

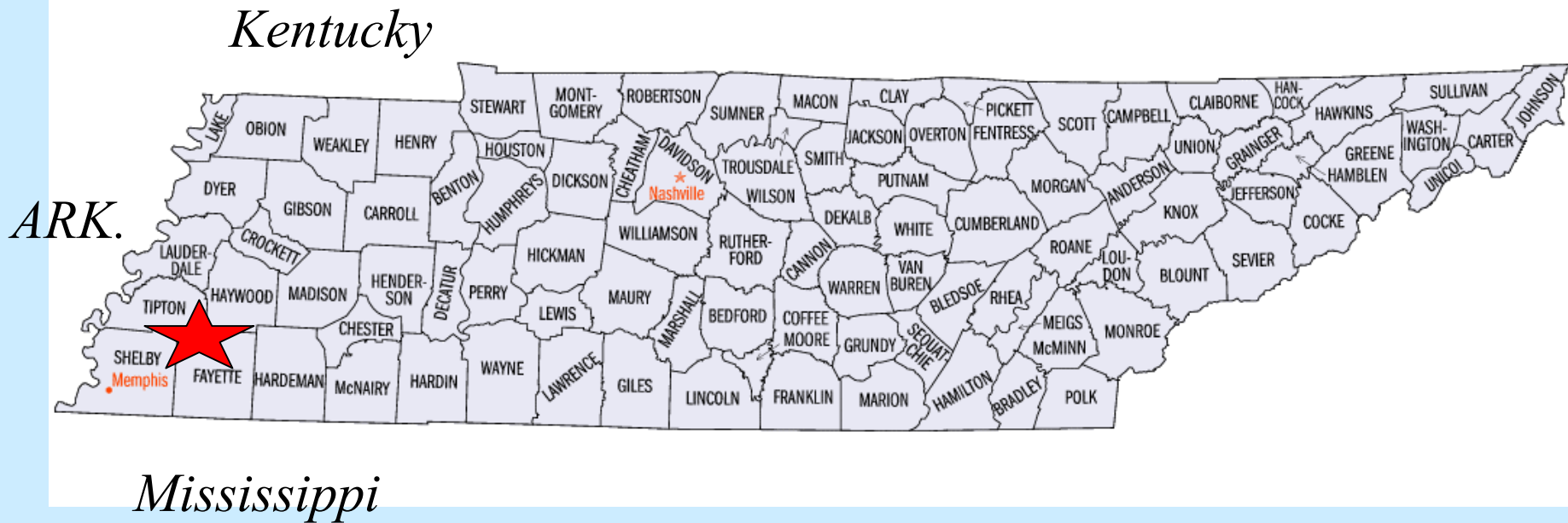


Hay Day 2003

A Water Quality Field Day

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Fayette County, Tennessee



Purpose



To provide **scientific** information needed by beef producers to implement recommended production and conservation practices to increase **sustainability** and improve **water quality**

Objectives



To demonstrate the:

1. the use of stream crossings
2. stream protection
3. use of protected heavy-use areas
4. pond management
5. pasture weed management

Cooperators



- ⌘ NRCS
- ⌘ TN Dept. of Ag.
- ⌘ Fayette County Soil Conservation District
- ⌘ UT Ag. Extension Service
- ⌘ BASF
- ⌘ Livestock Associations
- ⌘ Wayne Thomas

Target Audiences



- ⌘ Nine County Beef Producers
- ⌘ Counties' agricultural leaders
- ⌘ Those interested in water quality
- ⌘ Agents, specialist, administrators
- ⌘ Political leaders

Major Water Pollutant

**Soil
Particles
3 tons/ac
Avg.**



Rainfall Factors in TN

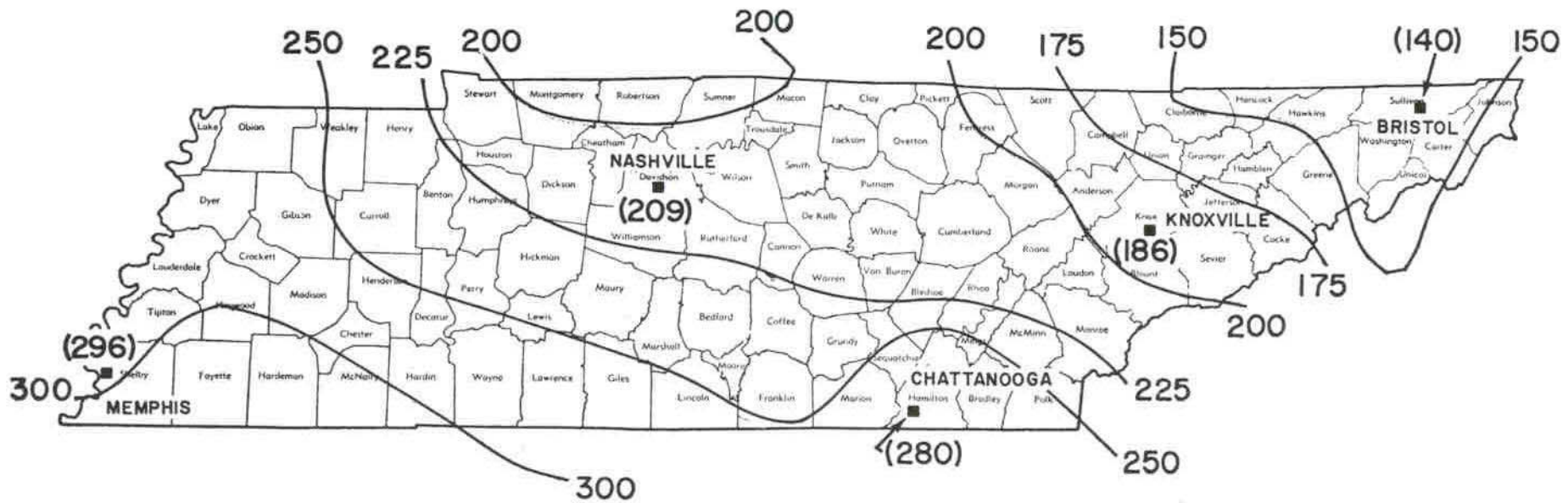


Figure 3. Values of the rainfall factor in Tennessee.

Demonstration Site

Wayne Thomas Farm



Objective 1- Stream Crossing

- ⌘ Reduces streambank damage
- ⌘ Reduces sediment loads
- ⌘ Reduces nutrient and organic loads in streams
- ⌘ Reduces pathogen loads into streams



Objective 1- Stream Crossing

Old crossing



Stream size



Objective 1 – Stream Crossing



Objective 1 – Stream Crossing



Objective 2 - Stream Protection

- ⌘ Prevents streambank erosion
 - ☑ Reduces water pollutants
 - ☑ Reduces sediment load
- ⌘ Limits livestock
 - ☑ Reduces manure in streams
 - ☑ Reduces disturbance of streambanks



Objective 2 - Stream Protection



Objective 3 – Heavy Use Area

- ⌘ Reduces erosion
- ⌘ Reduces sediment load
- ⌘ Reduces organic load
- ⌘ Benefits producer
 - ☑ Stable and safe footing
 - ☑ Convenient mud-free area



Objective 3 – Heavy Use Area



Objective 3 – Heavy Use Area



Objective 4 – Pond Management

- ⌘ Alternative water source protects streams and lakes
- ⌘ Preserves bank stability
- ⌘ Allows streambanks to revegetate



Objective 4 – Pond Management

From this...



Using this...



Objective 4 – Pond Management

To achieve this.



Objective 5 – Pasture Management

⌘ Improving quality forages

☑ Fertilize

☑ Add small grains

☑ Control weeds



Objective 5 – Pasture Management

Weed control using plot demonstrations



Objective 5 – Pasture Management

Control Burn



Buttercup weeds



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Conclusion & Question

