

# Habitat Restoration and Management in the Little Tennessee River Valley

Dennis Desmond

The Land Trust for the Little Tennessee

LTA Rally 2006 – Biodiversity Sessions E01 and F01  
Sunday, October 15th



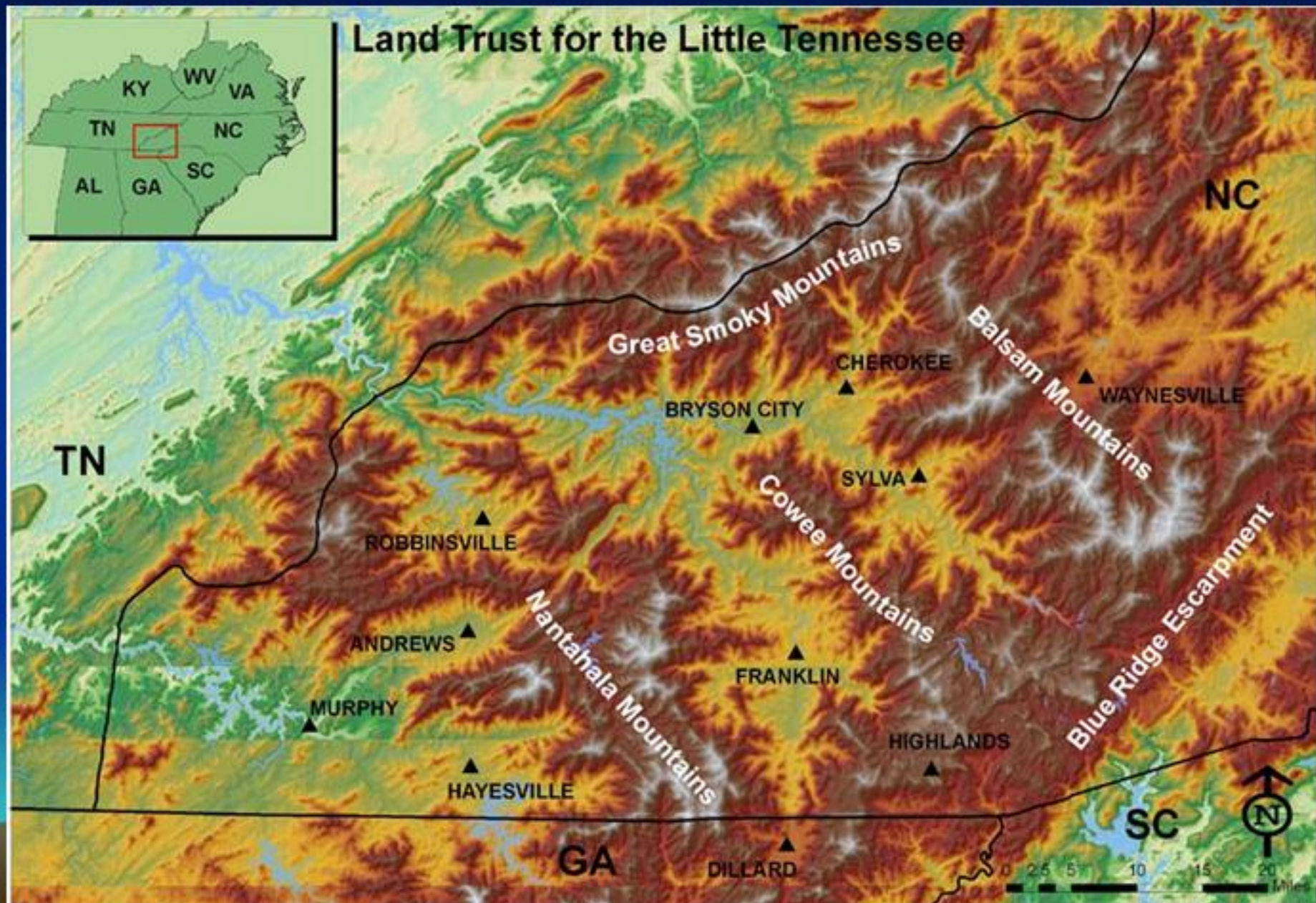
# The Land Trust for the Little Tennessee

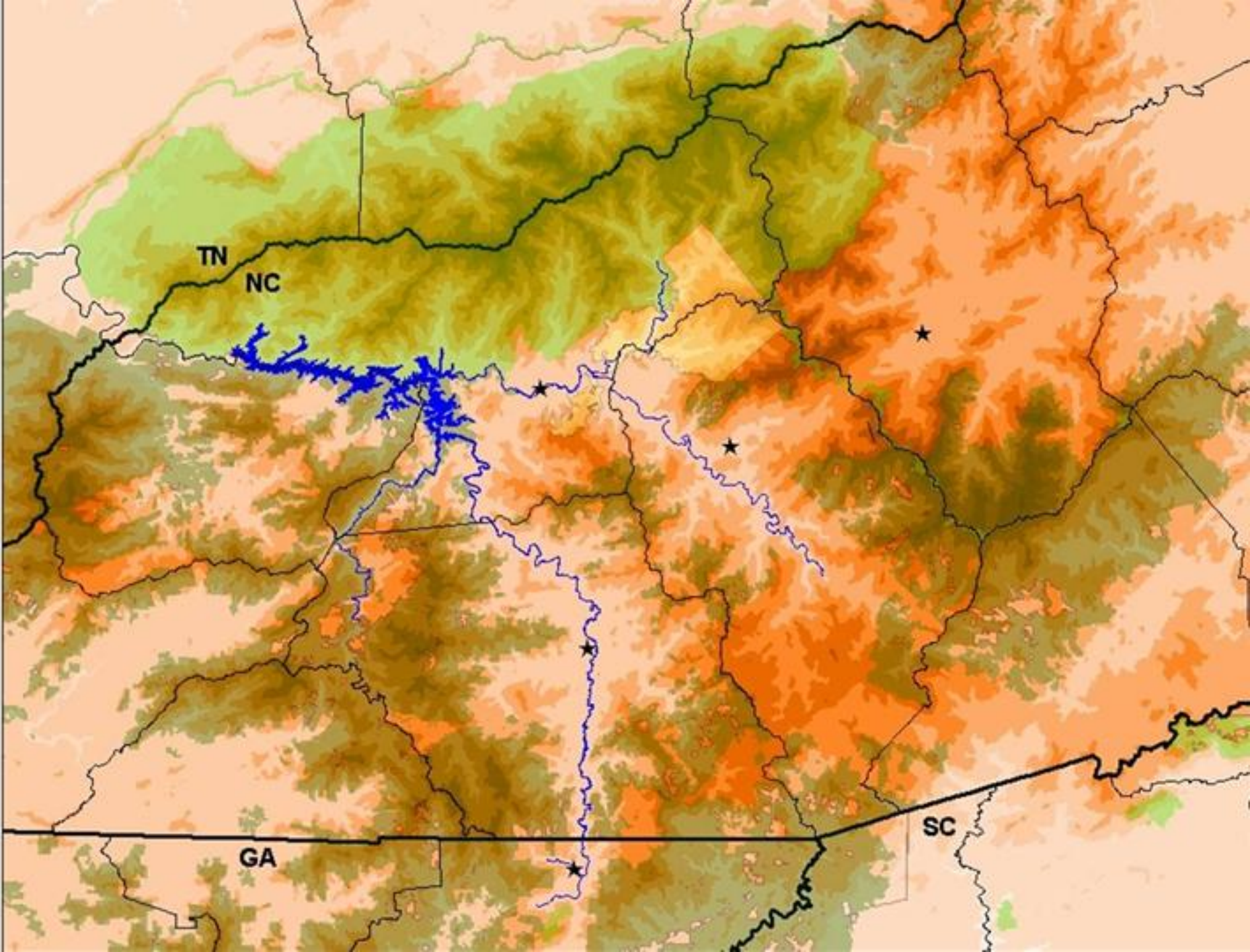


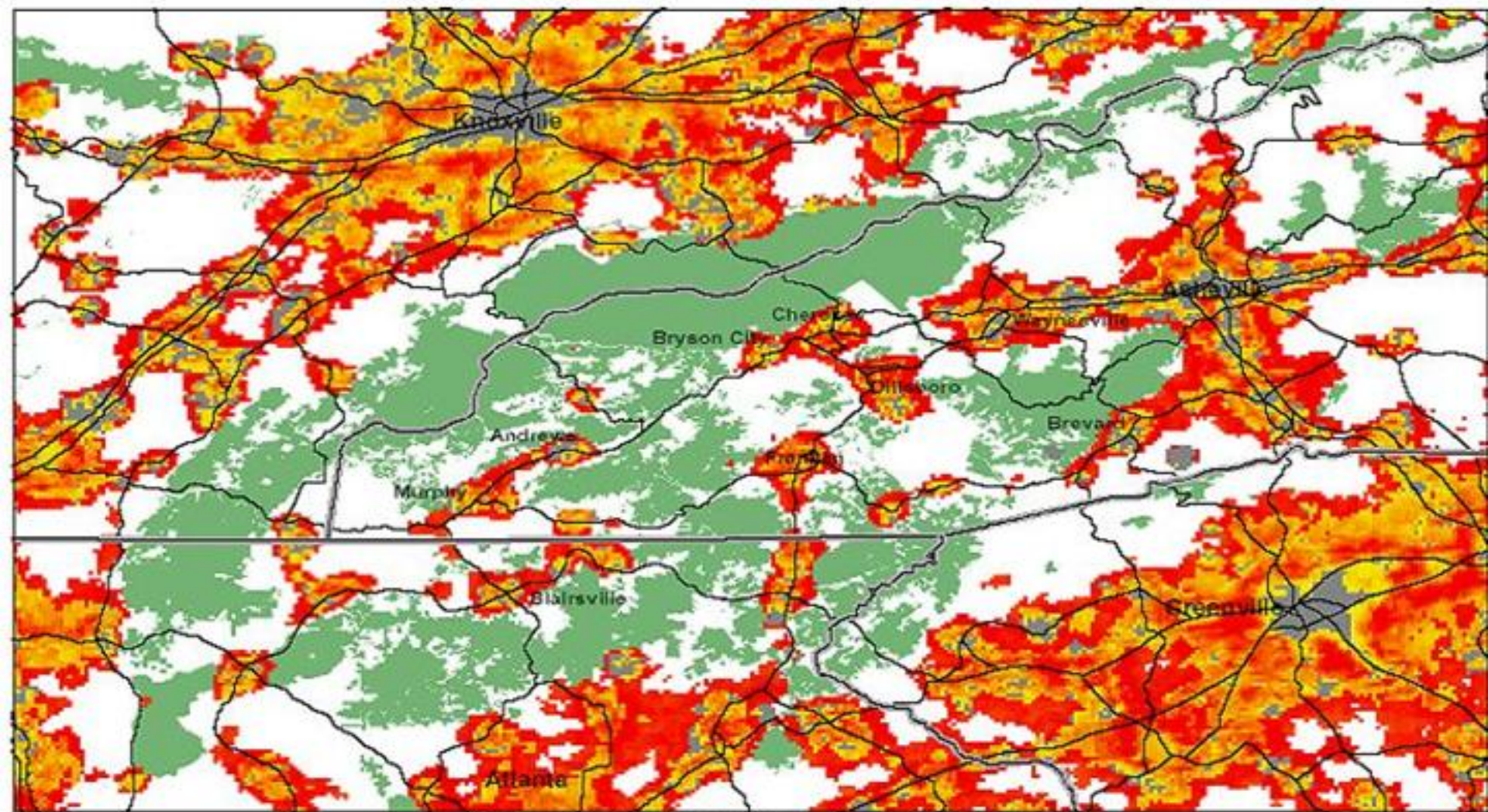
*Mission: The Land Trust for the Little Tennessee is dedicated to conserving the waters, forests, farms, and heritage of the Upper Little Tennessee and Hiwassee River Valleys.*

*Incorporated in 1997, currently 7 staff*

# Service area: far western North Carolina, 6+ counties

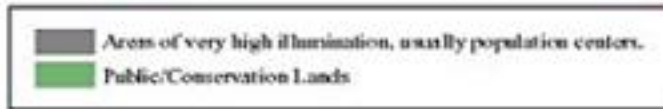
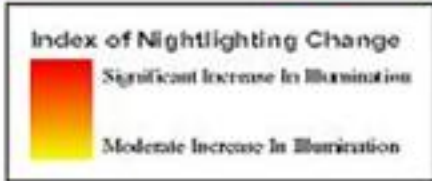






### Change In Night Lighting Intensity

**DRAFT** 1992 - 2000 **DRAFT**



This data set represents a portion of a larger national Night Lighting Change data set developed by: Dr. Chris Elvidge at NOAA in conjunction with The Doris Duke Charitable Foundation and LTC - Conservation Advisory Services.

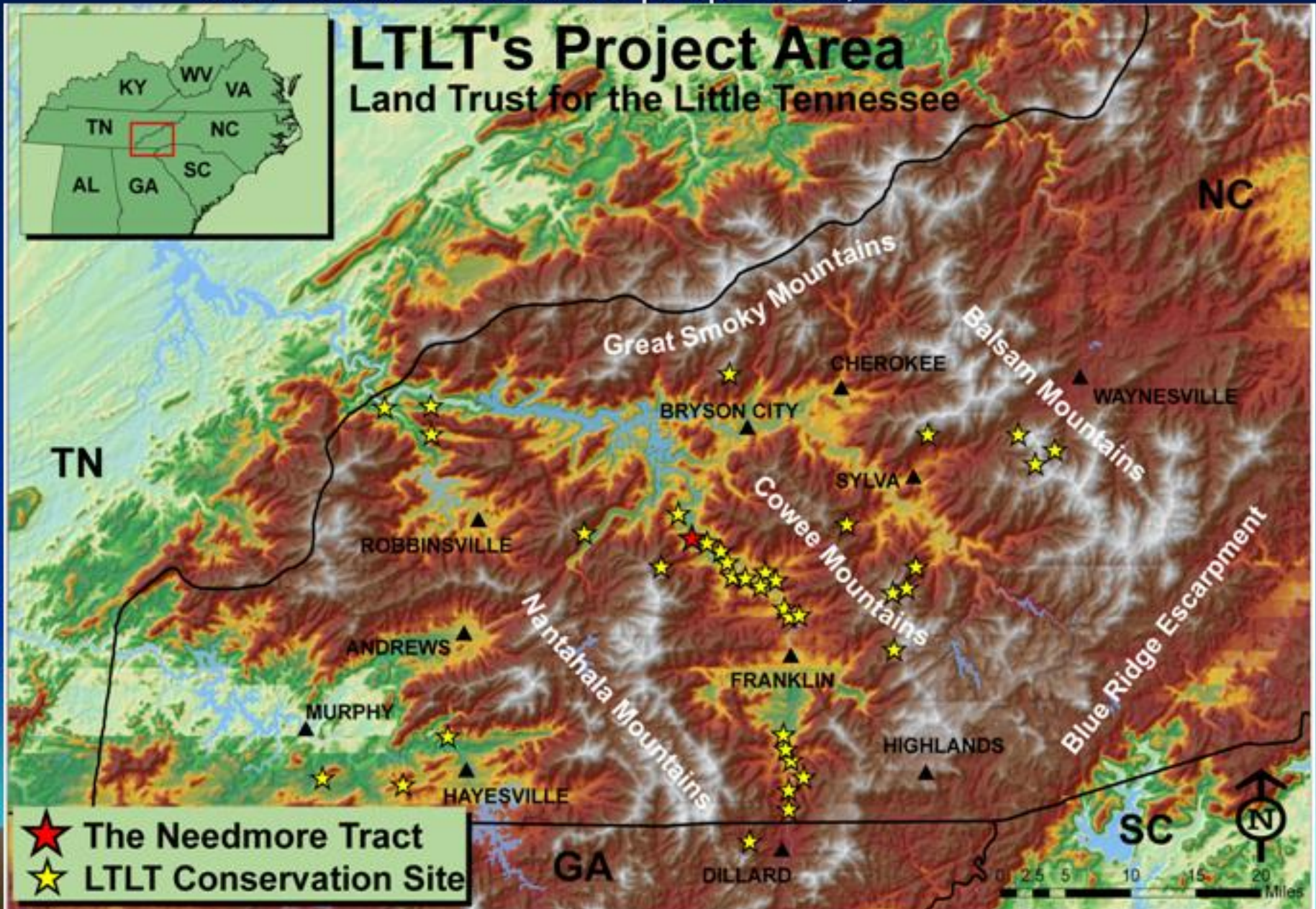


LTLT Title: 17 properties, 540 acres

LTLT Easements: 15 properties, 1700+ acres

# LTLT's Project Area

Land Trust for the Little Tennessee



# LTLT's early involvement in habitat restoration and management

- **Paul Carlson, current ED**
  - Registered consulting forester—developed clientele of forest landowners
  - Served on SWCD board—helped obtain funding for streambank restoration program
  - Relationship with forestry program of Western Carolina University



# Targeted ecological functions and biological values

- Aquatic habitat and water quality of Little Tennessee River (protect imperiled species)
  - establishment of forested riparian buffers
  - stabilization of eroding streambanks
  - in-stream restoration of tributaries





# Targeted ecological functions and biological values (cont.)

## Little Tennessee River riparian areas

- Restoration of endangered species and rare plant communities
  - montane alluvial forest
  - giant rivercane canebrakes
  - Virginia spiraea, bog turtle
- Invasive exotic plant control



# Targeted ecological functions and biological values (cont.)

Restoration & Management of Upland Forests –  
rich cove & northern hardwood forest types

- most productive, biologically & commercially
- secondary forests: high-grading, lack of management
- threats: air pollution, exotic species



# Mechanisms used with CE Landowners

- Easement language
  - Restrictive clauses: (e.g., forest management plan; riparian buffers)
  - Affirmative clauses (e.g., invasive exotic plant control)
- Restrictions tied to purchased easements
  - CWMTF: woody riparian buffers, wetland buffers
  - FRPP: NRCS conservation plan
  - Forest Legacy: forest management plan
- Demonstration sites on LTLT-owned lands
- Volunteer workdays on LTLT-owned lands
- Landowner workshops
- Subsidized services (cost share programs, WCU intern program)

# Partners

## -Soil & Water Conservation District

- riparian reforestation
- streambank stabilization
- in-stream restoration

## - Western Carolina University (intern program)

- forest management planning
- demonstration sites/practices

## - Little Tennessee Watershed Association

- landowner outreach & education



# Funding

- Forestry Project: National Forest Foundation & Doris Duke Charitable Foundation
- Valley Bottoms: U.S. Fish & Wildlife Service, National Fish & Wildlife Foundation, Cherokee Preservation Foundation



# Response

- Donors: continued, long-term funding
- NC Wildlife Federation: 2002 Governor's Award, Land Conservationist of the Year
- Membership: increasing
- Increased requests from landowners for assistance



# Challenges

- **Tree survival & growth**
  - small seedlings, vegetative competition, beavers
  - response: 2-year seedlings, planting tubes
- **Funding: Donor Fatigue**
  - Response: diversifying funding sources; reduced cost-share

