Hay Day 2003
A Water Quality Field Day

Richard Powell, District Program Leader
Jamie H. Jenkins, County Extension Director
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
Hay Day 2003
Hay Day 2003
Hay Day 2003
Conclusion & Question