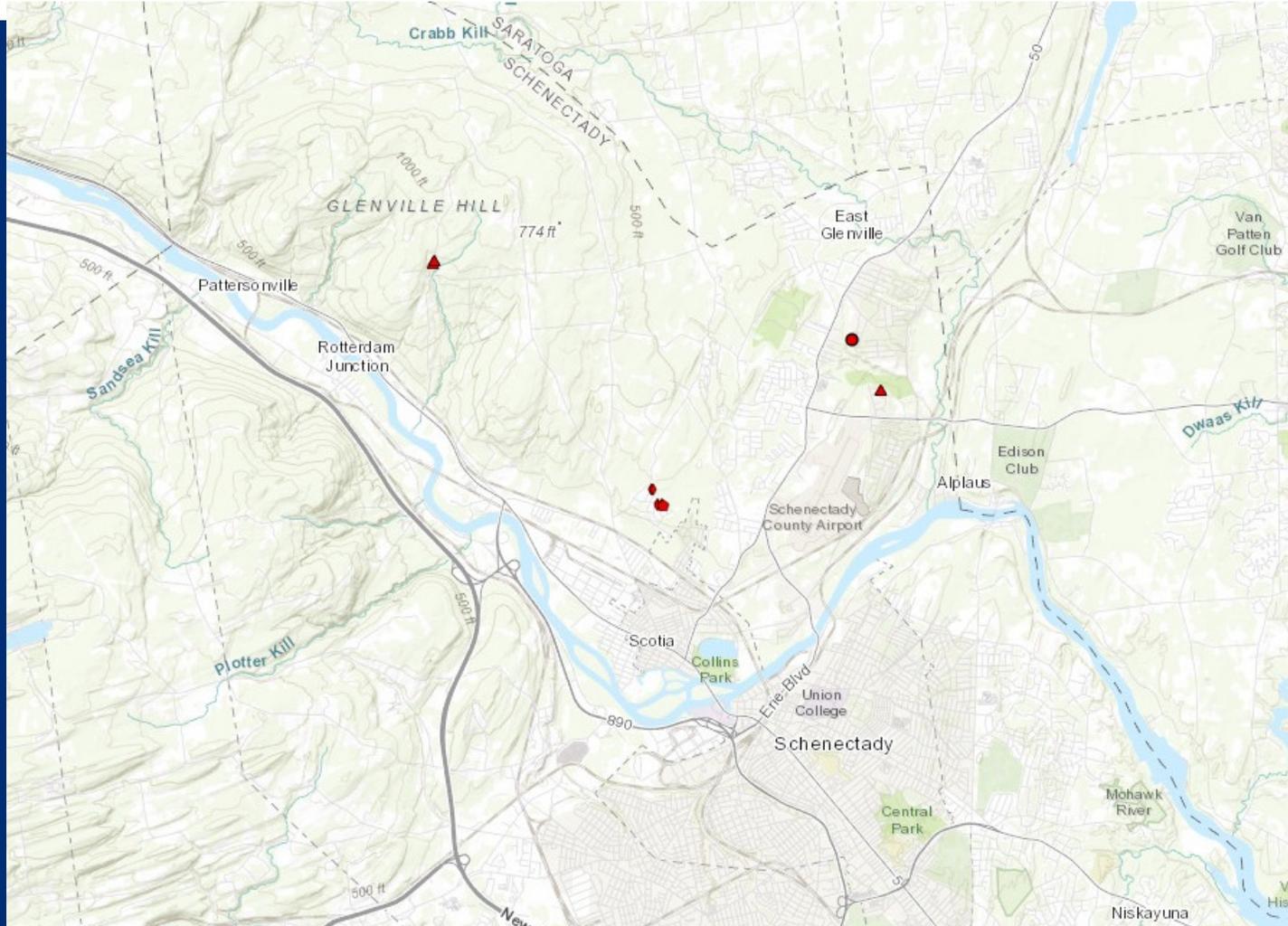














**PREVENT
OAK WILT**

**DON'T
PRUNE**
March-Sept



Firewood Movement



USE LOCAL FIREWOOD

PROTECT TREES

Don't Spread Pests & Disease

A graphic illustration featuring a stylized orange and yellow flame above two crossed logs. A black beetle with white spots is shown crawling on the logs. The background is a light grey with faint tree silhouettes.

NEW YORK STATE Department of Environmental Conservation





Month	Risk	Pruning	Timbering	Firewood Movement
Apr-July	High	NOT recommended, immediately cover wounds with paint	NOT recommended, immediately cover wounds with paint	NOT permitted
Aug-Sept	Low	NOT recommended, immediately cover wounds with paint	Can be done, should still look to minimize oak wounding	Requires DEC permit
Oct-Mar	Very Low	Recommended, no need to cover wounds	Recommended	Requires DEC permit



Questions?

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