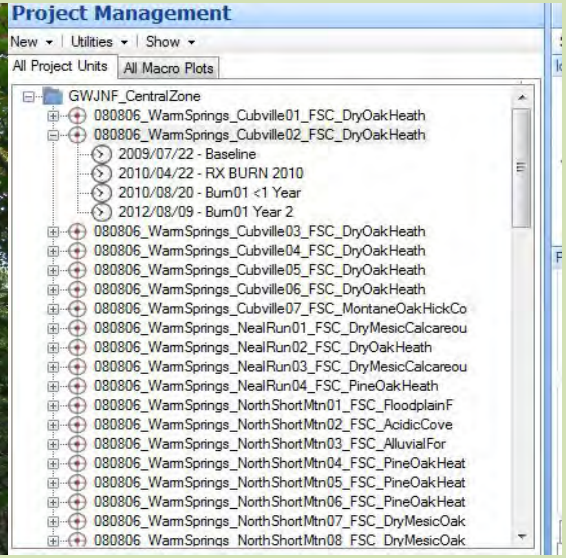
Fire Effects Monitoring Results

Nikole Simmons & Lindsey Curtin
Central Apps FLN Meeting
November 8, 2017

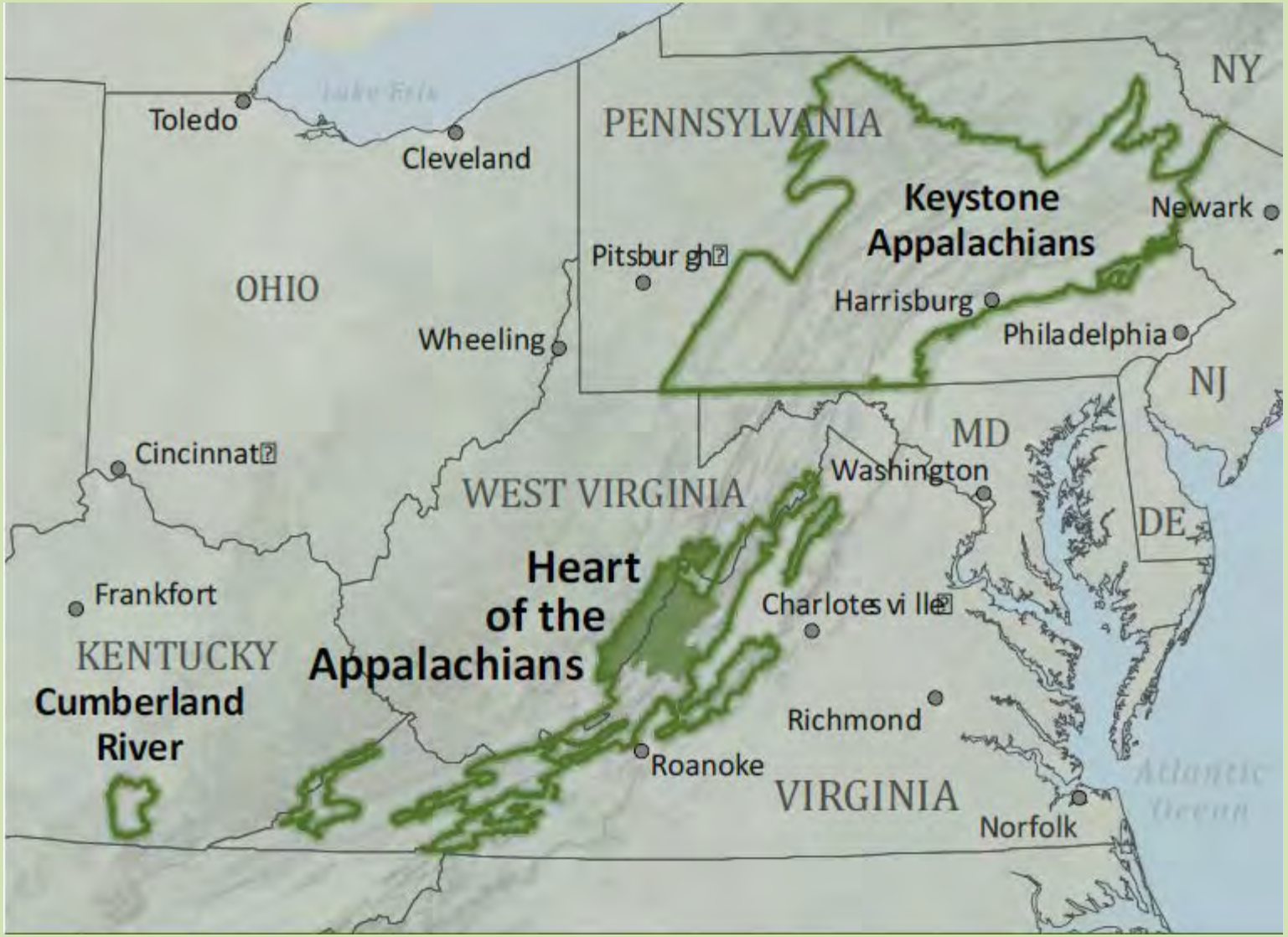
Today's Objectives

Discuss results of Forest Structure and Composition monitoring



Forest Structure and Composition

Project Area



Heart of the Appalachians FLN Monitoring Working Group

Group Coordinators: Nikole Simmons, TNC & Lindsey Curtin, USFS

Jean Lorber, TNC

John Moncure, USFS

Ron Nixon, USFS

Beth Buchanan, USFS

Tyler Urgo, VDGIF

Laurel Schablein, TNC

Lane Gibbons, NPS

Adam Christie, VA DCR NH

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George Washington and Jefferson National Forests

Virginia Department of Game & Inland Fisheries

DCR
Virginia Department of Conservation & Recreation

Forest Structure and Composition Monitoring Methods and Stats

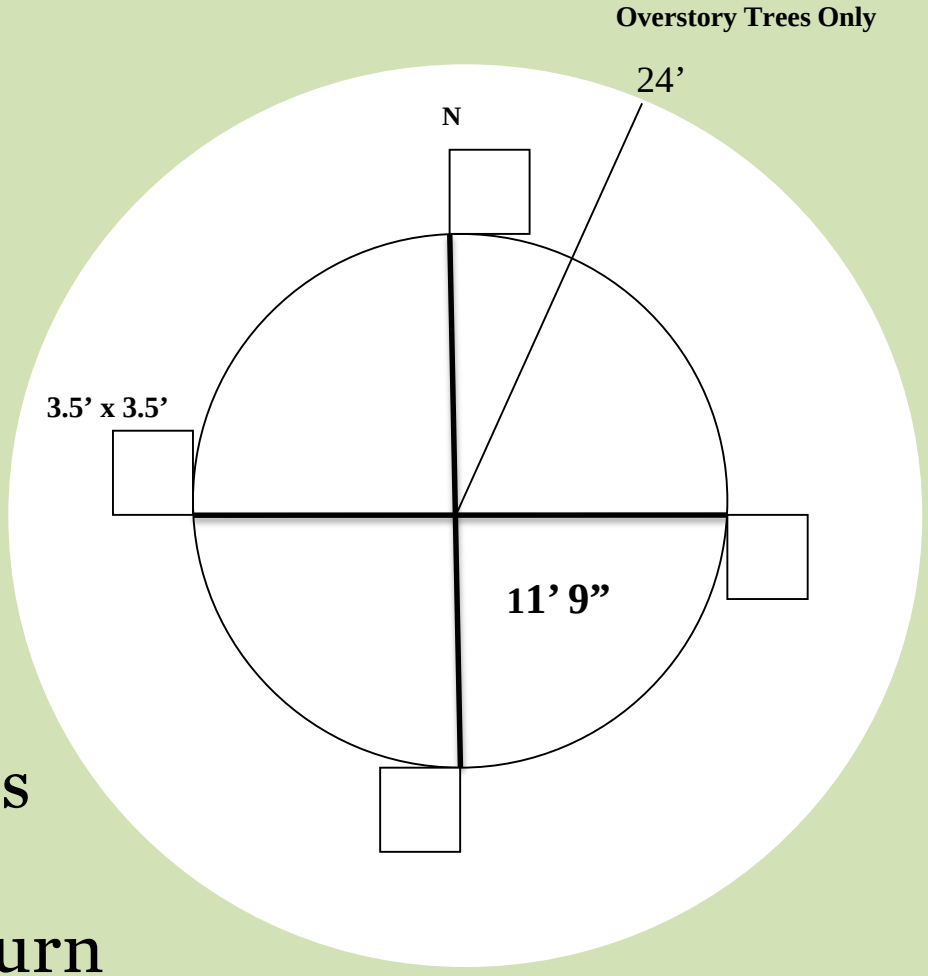
425 Plots Total

948 Plot Visits

Plots Stratified by Vegetation Type

46 burn units, 63,000 acres

Plots visited 1 year post burn and again at 5 years



Overstory Changes

Burn Plan Objectives:

Reduce overstory canopy in Oak and Pine woodlands by 5-15% each treatment.

Canopy Cover
Baseline 83%
Post Burn 68%

Basal Area
Baseline 103
Post Burn 79

Midstory Changes

Tree and Shrub stem density (1”-4” DBH) decreased by 49% after multiple burns

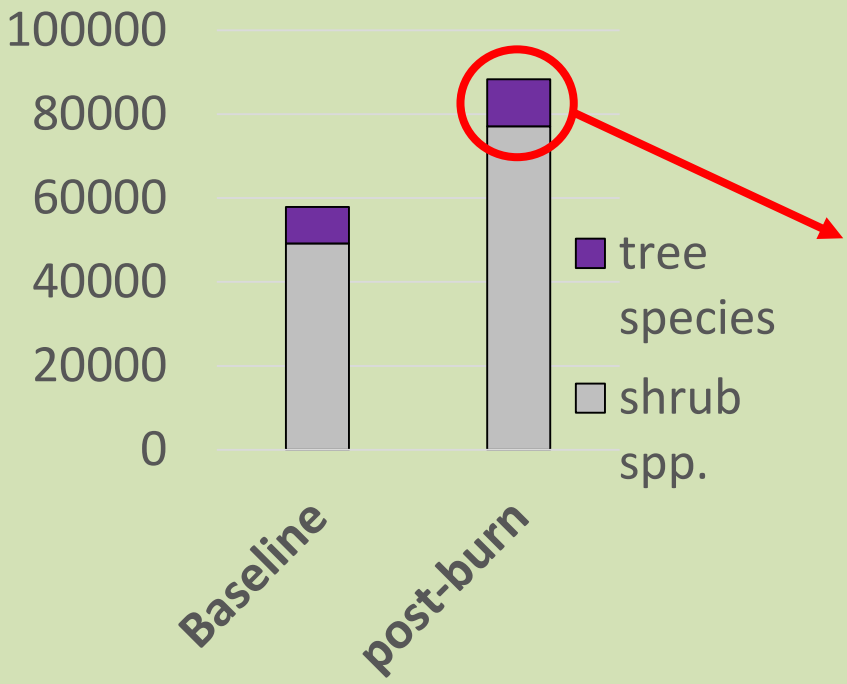
Live Woody Stems Per Acre 1-4 inch DBH	Baseline	Post Burn
All Species	80	39
Tree Species	74	32
Shrub Species	6	7

North Fork Pound Plot 01-05 Baseline

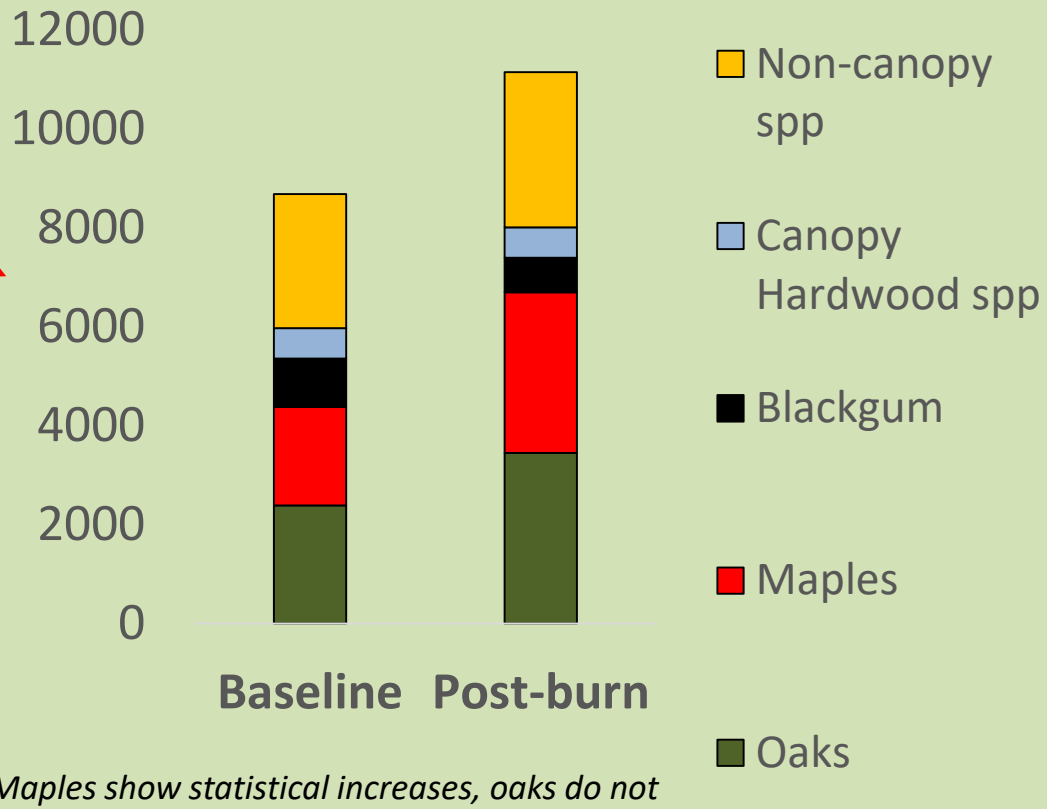
North Fork Pound Plot 01-05 Burn 1 Year 1

After multiple controlled burns

Understory



Small stems 6”-3.5’ tall



Maples show statistical increases, oaks do not

Understory Changes
Trees and Shrubs (<1” DBH <3.5” tall)

Cubville Plot 03 Burn 1 Year 1

Berries in Porters Mill Unit

Cubville Plot 03 Burn 1 Year 6

Understory Changes

Cover	Baseline	Post Burn
Forbs	4%	8%
Grasses	0.5%	3%


WSMRP Porters Mill Plot 05-01
08/02/2017
Burn 1 Year 5
North

Thank you to all who make this work possible!

Oak & Hickory Forests and Woodlands

Pine Forests, Woodlands & Savannahs