

THE NATURE CONSERVANCY

BOTTOMLAND FOREST CONSERVATION INTERESTS



Jeff Marcus

NC Longleaf Restoration Director

TNC'S PRIMARY INTERESTS:

- Conservation of Biodiversity
- Protecting water quality and quantity
- Inspiration



LAND PROTECTION

- In NC TNC has protected ~275,000 acres of floodplain forest
- Focus on Roanoke River & Black River

POLICY AND RIVER MANAGEMENT

- Promote NC Clean Water Management Trust Fund
- Landmark agreement for flows on the Roanoke River
- Advocate for flows on Cape Fear River



Kerr dam on Roanoke



RESEARCH

- Collect flows and veg data on Roanoke
- Support fire and water flow study
- Support numerous research studies on TNC preserves (e.g. Dr. David Stahle's dendrochronology work on the Black River)



MANAGEMENT RECOMMENDATIONS FOR BOTTOMLAND HARDWOOD FOREST



AARON LEVINE, NCFS

- Collaboration between NC Forest Service and The Nature Conservancy
- Target audience: landowners in eastern NC w/ primary interest in wildlife, secondary interest in revenue
- Desired Future Conditions
- Demonstration project
- Funding by National Fish and Wildlife Foundation and International Paper



BOTTOMLAND DESIRED FUTURE CONDITIONS

Focal species

Songbirds



Kentucky warbler- Will Stuart

Bats



Rafinesque big ear bat-
Scott Altenbach

Herps



Marbled Salamander-
Anne Outlaw

Game species



Wild Turkey- AJH

BOTTOMLAND DESIRED FUTURE CONDITIONS

Forest Structure

- Average 60-70% canopy closure
- Emergent (supercanopy) trees
- Desirable tree species
- Large diameter trees
- Snags and hollows
- 25-40% midstory
- Regen of desirable trees- 30-40% of understory
- Coarse woody debris
- Cane and herbaceous understory
- Few invasives



BOTTOMLAND DESIRED FUTURE CONDITIONS

Desirable Tree Species

- Hard or soft mast
- Support invertebrate diversity
- Cover or nesting substrate
- Commercial value



DEMONSTRATION PROJECT

- Cape Fear bottomland on Bladen Lakes State Forest
- Patch clearcuts with feathered edges
- Pre and post-treatment data on overstory and understory