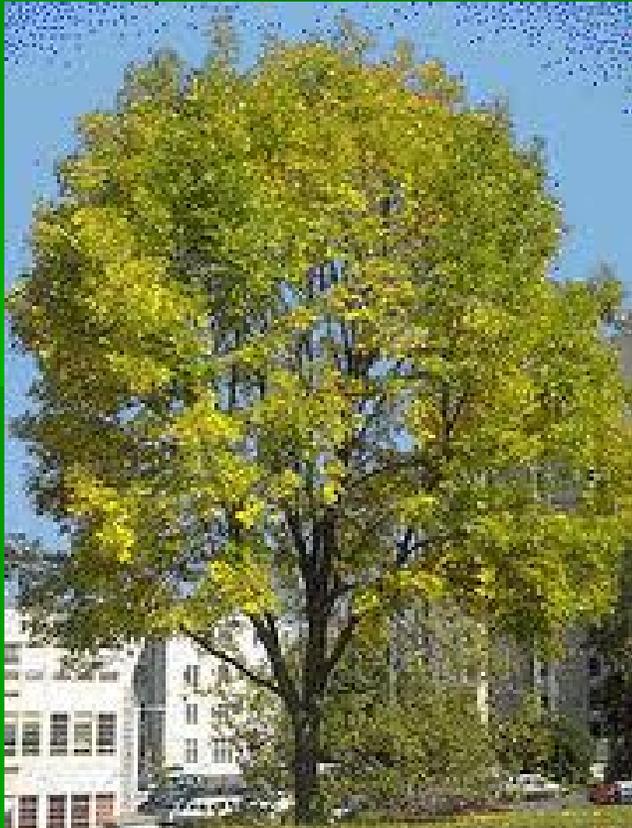


Emerald Ash Borer Workshop



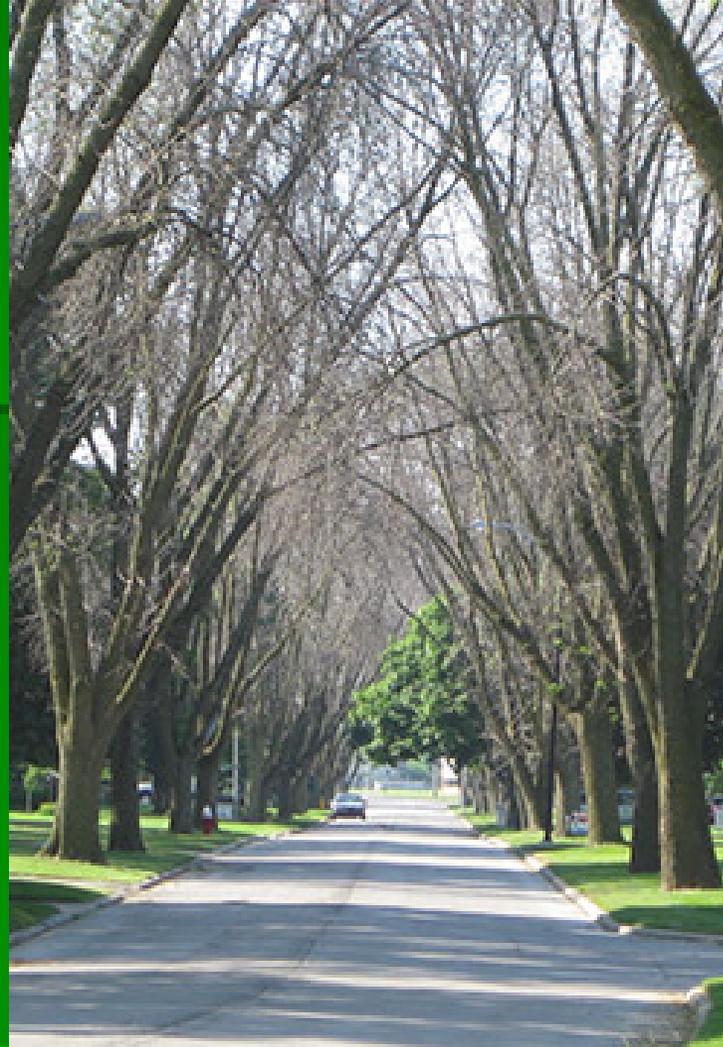
What's at Stake?



Will We Kiss Our Ash Good-Bye?

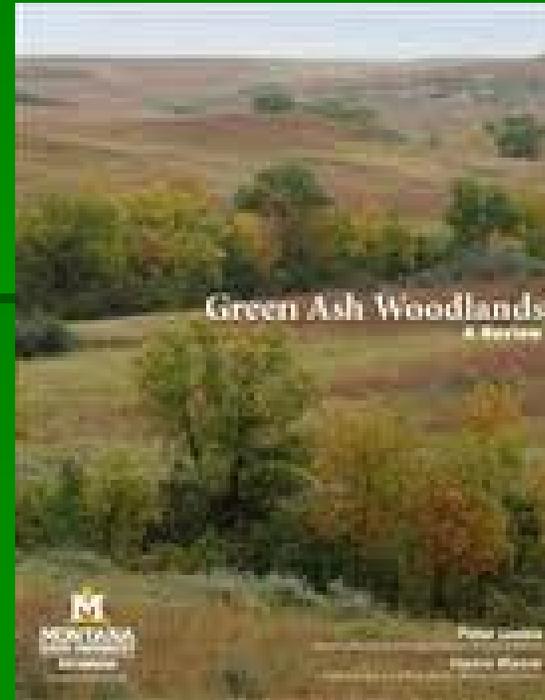
American Forests, Winter 2013

2006 Toledo, Ohio 2009



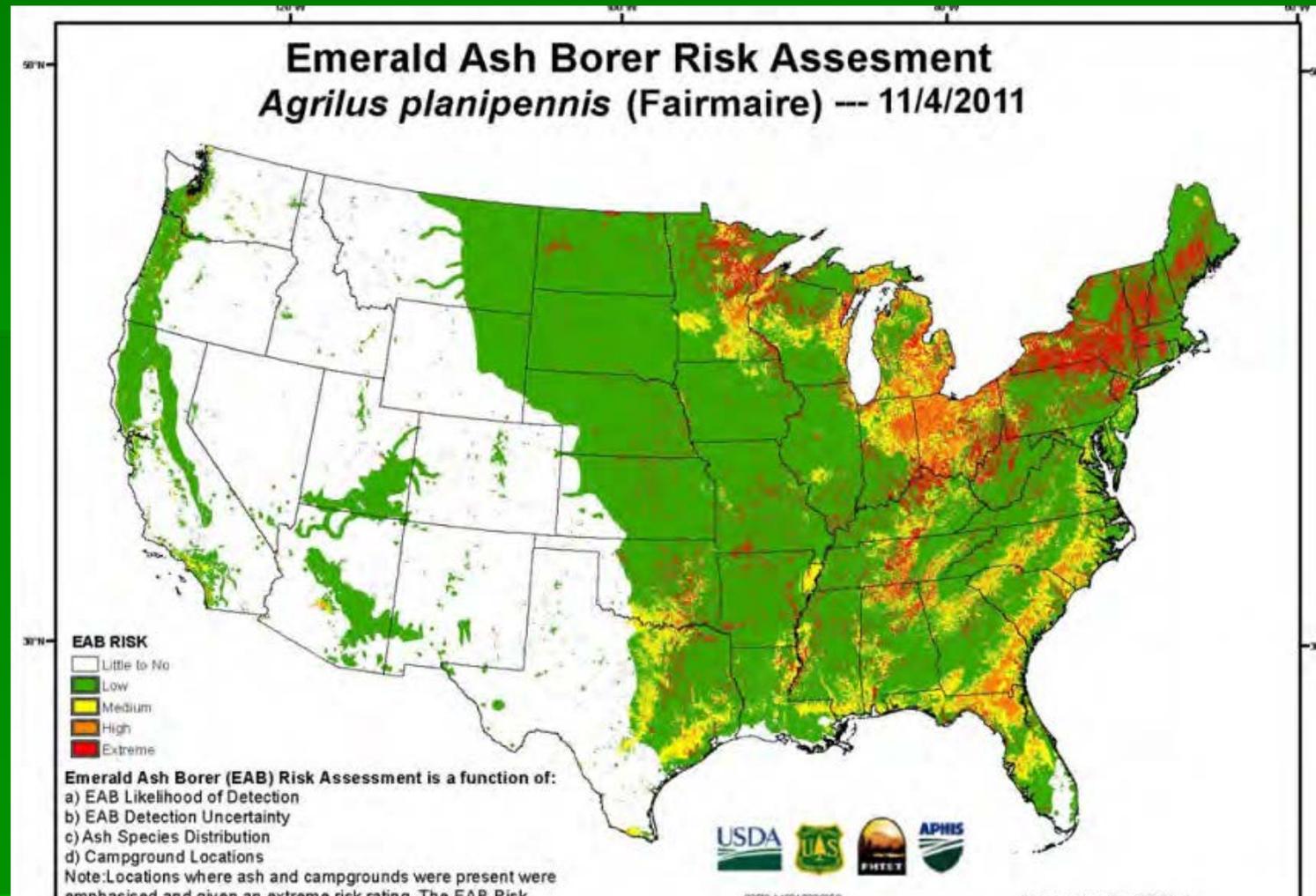
Native Green Ash in Montana

Green Ash Woodlands, Hardwood Draws, Ash Draws



Native Green Ash in Montana

Green Ash Woodlands, Hardwood Draws, Ash Draws



Native Green Ash in Montana

Green Ash Woodlands, Hardwood Draws, Ash Draws

- Western edge of native green ash range
- Occur on 1-4% of eastern MT landscape
- Ash share draws with American elm, some boxelder, and up to 8 shrubs
- Important wildlife habitat
- Provide economic benefits to livestock growers and rural communities
- Canopy cover averages 42-45%

Native Green Ash in Montana

Green Ash Woodlands, Hardwood Draws,
Ash Draws

- American elm dying from Dutch elm disease
- Boxelder is intolerant of shade
- If green ash dies, sites will be susceptible to invasion by Russian olive, buckthorn, and other invasive woody species
- Result: Less native canopy, wildlife habitat, and livestock cover
- Result: Less environmental services (stormwater and erosion control, etc.)

Urban Green Ash in Montana

- Planted extensively in urban settings in Montana
- Increased in importance as American elm died from Dutch elm disease
- Major component of urban forest canopy on public and private property (10-80+%)
- Has volunteered on adjacent areas from seed which has increased its urban presence

Urban Green Ash in Montana

- Planted extensively in urban settings in Montana
- Increased in importance as American elm died from Dutch elm disease
- Major component of urban forest canopy on public and private property
- Has volunteered on adjacent areas from seed which has increased its urban impacts
- Major provider of environmental services in our cities

Urban Green Ash in Montana

- Results: Major costs to treat, remove, and replace ash
- Results: Loss of canopy and environmental services

Urban Green Ash in Montana

Estimated Cost to MT Communities in
3-10 year period after EAB Introduction

Community	# of Ash Trees	Low Estimate
Bozeman (1995)	43,800	\$19,710,000
Billings (2009)	16,000 city owned	\$7,200,000
Missoula (2009)	15,900	\$7,155,000
Helena (2011)	5,621 city owned	\$2,529,450
Great Falls (2009)	42,000	\$18,900,000
Forsyth (2008)	188	\$84,600
Glendive (2004)	925	\$416,250
Red Lodge (2008)	201	\$90,450
Roundup (1989)	1,264	\$568,800
Livingston (2014)	1,770 city owned	\$796,500
Sidney (2013)	632 city owned	\$284,400
Lewistown (2102)	1685 city owned	\$758,250
Total	129,986	\$58,493,700



Urban Green Ash in Montana

- Costs using i-Tree Trunk Formula

• Community	% Ash	Replacement Value
• Livingston 2014	46%	\$6,899,000
• Sidney 2013	10%	\$1,513,198
• Lewistown 2012	54%	\$5,700,000

