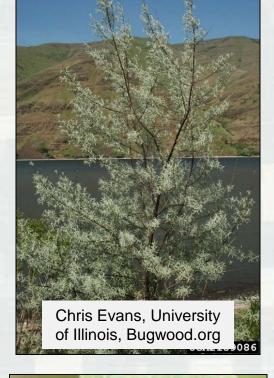
Terrestrial Invasive Species



Terrestrial Invasive Species











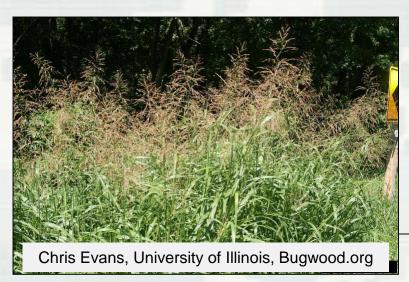




Invasive Grasses



Johnson Grass – Sorghum halepense



Cogongrass - Imperata cylindrica



Invasive Grasses

Spread from rhizomes, seeds and equipment Difficult to control (mechanical/chemical)



Invasive Shrubs

- Multiflora rose Rosa multiflora
- Salt Cedar Tamarix spp.



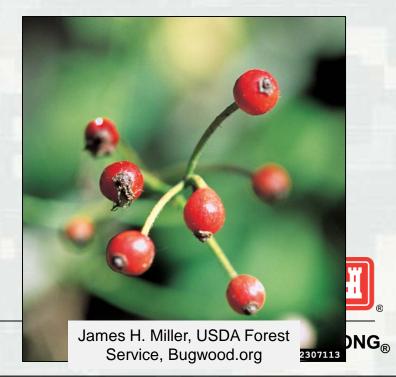
Leslie J. Mehrhoff, University of Connecticut, Bugwood.org



Invasive Shrubs

- ► Spreads from seeds (wind, animal dispersed)
- ► Resprouts from roots
- ► Control can be achieved with mechanical or chemical techniques, but resprouts and new germination requires monitoring





Invasive Trees

Russian olive – Elaeagnus angustifolia



Chinese tallow – *Triadica sebifera*



Park Service, Bugwood.org



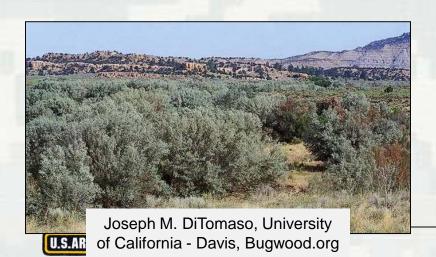
Invasive Trees

► Long distance spread by birds

- Steve Dewey, Utah State University, Bugwood.org
- ► Alters structure & function of ecosystems
- ► Control with mechanical, chemical and potentially biological

Greater lag time between germination and

reproduction





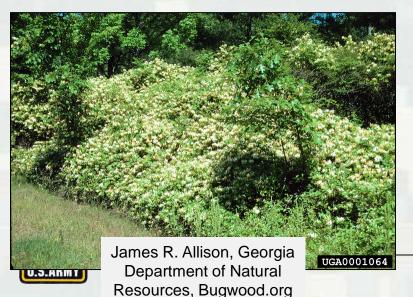
James H. Miller, USDA Forest Service, Bugwood.org



Invasive Vines



Japanese honeysuckle – Lonicera japonica





Kudzu – Pueraria montana



Invasive Vines

- ► Aggressive growth smothers other plants
- ► Roots from nodes
- ▶ Difficult to control (biocontrol goats)



Mammals

- Feral hogs
 - ▶ Create disturbance that facilitates invasive plant establishment
 - ► Erosion issues
 - ▶ Destroy crops and native plants





Invasive Insects

Emerald Ash Borer



Leah Bauer, USDA Forest Service Northern Research Station, Bugwood.org

Redbay Ambrosia Beetle



Michael C. Thomas, Florida
Department of Agriculture and
Consumer Services, Bugwood.org



Invasive Insects

- ▶ Devastating impacts to forests
- No effective landscape scale controls
- ► Key is to prevent spread

Damage from emerald ash borer



Damage from redbay ambrosia beetle



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Questions?



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