

↓ Increase Species Diversity

- More species in a stand can result in higher carbon stocks because more niches are filled
- Consider functional diversity (trees with different strategies, like conifers vs broadleaf, mid vs high shade tolerance)

Benefits

- Seeks to maximize and stabilize carbon stocks
- Promotes forest resilience
- Also associated with other ecological benefits, like biodiversity

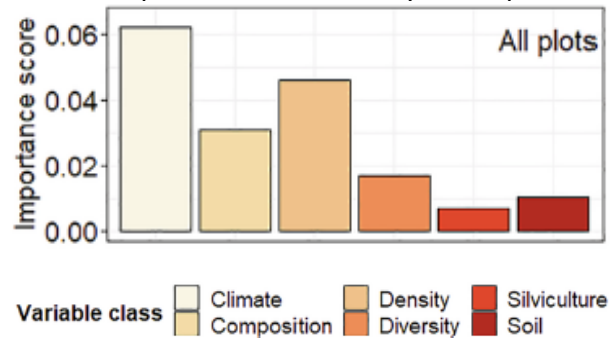
Considerations

- Initial decline of carbon stocks (emissions)
- Consider favoring future climate-adapted species
- Diversity can be vertical or horizontal

If possible, maintain conifer content in hardwood stands



Aboveground carbon is related to composition and diversity in FIA plots



Maximum AG carbon is higher in stands with higher species diversity

