Maintenance
North Central Weed Science Society
63rd Annual Meeting
Midwest Invasive Plant Network
2009 Plant Symposium
Indianapolis, Indiana
December 11, 2009
Statistics

• 27,500 miles
• 200,000 total acres of right-of-way
• 100,000 managed acres
• $42 million vegetation management program
  – Mowing - $29 Million
  – Tree & Brush Removal - $9 Million
  – Weed & Brush Control - $3 Million
  – Other VM Activities - $1 Million
  – 21% of Maintenance Budget
Kentucky Noxious Weed Law

• Initially Adopted – 1956
• KRS 176.051
• Johnsongrass Law
• Control noxious weeds & brush on R/W
• Eradicate noxious weed species
• Use chemicals or other effective means
• Inform landowners of the Program
• Advertise annually by 1st week of March
• Stipulate landowner involvement
Noxious Weed Species

- Johnsongrass (Sorghum halepense)
- Giant Foxtail (Setaria faberi)
- Musk (Nodding) Thistle (Carduus nutans)
- Canada Thistle (Cirsium arvense)
- Kudzu (Pueraria lobata)
- Multiflora Rose (Rosa multiflora)
- Wild Cucumber (Echinocystis lobata)
- Black Nightshade (Solanum Ptycanthum)
Johnsongrass Control

• Outrider @ 1 oz/Acre
  – May Damage Fescue Turf (Drought Conditions)
• Fusion @ 8 ozs/acre
  – Transline @ 4 ozs/acre for Broad Leaf Weeds
  – Garlon 3A @ 1 pt/acre and Escort @ 1/8 oz/acre for hardy weeds
• MSMA @ 1/3 gal/Acre
  – Treat re-growth 14-21 after mowing
• Envoy @ 13 oz/Acre
Musk Thistle Control

- 2, 4-D Liquid @ 2 qts/Acre
  - Telar or Escort @ 1/4 oz/Acre
- 2, 4-D Dry @ 36 ozs/Acre
  - Telar or Escort @ 1/4 oz/Acre
- Milestone @ 5 oz/Acre
- Transline @ 1 pt/Acre with
  - Telar @ 1 oz/acre
    » or
  - Escort @ 1/4 oz/acre
Canada Thistle Control

• Transline @ 1pt/Acre
  – Telar @ 1 oz/Acre
• Overdrive @ 8 oz/Acre
Giant Foxtail Control

- MSMA @ 1/3 gal/acre (excellent)
Kudzu Control

• Transline @ 16 - 20 oz/Acre

• Escort @ 4 oz/Acre
  – Garlon 3A @ 2 qts/Acre

• Roundup Pro @ 2 gals/Acre
  – Escort @ 1/2oz/Acre
Multiflora Rose Control

• Escort @ 1/2 oz/Acre

• 2, 4-D @ 2 qts/Acre
Nuisance Weeds

- Japanese Bamboo (Knotweed & Fleece Flower)
- Wild Lettuce
- Poison Hemlock
- Teasel
- Wild Carrot
- Chicory
- Purple Loosestrife
Biological Control

• Thistlehead Weevil (Rhinocyllus conicus)
  – Feeds on seed from the Seedhead (Bloom)

• Rosette Weevil (Trichosirocalus horridus)
  – Feeds on musk thistle rosette

• Purple Loosestrife Beetle (Galerucella calmariensis)
  – Little Control
Project Successes

• Bush Honeysuckle Control Project
  – Fayette County – KY 4 (New Circle Road)
  – Plant Material
    • Cut and Mulched into the Soil on Site
    • Removed from the Site and Chipped
  – All bare areas remaining were reseeded

• Noxious and Nuisance Weed Control Project
  – Two-cycle Application Approach (Fence to Fence)
    • 1\textsuperscript{st} Cycle to address Broadleaf Weed Species
    • 2\textsuperscript{nd} Cycle to address Johnsongrass infestations
    • 10,000 Acres of Rights-of-Way were treated
Mammoth Cave Biosphere Reserve Project

• Memorandum of Agreement (MOA) with Mammoth Cave Resource Conservation Development District, Inc. (MCRCDD)

• Project: To remove source populations of exotic woody plants from highway R/W
  – I-65, KY 70 and other routes

• Primary Species:
  – Tree-of-Heaven (Ailanthus altissima)
  – Princess Tree (Paulownia tomentosa)

• Work to be Performed by the Great Onyx Job Corps Forestry Interns
Mammoth Cave Biosphere Reserve Project

- Species will be cut and removed from areas surrounding Mammoth Cave National Park
- Areas will be reseeded and native plantings will be restored
- KYTC will provide the funding from SAFTEA-LU funds (Federal)
- MOA Approved – January 2008
- Funding Approved – June 2008
- Initial Funding - $155,000
- Contract Effective Date – December 15\textsuperscript{th}
Questions ???
Maintenance