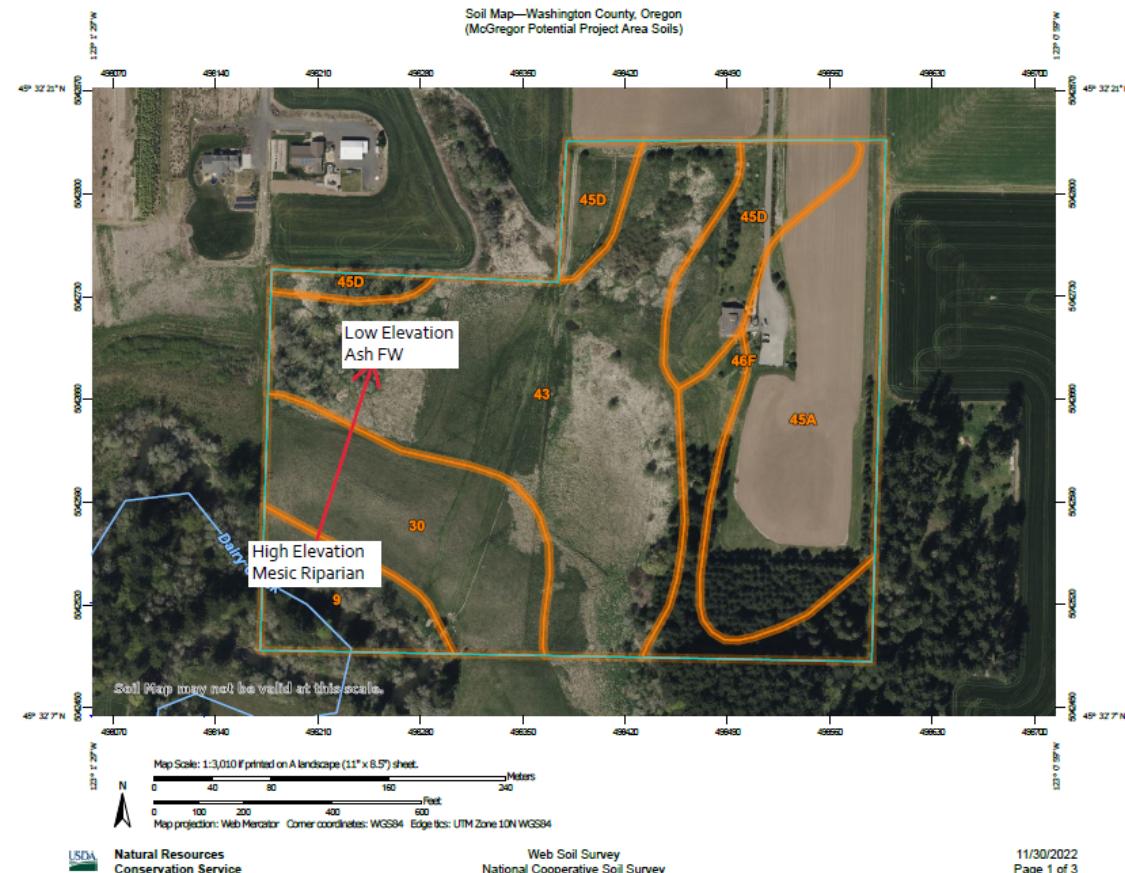


Ash Inventory Project Update

David Showalter
Feb. 9, 2023

Stand Characterization

- Stands need to be defined
 - Area with relatively homogeneous composition
 - Management unit
 - **Hydrology**
 - Datasheet created



Soil mottling as indicator for hydrology

- ~2ft pit should be sufficient
- Would not expect Oregon oaks in areas where mottling <4in (Prive)
- Needs method refinement and pictoral guide



Stand Characterization Datasheet

- Will need to provide instruction for selecting sampling locations to define relevant hydrological boundaries

Survey Date

Stand Characterization Survey

1/1

Inventory Plot Design

- Recommending 3 plots per stand

USDA United States Department of Agriculture

Monitoring Ash (*Fraxinus spp.*)
Decline and Emerald Ash Borer
(*Agrilus planipennis*) Symptoms in
Infested Areas

Kathleen S. Knight
Britton P. Flash
Rachel H. Kappler

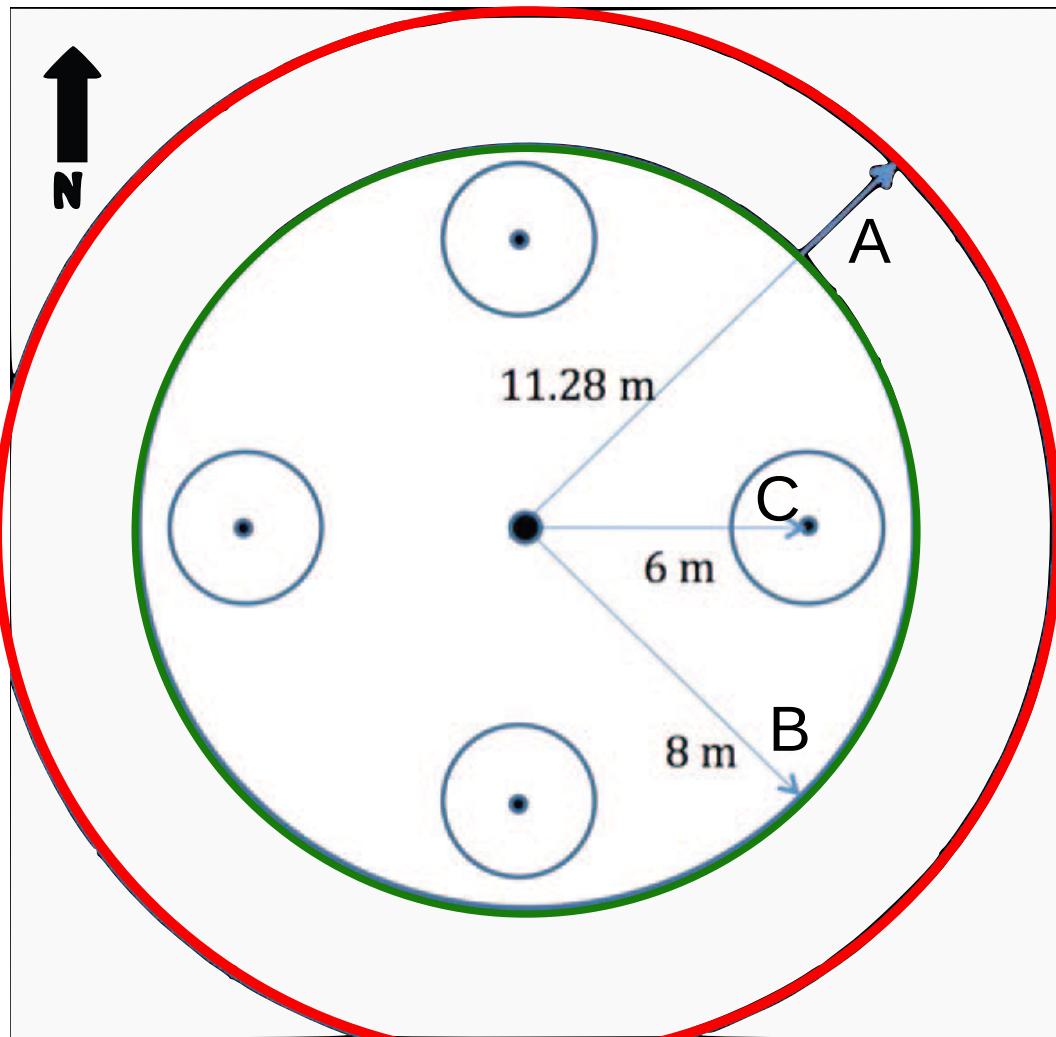
Joel A. Throckmorton
Bernadette Grafton
Charles E. Flower



Forest Service Northern Research Station General Technical Report NRS-139 September 2014

Nested plots

- A Large trees
- B Medium
- C Seedlings



Tree inventory (large and medium)

Survey Date

Stand Inventory Survey

Seedling/ sapling inventory

Survey Date:

Stand Seedling Survey

1/1

Stand Characterization Survey	
Field	Description
Stand ID/ Name	unique name or number for stand
Location	Latitude and longitude or other location indicator
Canopy spp.	Tree species present as part of the canopy. See below for abbreviations
Understory spp.	Woody species present in the understory, either seedlings or bushes. See below for abbreviations.
Ash canopy %	Percentage of canopy composed of ash. Coarse estimate e.g. 0-25%, 25-50%, 50-75%, 75-100%.
Ash understory %	Percentage of understory/ seedlings composed of ash. Coarse estimate e.g. 0-25%, 25-50%, 50-75%, 75-100%.
Soil sample #	Identifier for soil sample taken within stand
Mottle depth (in)	Depth from soil surface to mottling in inches (see mottling guide)
Canopy species codes:	BLM , Bigleaf maple; BLC , Black cottonwood; BLH , Black hawthorne; CAS , Cascara; COP , Common pear; DOF , Douglas-fir; GRF , Grand fir; ORA , Oregon ash; ORO , Oregon oak; PAW , Pacific willow; REA , Red Alder; SCW , Scouler willow; SSH , single-seed hawthorne; VPP , Valley ponderosa pine; VIM , Vine maple; WEC , Western crabapple; WRC , Western redcedar; WHA , White alder; WIL , unknown willow; ALD , unknown alder; HAW , unknown hawthorne. Codes for species not present in this list can be added.
Understory species codes	For seedlings of canopy species, use codes above. May create codes for important shrubby species on your site.
Stand Inventory Survey	
Field	Description
Stand ID/ Name	unique name or number for stand
Plot ID/ Name	unique name or number for plot within stand
Tree #	Identifying number for tree
DBH (in)	Diameter of tree at breast height in inches. Trees <4in DBH will be tallied as seedlings.
Canopy Rating (1-5)	Canopy health rating on 1-5 scale.
Seed? Y/N	Is the tree seed bearing?
Importance feature. Notes.	Features that make tree important for preservation. Size, stream bank stabilization or shading. Aesthetics. etc.
Mottle depth (in)	Depth from soil surface to mottling in inches (see mottling guide). If taking additional soil samples.
Stand Seedling Survey	
Field	Description
Stand ID/ Name	unique name or number for stand
Plot ID/ Name	unique name or number for plot within stand
Microplot (N,S,E,W)	Cardinal direction identifying seedling microplot within plot.
Ash seedling count (<4.5ft high)	Number of ash seedlings less than 4.5ft tall (breast height)
Notes	Any relevant information.

Canopy Rating



1



2



3



4



5

Next Steps

- Get boots dirty
- Soil pit testing
- WDNR permit
- Private landowner connections