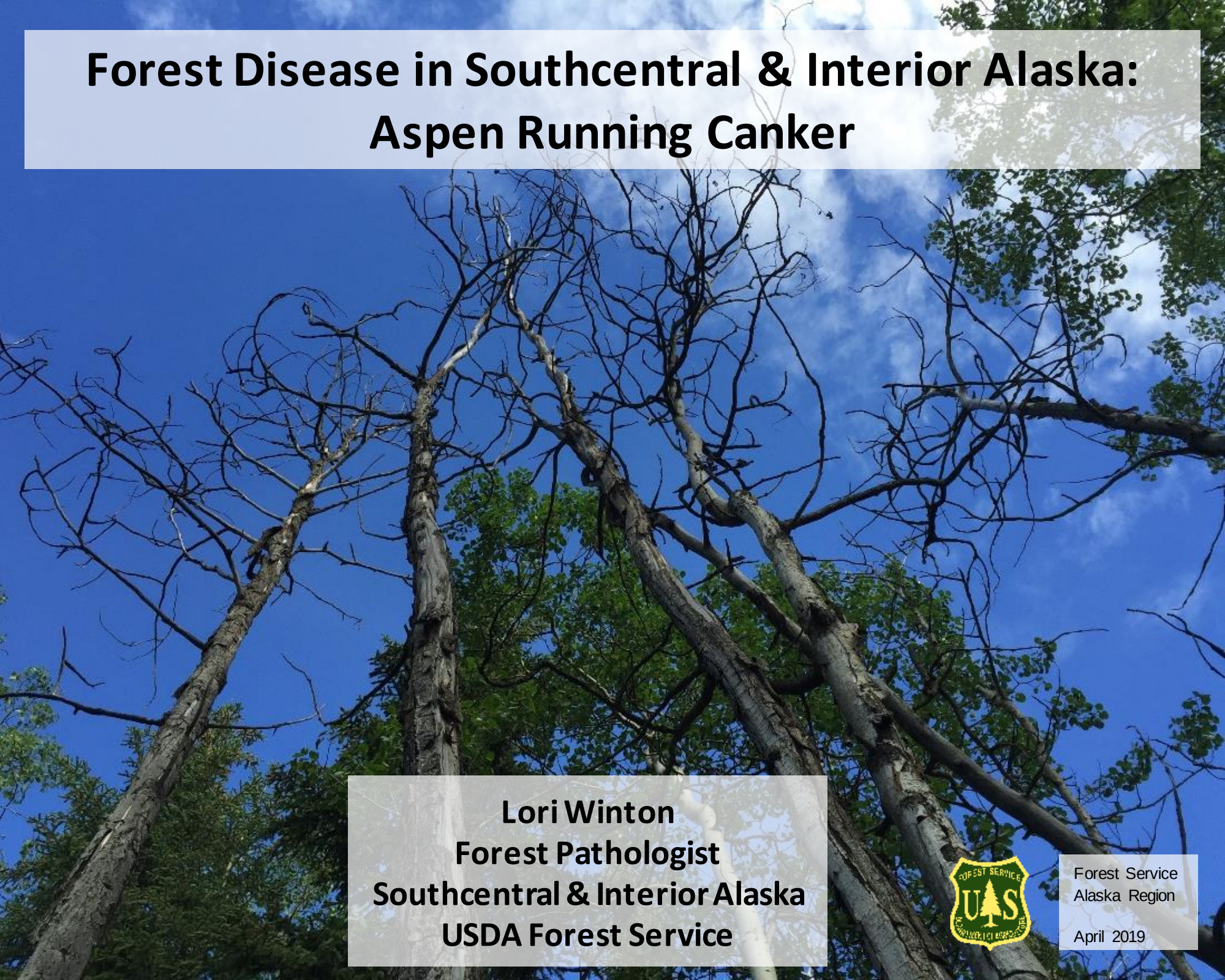
Forest Disease in Southcentral & Interior Alaska: Aspen Running Canker



Lori Winton
Forest Pathologist
Southcentral & Interior Alaska
USDA Forest Service

Forest Service
Alaska Region

April 2019

- Tree disease is deviation from normal functioning caused by fungi, virus, bacteria, etc.

- Most diseases not visible from air
- The organisms are sessile
- Rely on ground surveys
- Partnerships
  - UAF
    - LTER
    - CAFI
  - DOD
  - FIA

- Website (google Alaska Forest Health)

Site Map

Region 10

- Home
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Contact Information

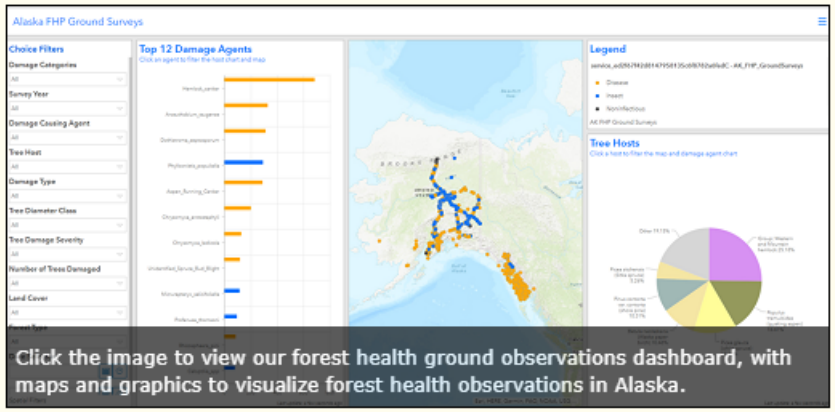
Alaska Regional Office
PO Box 21628
709 W. 9th Street
Juneau, AK 99802-1628
(907) 586-8806

Chugach National Forest
161 East 1st Ave., Door 8
Anchorage, AK 99501
(907) 743-9500

Tongass National Forest
648 Mission Street
Ketchikan, AK 99901
(907) 225-3101

Stay Connected!

Forest & Grassland Health



Common Forest Insects & Diseases in Alaska

Select forest diseases, insects and noninfectious disorders from the menu below for their current status, distribution, historic activity, symptoms, biology, and impacts to host trees and forest management. Also see:

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FOREST DISEASES

Foliage Diseases

- Cedar Leaf Blight
- Dothistroma Needle Blight
- Hardwood Leaf Rusts
- Hemlock-Blueberry Rust
- Spruce Needle Casts/Blights
- Spruce Needle Rust

Shoot, Twig & Bud Blights

- Sirococcus Shoot Blight
- Spruce Bud Blights

FOREST INSECTS

Bark Beetles and Woodborers

- Ambrosia Beetle
- Northern Spruce Engraver
- Spruce Beetle
- Western Balsam Bark Beetle

Defoliating Insects

Conifer Defoliators

- Balsam Woolly Adelgid
- Hemlock Sawfly
- Spruce Aphid

Featured Links

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Publications and Products

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#alaskaforesthealth
#alaskasprucebeetle

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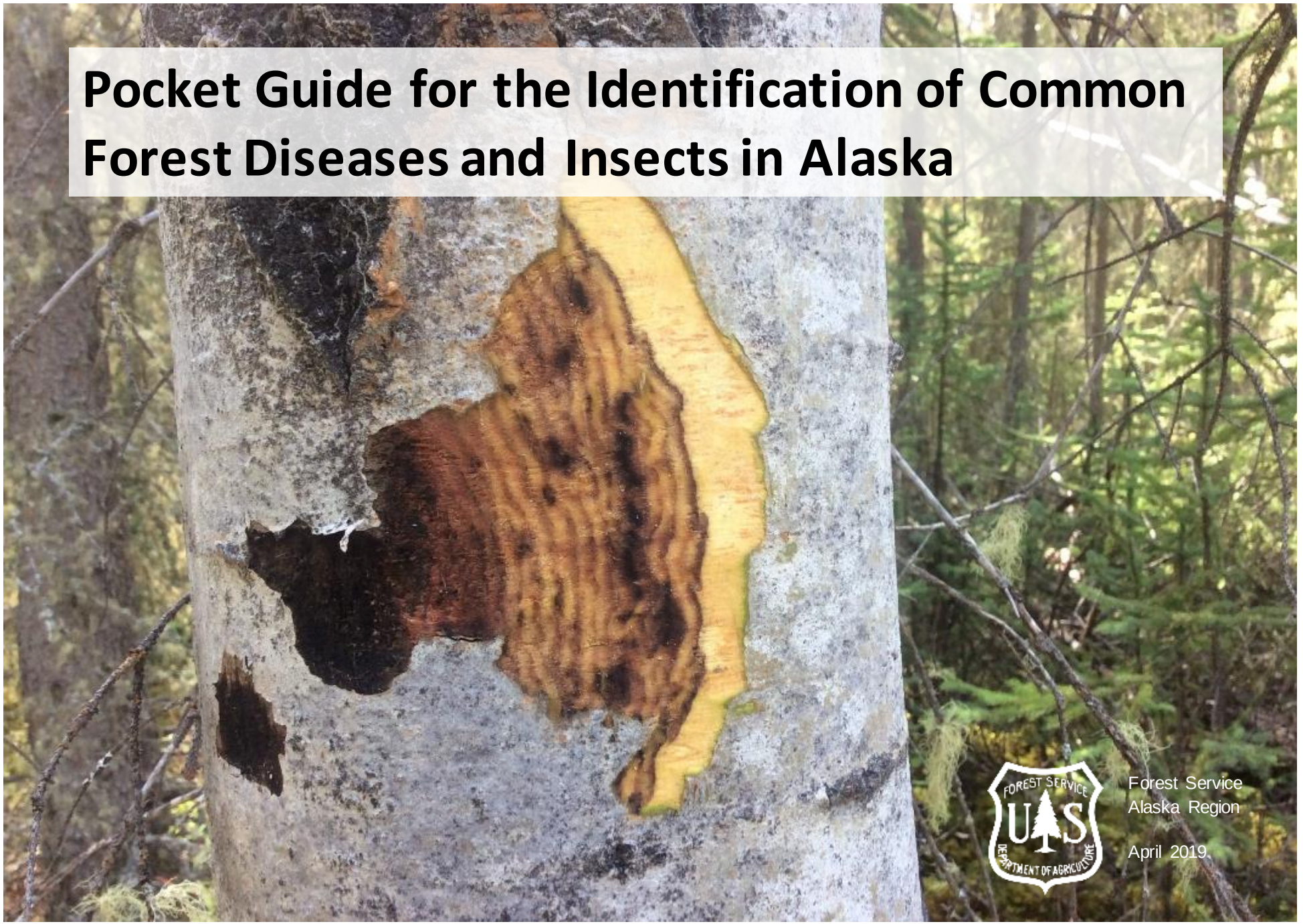
Have you noticed any of these caterpillars and 'tents' in alder or cottonwoods? If you notice western tent caterpillars, take a picture and upload it to iNaturalist to help us collect data on these forest pests. Set up an account at inaturalist.org/projects/alask

Pocket Guide for the Identification of Common Forest Diseases and Insects in Alaska



Forest Service
Alaska Region

April 2019

Unknown fungus

Aspen Running Canker

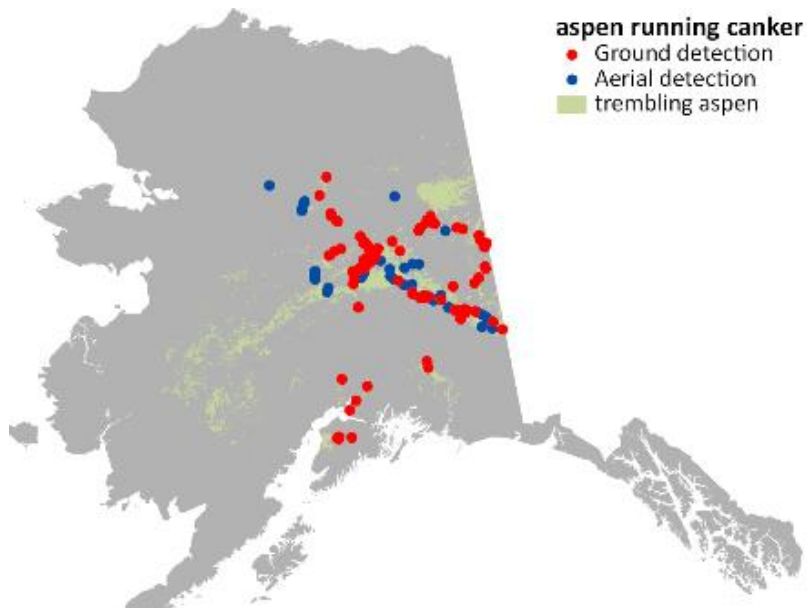
Unknown fungus — Aspen Running Canker

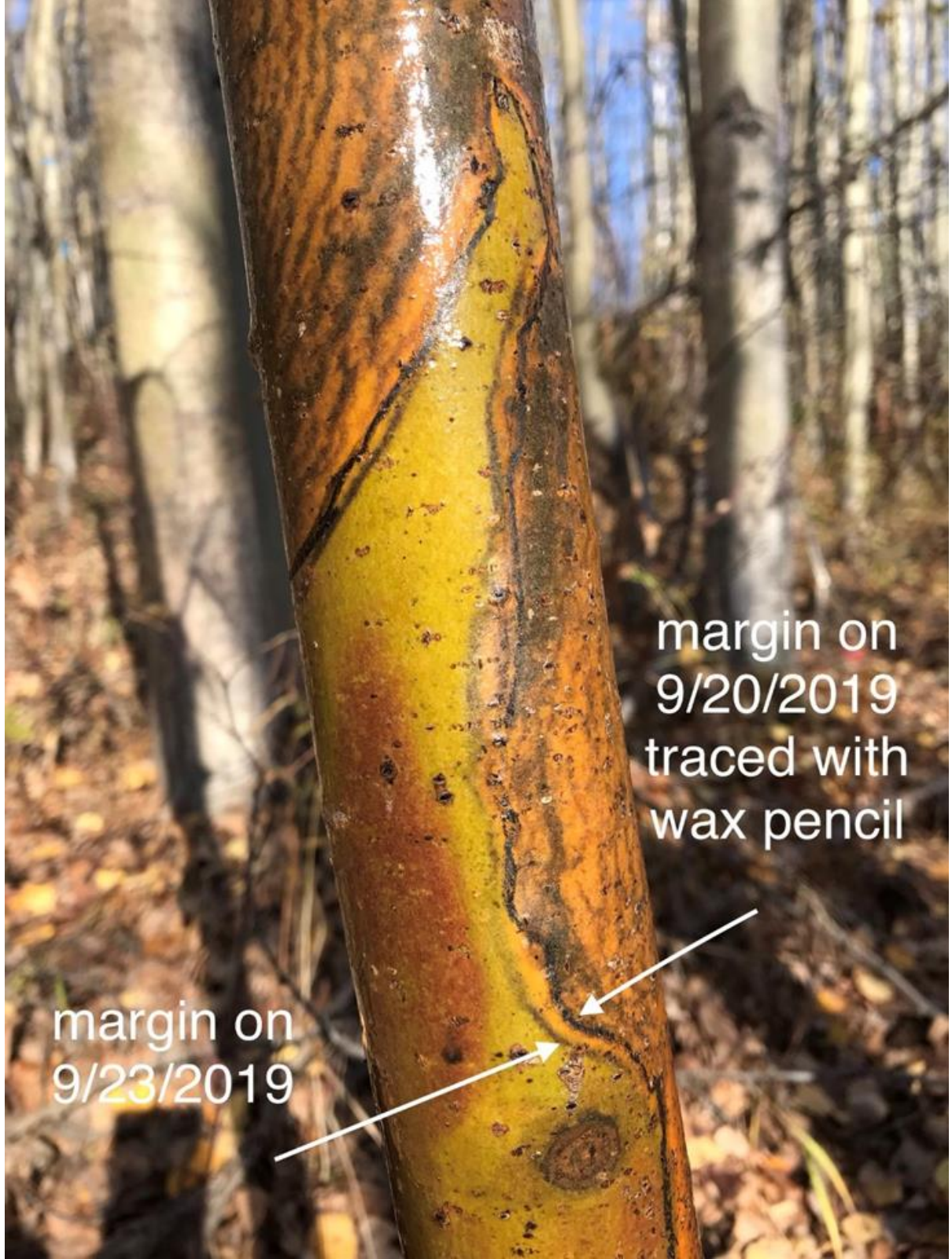
Hosts: Aspen.

ID: Bark looks dead or discolored orange to brown. Distinct margin between live and dead/dying tissue, may need to scrape away the bark to see. Often has a slight ridge where new wood is forming at margin between live and dead tissue. With older cankered areas, the bark over the dead cambium dries and may crack at margin.

Damage: Death of cambium, branches, and eventually entire tree. Tree mortality can occur within a year or two when the aggressive cankers girdle the main stem. Trees killed by aspen running canker often occur as singletons scattered throughout a stand. However, it is not uncommon to see groups of trees killed by this disease.

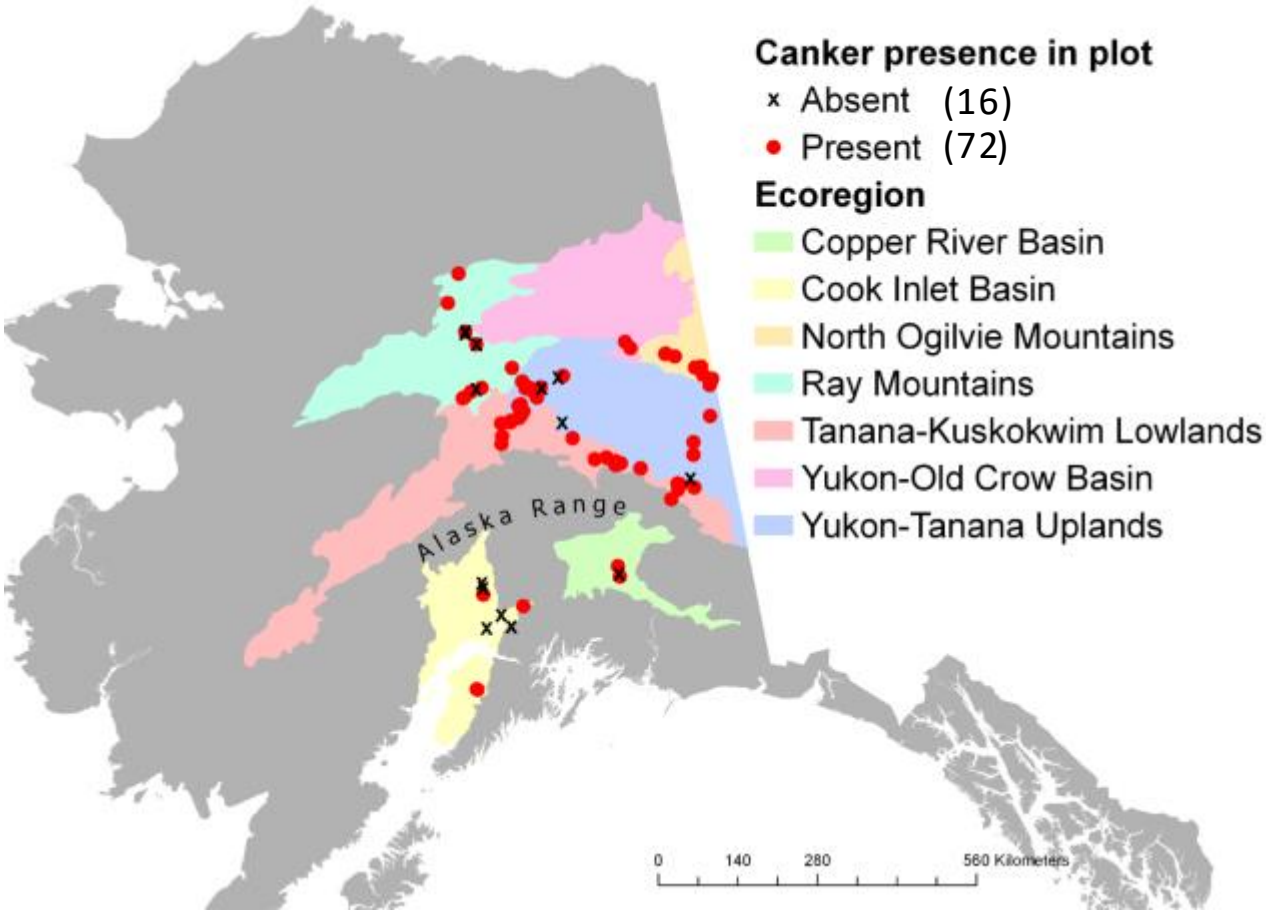
Remarks: Disease incidence is higher (up to 64%) on smaller diameter trees in older stands. In contrast, young stands (less than about 20 years old) have little to no disease. The causal agent of this disease has not yet been identified.




margin on
9/20/2019
traced with
wax pencil
margin on
9/23/2019

Scraping away outer bark clearly reveals margin

Aspen running canker permanent plot inventory (2015 – 2018)

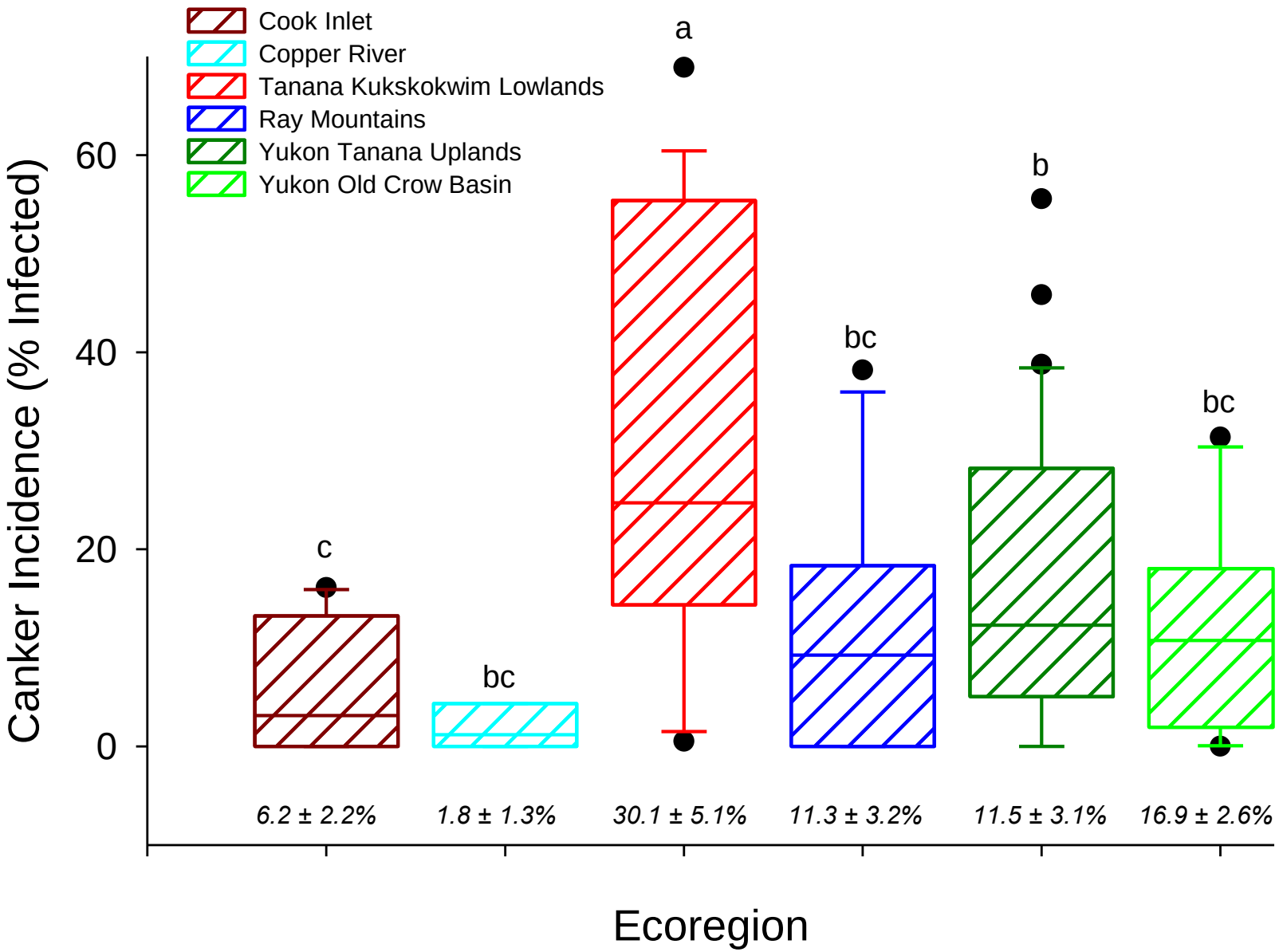


18,035 trees

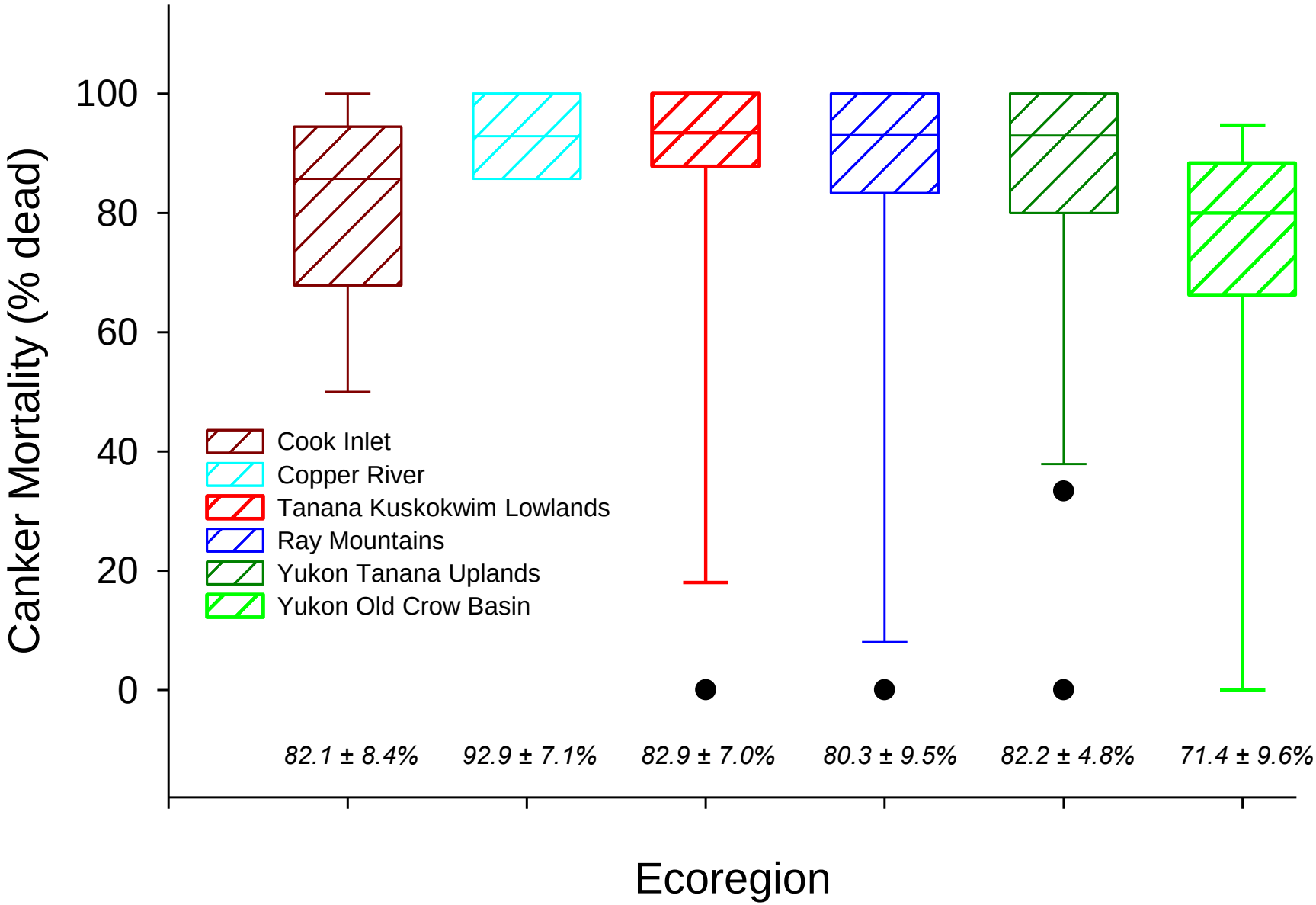
88 sites

6 Ecoregions

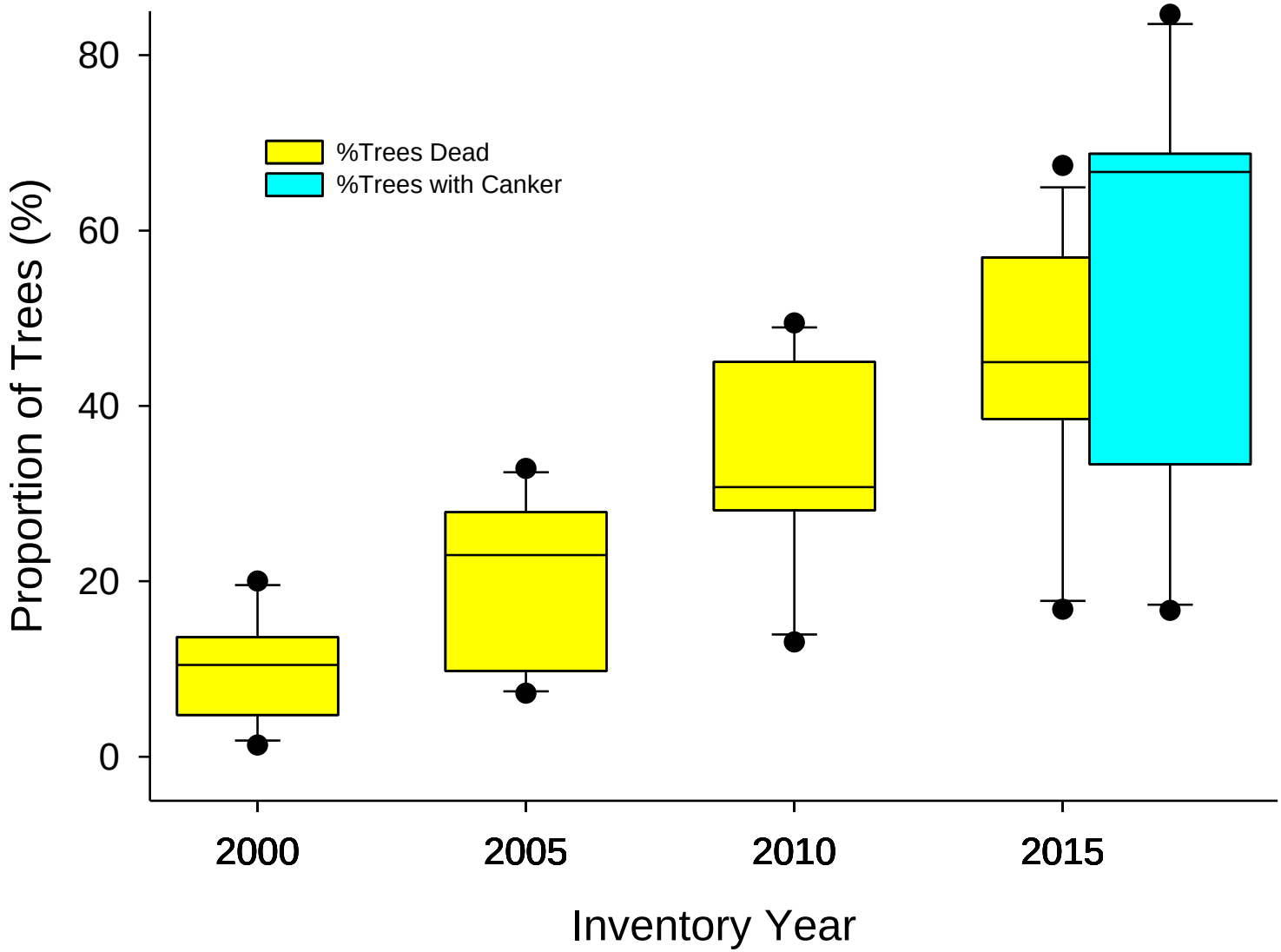
Canker incidence across ecoregions



Mortality of trees with canker across ecoregions



Mortality of trees at 12 sites over 15 years



Determining the causal agent

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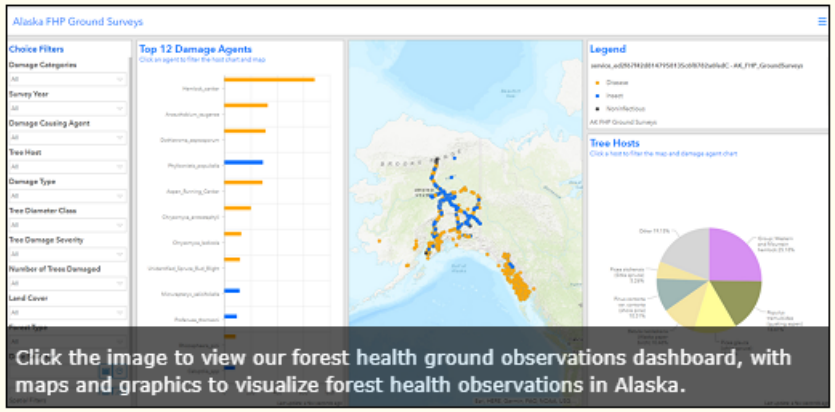

Click the image to view our forest health ground observations dashboard, with maps and graphics to visualize forest health observations in Alaska.

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Thank You