Reforestation

- Most often the best option to overcome deforestation and offset soil degradation
- May take 4-5 years to produce sufficient litter to protect soil surface
- Generally, Reforested areas do not provide the same ecosystem functions as did the original forest
- This is particularly true for Plantations

Afforestation

- Planting trees in areas that did NOT previously support trees
- May be useful on degraded or abandoned Ag lands
- Can occur naturally over time if fire is removed from prairie system
- May contribute to invasive species encroachment
- Will offset global deforestation (Carbon)

Prescribed Forest Fires

- Well managed fires control:
 - Vegetation density,
 - Improve distribution of species,
 - Enhance forest productivity
 - and reduce severe wildfire hazards
- Excessive burning can increase hydrophobic properties of soil and increase runoff
 - Hydrophobic properties result from "soot" coating of soil particles

Management of Cleared or degraded Forest Land

- Goals:
 - Provide ecological and environmental services
 - Reduce poverty in rural areas
- Must install Conservation Practices to prevent drastic Degradation and erosion
- No-till management is very effective (Brazil)
- Must strive to increase production instead of clearing new areas

Healthy forest program

- Voluntary program
- Established for the purpose of restoring and enhancing forest ecosystems
- Promote the recovery of threatened and endangered species
- Improve biodiversity, and
- Enhance carbon sequestration.

Healthy Forest Program

- Threatened or endangered Species targeted by this program
 - Gray Bat
 - Ozark Big-eared Bat
 - Ozark Cavefish

Practices used in Healthy Forest

Program

NRCS <u>Practices</u>



