Using Integrated Vegetation Management in Controlling Wild Parsnip and Poison Ivy

Northeastern Transportation and Wildlife Conference
September 12, 2016
Training Objectives

- Identify key traits of
  - Poison Ivy and
  - Wild Parsnip
- Review New York State Department of Transportation’s Integrated Vegetation Management (IVM) process
- Show how to use each stage of IVM to control plants
Some General Comments

- Worker safety = Number one concern!
  - Poison Ivy: irritation from urishiol, an oil
  - Wild Parsnip: skin burns from substance called “furanocoumarins” in plant sap
  - BTW: there are furanocoumarins in other plants and fruits: celery picker’s itch and bartender’s itch (from chemical in limes)

- Species ID crucial
- If you can’t identify, you can’t control it
Poison Ivy
Wild Parsnip
Wild Parsnip
Wild Parsnip: Year One
Wild Parsnip: at Maturity
Integrated Vegetation Management: Roadside Zones

NYSDOT ROADSIDE MANAGEMENT ZONES
Integrated Vegetation Management: Process Steps

Concept and chart courtesy of Christopher Nowak, College of Environmental Science and Forestry
Thresholds/Tolerance Levels
Monitoring

PREPARING FOR USE - SITE SPECIFIC CONSIDERATIONS
Understanding the risks associated with the application of DuPont™ PERSPECTIVE® is essential to aid in preventing off-site injury to desirable vegetation and agricultural crops. The risk of off-site movement both during and after application may be affected by a number of site specific factors such as the nature, texture and stability of the soil, the intensity and direction of prevailing winds, vegetative cover, site slopes, rainfall, drainage patterns, and other local physical and environmental conditions. A careful evaluation of the potential for off-site movement from the intended application site, including movement of treated soil by wind or water erosion, must be made prior to using PERSPECTIVE®. This evaluation is particularly critical where desirable vegetation or crops are grown on neighboring land for which the use of PERSPECTIVE® is not labeled. If prevailing local conditions may be expected to result in off-site movement and cause damage to neighboring desirable vegetation or agricultural crops, do not apply PERSPECTIVE®.

Before applying PERSPECTIVE®, the user must read and understand all label directions, precautions and restrictions completely, including those requirements for a site specific evaluation. If you do not understand any of the instructions or precautions on the label, or are unable to make a site specific evaluation yourself, consult with your local DuPont Crop Protection representative, local agricultural dealer, university cooperative extension service, land manager, professional applicator, agricultural consultant, or other qualified authorities familiar with the area to be treated. If you still have questions regarding the need for site specific considerations please call 1-888-6-DUPONT.
Monitoring: Easy and Hard
Control Methods/Treatments

- Biological and cultural
- Mechanical
- Alternatives to Herbicides
- Herbicides
Biological and Cultural Control

- Keep roadside healthy
- Avoid rutting when mowing
- Promptly revegetate if disturbing soil
- Succession may reduce Poison Ivy and Wild Parsnip
Mechanical: Small Poison Ivy Infestations

- **MUST** wear personal protective equipment (PPE): long-sleeve shirts, gloves
- **Do not** pull unless you KNOW you are tolerant
- Can kill vines by cutting and letting rot
- Only works with small plants
- With weed whackers, be careful of oil
- Be careful w/Poison Ivy when doing tree/brush work
Mechanical: Small Wild Parsnip Infestations

- MUST wear PPE: long-sleeve shirts, gloves
- Be careful of sap and plant pieces
- Techniques
  - Hand pull rosettes
  - Sever taproot
  - Cut with tools, weed whackers
- NEVER leave seed heads, take away
Mowing: Timing is Key!

 יען Poison Ivy

- Mowing effective against small plants
- Repeated mows needed for established vines

 יען Wild Parsnip

- Mow as stalks appear, before seed heads form
- Mowing when in seed spreads plants
- Many rosettes too low for mower
- Mowing can reduce grass competition with rosettes! Allows light to reach young plants

 יען If mowing,

- Make sure operators have PPE
- Tell equipment mechanics!
Mowing and Herbicides: 1 ~ 2 Punch

- If there is large infestation that requires treatment, consider
  - Mow first
  - Apply herbicides second.
  - Consider revegetating
- Mowing exposes vines or rosettes
- Then apply herbicides to vines or rosettes before regrowth starts
Herbicides: General Rules

- State laws/statutes
- Apply according to label
- Target/off-target
- Restricted v. Non-restricted
- Category: 6a? 3a?
- Land type and notification:
  - fee or non-fee
  - wetland buffers
  - sensitive land uses
Herbicides: Surfactants

- VERY important to penetrate leaves
- Check label/vendors: some herbicides already have surfactants
- If not, some recommendations:
  - King Pin
  - Thinvert
  - Clean Cut
Herbicide Timing: Poison Ivy

- Garlon: between leaves fully expanded in spring and before color change in fall
- Glyphosate: 2 weeks before/after full bloom
- New Bayer chemistry: read the label
Herbicide Timing: Wild Parsnip

- Oust Extra: pre-emergent or early post-emergent
- Escort:
  - Adult plants spot treat during time of plant bolting until flowering (mid-May to mid-June)
  - In fall, target plants in rosette stage
- New Bayer Chemistry: read the label
Alternatives to Herbicides

- Many non-selective: off target damage issue
- Expense an issue
- Most kill on contact, rather than spreading through plant system and killing entire plant
- C-Cide advertises a 1:3 mixture for Poison Ivy, e.g. 1 oz C-Cide to 3 oz water
- No rates given for Wild Parsnip
For Any Control

- Protect desirable vegetation
- Always be thinking . . .
- Revegetate? Revegetate? Revegetate?
- If you have questions, get help
Evaluation

Poison Ivy and Wild Parsnip:
- Both persistent, long-lasting plants
- Wild Parsnip, new problem, no cookbook rules

Need to observe, to see what happens
Please share your results ~ helps us all!
Questions?

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