

#### **Serving Arkansas Since 1931**

### Our Mission

The mission of the Forestry Division is to protect Arkansas's forests, and those who enjoy them, from wildland fire and natural hazards while promoting rural and urban forest health, stewardship, development, and conservation for all generations of Arkansans.





#### **Mother Nature's Forest Management**

- Whole stand replacement
  - Natural disasters
    - Weather Wind, Ice, Snow, Flood, Drought
    - Catastrophic wildfire
    - Landslide, Volcano
- Individual tree removal
  - Health issues due to competition stress
    - Insect infestations
    - Bacterial infections
    - Fungal issues





### Human Forest Management Methods

**Timber Stand Improvement** – methods used to improve the vigor, stocking composition, productivity, and quality of forests.

- Thinning and full stand replacement
- Prescribed burning
- Invasive species control
- Supplemental planting to increase diversity
- Fertilization or other soil improvements



### **Thinning Benefits**

- Remove inferior trees
  - Hazardous snags
  - Infested or diseased
  - Damaged or deformed
  - Invasive species
- Reduce competition
  - Improve residual tree vigor
  - Improve residual stand health
- Improve wildlife habitat
- Capture value and materials









#### **Benefits of Leftover Slash**

- Natural mulch effect
- Erosion prevention
- Improved water storage
- Improved nutrient cycling
- Decreased soil-air temperature
- Wildlife ecosystem support
  - Piles
  - Distributed

More Information on benefits of downed woody material here:

https://extension.psu.edu/dead-wood-for-wildlife







## Prescribed Burning Benefits

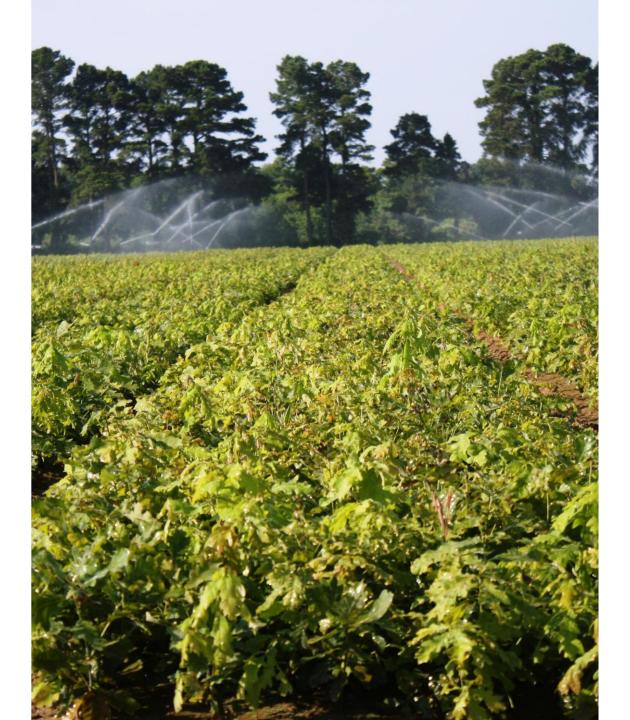
- Reduce fuel loading
- Improve quality and quantity of forage for wildlife
- Improve nutrient availability
- Improve aesthetics
- Reduced tick populations





# Supplemental Planting

- Increase species diversity
- Improve wildlife habitat
- Increase climate change resilience
- Beautification





## **Forestry Vision**

Arkansas's healthy rural and urban forests provide clean air and water, functioning ecosystems, and economic and social benefits. We are an agency of leaders in forest protection, emergency response, and forest management and we are committed to maintaining and enhancing these attributes.







**FORESTRY DIVISION** 

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