The Challenges of Controlling Invasive Exotic Plants in Forests

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Outline

- Invasive Exotic Plant Species, what they are, associated problems
- Current methods of control
- Challenges associated with control
- Future outlook

Exotic Invasive Plants?

- Non-native plants that out-compete native vegetation
- Have the ability to thrive and spread aggressively outside natural range
- Lack of any native biological control (insects, diseases, foraging animals)
Problems

- Decrease biodiversity
- Detrimental to some wildlife
- Cause economic damage to humans
Problems

Methods of Control

- Prevention
- Mechanical
- Chemical
- Biological
Prevention

- Stopping it before it starts
- Washing equipment
- Using clean seed, mulch, soil, etc.
- Killing plants before they become established
- Can be very difficult

Mechanical

- Pulling weeds
- Mowing/cutting
- Burning
- Can be expensive for large areas

Chemical

- Herbicides
- Effective
- Good for large infestations
- Economical
Biological

- Not used very often
- Can cause new exotics to be introduced
- Not always effective
- Expensive to develop
- Slow to work

Why are they so hard to Control?

Plant Side

- The nature of the plant
  - High plasticity
  - Aggressive
  - Rapid growth
- Seeds
  - dispersal
  - seedbed

Human Side

- Lack of knowledge
- Failure to care
- Neighbors
- MONEY

Ah jeez...
Future outlook

- Exotics are here to stay
- Best case scenario = suppression

Sources

- The United States National Arboretum
- Plant Conservation Alliance’s Alien Plant Working Group
  http://www.nps.gov/plants/ALIEN/fact/hehe1.htm