May Day, May Day...

European Bird Cherry on the Move

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Prunus



- 1. Identification and Invasiveness
- 2. Prunus is more than an urban pest
- 3. What can you do?





Prunus

May Day tree, hackberry, hagberry, chokecherry, European bird cherry...

Prunus padus - European bird cherry

Prunus virginiana - chokecherry





Identification

Tree up to 35' tall, smooth gray to brown bark





ID

Cluster of white flowers





ID

Alternate leaves

Two small glands at the base of the leaf

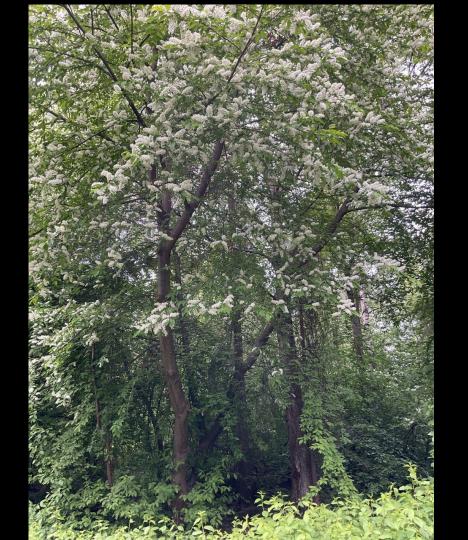




ID

Cluster of small black cherries







Origin



Why does Prunus spread quickly?

- Browsing, pruning and cutting encourages growth, including suckers
- High seed production
- High germination success (85% in controlled setting)
- Birds transport seeds



Seed viability in the seed bank likely 5 years +/-

Aggressively invades riparian habitat and natural forest

Toxicity: cyanide found in various plant parts

Ornamental Chokecherry Tree a Devil in Disguise Cyanide-poisoned Moose

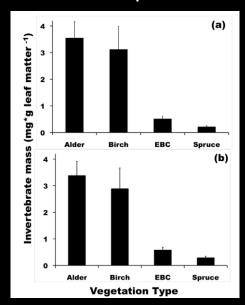
By Riley Woodford and Cathie Harms

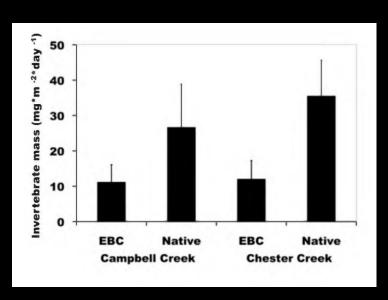


One of the victims of chokecherry poisoning.

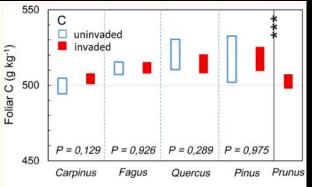
- Prunus can create dense thickets = change in plant community
 - Impacts are complex
 - Roon (2011) found lower presence of terrestrial invertebrates on

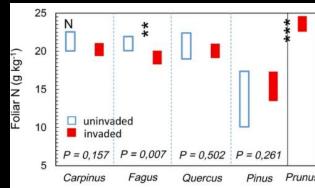
Prunus

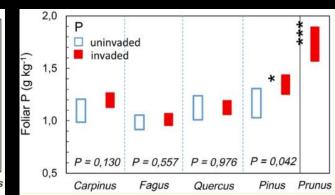




- Prunus can create dense thickets = change in plant community
 - Impacts are complex
 - Aerts et al. (2017) found that the presence of invasive *Prunus* decreased the foliar nutrient contents of co-occurring native trees species

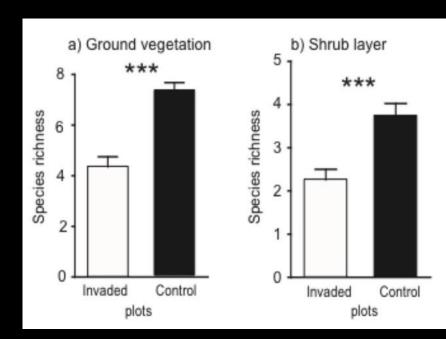




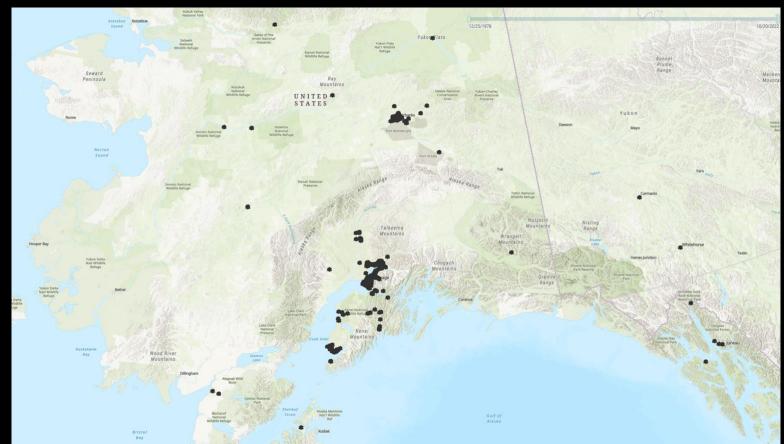


- Prunus can create dense thickets = change in plant community
 - Impacts are complex
 - Rusterholtz et al. (2018) found that the number of species decreased with Prunus present and that soil carbon was being moved through the ecosystem more rapidly,

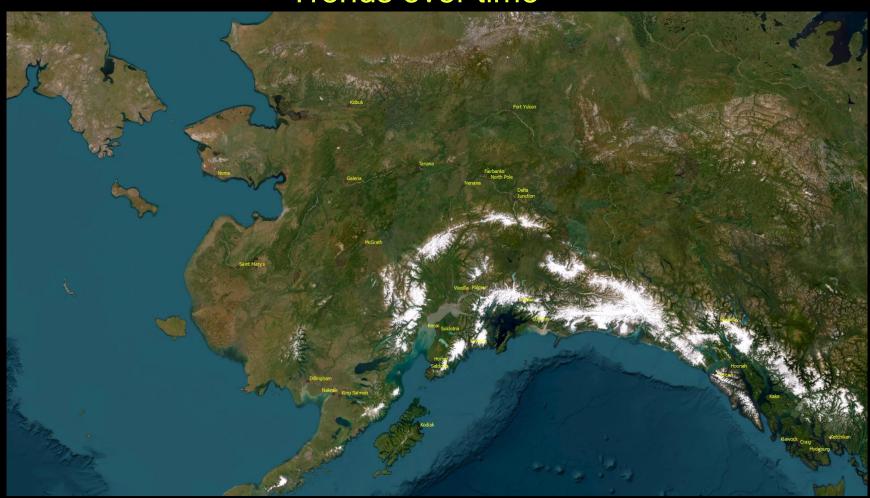
A loss of biodiversity decreases ecosystem resilience

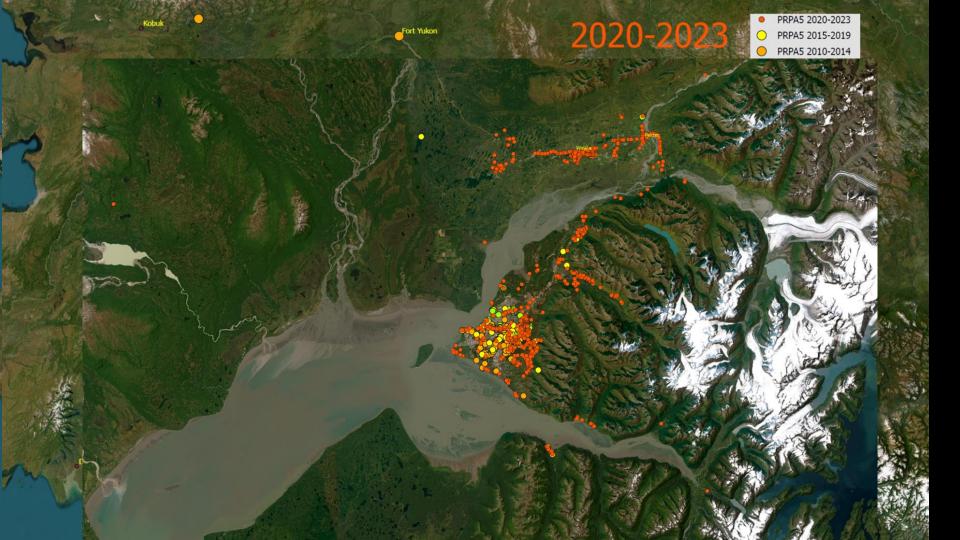


Where have you seen this tree?



Trends over time





Anch CISMA

Cooperative

Invasive

Species

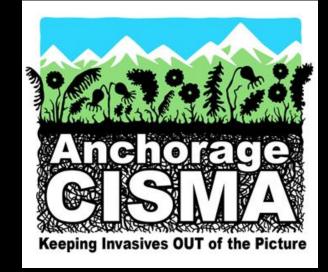
Management

Area























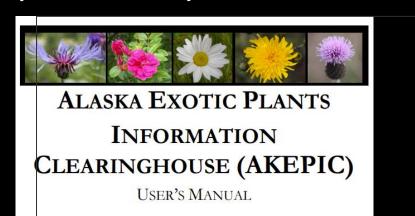




Survey methods

 Palmer SWCD: surveyed roads, stopping every 0.25 miles to record invasive plants

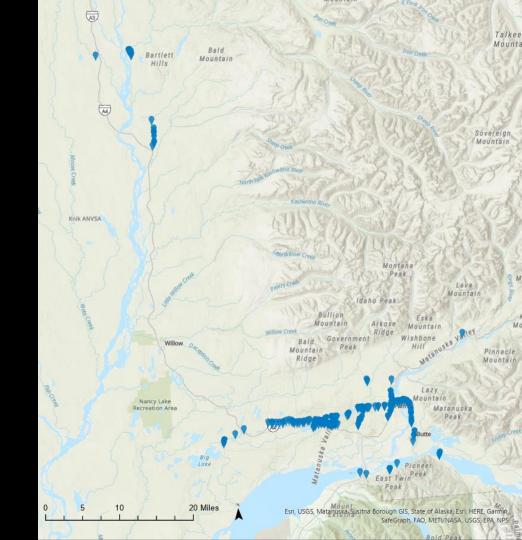
- Anchorage SWCD:
 - Citizen science, systematic surveys of creeksides



Results

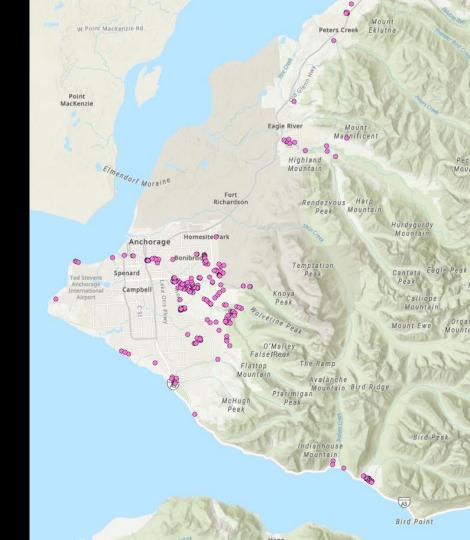
Palmer

219 documented locations



Results

- Anchorage -
 - 45 new locations within Chugach
 State Park
 - Many urban locations

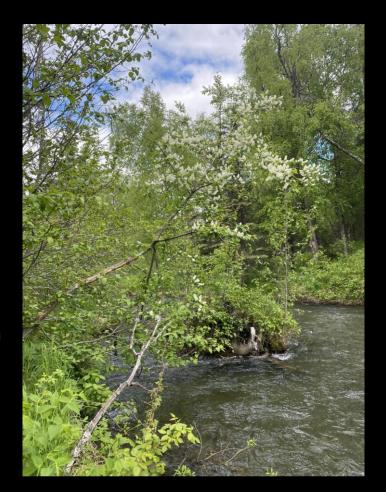


Control Work Anchorage CISMA

Pursue all angles at once -

- treatments of mother trees in parks
- removal of trees on creeksides
- outreach to landowners

Feral *Prunus* is present along majority of creeks in Anchorage, lots of potential habitat exists in the Mat Su Valley



Control work Kenai Peninsula CISMA

Removal of Prunus... in Homer, Soldotna, and Coopers Landing

- Focusing on "Mother Trees"
- Pulling saplings





Control

Mechanical - can be effective, can require much effort and follow up over time

Chemical (Herbicide)

Frill

Cut stump

Injection

Foliar



Pull, bag and revisit...

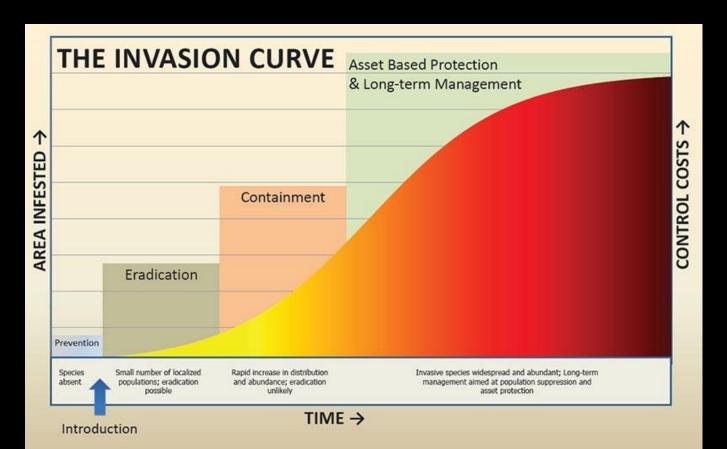
If less than 3" diameter...

- Pull trees
- Around 5 years until fruit
- Get as much root as possible

Revisit! Trees will resprout



What Can You Do?



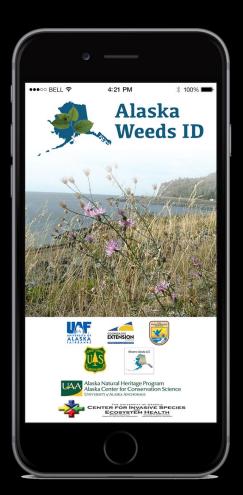
You Can REPORT!

AK Invasives ID app

<u>IPM – Public Submission Form – AkPestreporter (mybluehost.me)</u>

EDDmapS

Alaska Invasive Species Partnership



Action...

- Include Prunus removal in riparian restoration projects
- Spread the word to landowners to remove Prunus

While Hiking, Hunting, Fishing -

Report rogue trees!

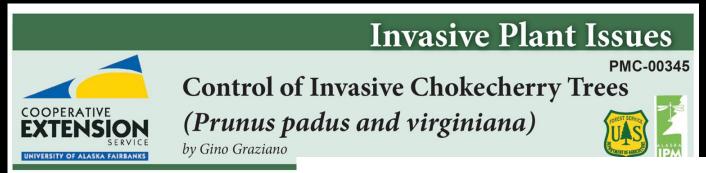
Prunus virginiana found 10 miles from boat launch on Little Su



Resources

Control of Invasive Chokecherry Trees - Cooperative Extension Service https://cespubs.uaf.edu/index.php/download_file/1544/

Chokecherry FAQ's http://anchorageswcd.org/Chokecherry%20FAQ.pdf



Frequently Asked Questions for property owners regarding removal of *Prunus padus* and *Prunus virginiana* trees

Thank you!



