Phragmites Control on Roadsides and Rights-of-Way

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"It's good to know about trees. Just remember nobody ever made any big money knowing about trees."
About MDOT

- I, US, and M Routes
- 10,000 + miles of roads
- Divided into seven Regions and 26 TSCs
- Region Resource Specialists
  - one per Region
  - provide specialized expertise in vegetation management for our Regions
  - work with specialists in our Roadside Operations area and Environmental Section
  - our role in Phragmites management
How MDOT Works

- Design
- Construction
- Maintenance
  - MDOT personnel
  - county road commissions under contract
  - private contractors
MDOT’s Phragmites Management Philosophy

- “Eradication”
- Each Region has a program
- Region philosophies similar
  - Eliminate small patches – “seek and destroy”
  - Dedicated efforts in targeted areas
    - larger scale infestations
    - wetlands
MDOT’s Priorities
Safety
Signs
Guardrail
Clear Vision Areas
Operational
Ditches
Other Structures
Wetland Mitigation Sites

- Built to replace wetlands lost during road construction
- Regulated by USACE & DNRE
- MDOT is required to meet certain vegetation standards
Challenges

- ROW issues
  - Linear nature of ROW
  - Different types/different approaches
    - fee
    - easement
    - permitted
- Funding/staffing
- Offsite presence of Phragmites
MDOT Control Strategies

- Primarily herbicide treatments
  - Linear ROW inappropriate for burning
  - Cannot manipulate water levels
- Herbicides used
  - Roundup Pro/Rodeo (glyphosate) with drift control agent
  - Arsenal/Habitat (imazapyr)
- Cultural methods
  - no mowing w/o prior treatment
  - notes on project plans
MDOT’s Roadside Spray Program

- Six distinct categories
  - guardrail
  - weed
  - brush
  - plant growth regulator
  - pavement
  - Phragmites/invasive species
MDOT’s Roadside Spray Program

- Spraying done by Maintenance
  - each Region has crews who spray
  - limited private contractors
- All applicators are MDA certified
- Annual training
MDOT’s Roadside Spray Program

2009 Figures
- Almost $1.7 million statewide

2010 Figures
- Sprayed 22,814 acres total all categories
- 2,280 acres of Phragmites
- Total herbicide purchase amount $835,156
- Phragmites program - $200,000+ in labor, equipment and chemical
Equipment

- ¾ ton 4x4 pickup
- 300 gallon tank
- 5 hp Briggs w/pump
- Hand Sprayer
- 30’ hose/reel
- Spill Kit
- Washing station/tank
- Lock box for chemicals
Program Improvements

- MDOT more intentional with our program
  - planning
  - record keeping
- GIS/GPS
- Pavement Management System
Working Together

- Partnering with other agencies and states
- Permitting treatment by others on ROW
- Coordinating treatment of problem areas
Permits

- Permit approval in 5 - 45 days from TSC
- Applicant is responsible for environmental clearances that may be needed
- Signage and traffic control will be required
- [http://www.michigan.gov/mdot](http://www.michigan.gov/mdot)
  - Scroll down to Favorite Links
  - Click on Permits
  - Click on Right-of-Way Construction Permits