

# Integrating Control Methods for Wild Parsnip (*Pastinaca sativa*) in Rights-of-Way with Imazapic + Metsulfuron for Grass Height Suppression

LEO ROTH<sup>1</sup>, MARK RENZ<sup>1</sup>, LEE  
SHAMBEAU<sup>2</sup>, KEN SCHROEDER<sup>3</sup>,  
JEROME CLARK<sup>3</sup>, LEIGH PRESLEY<sup>3</sup>

<sup>1</sup> UNIVERSITY OF WISCONSIN —  
MADISON

<sup>2</sup> 4-CONTROL, INC.

<sup>3</sup> UNIVERSITY OF WISCONSIN  
EXTENSION



**Renz Weed Science**

COLLEGE OF AGRICULTURAL & LIFE SCIENCES  
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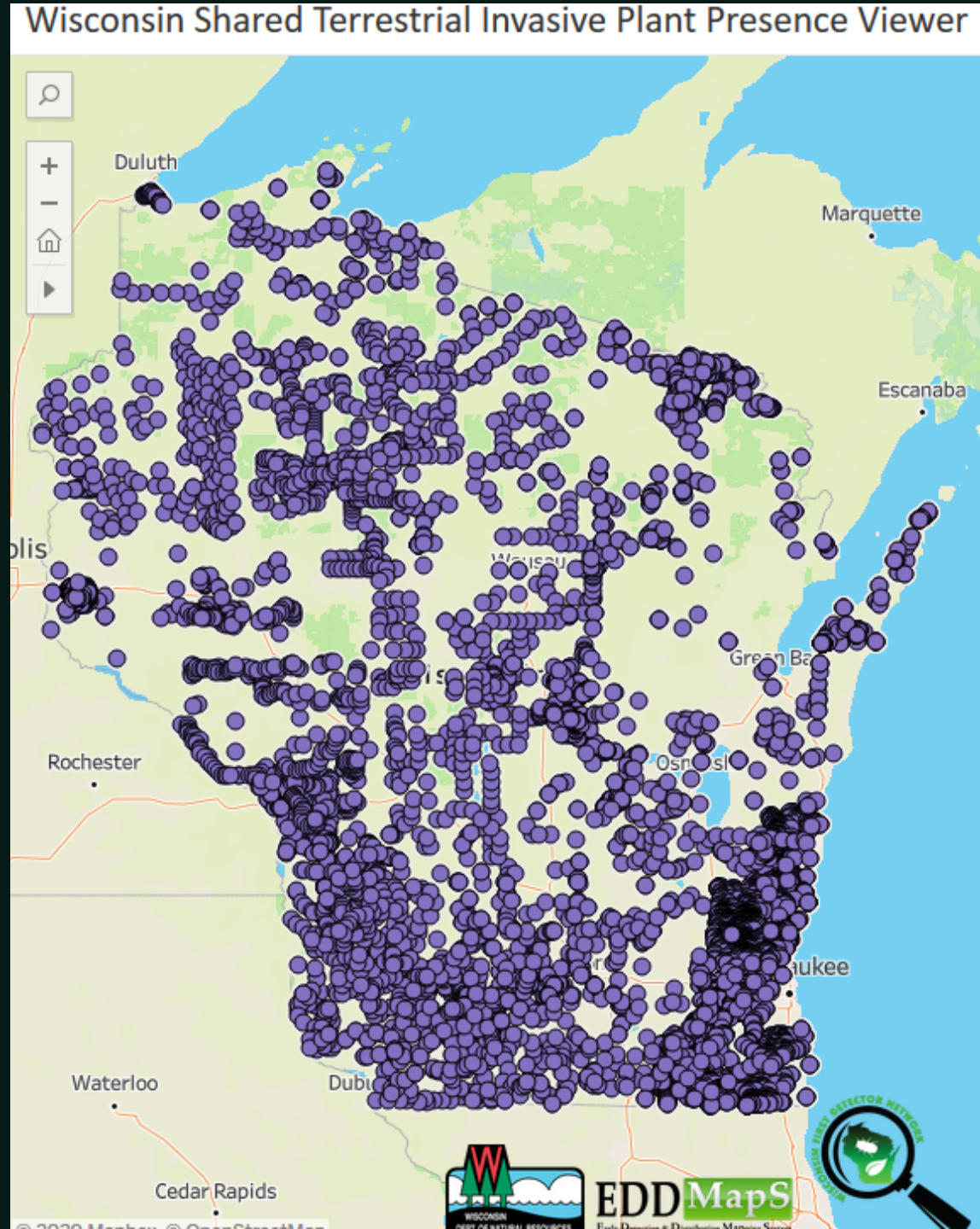




## Problem (1/2)

- Wild parsnip highly prevalent in WI (>12,000 records on 09.15.20)
- Wild parsnip common on ROW
- Most common management = mowing

Courtesy:  
Niels  
Jorgensen



## Problem (2/2)

- ROW mowing is expensive (\$70-150/lane mile)
- Correct mowing timing:
  - is species dependent
  - has narrow time frame

Species	Month						
	May	June	July	Aug	Sept	Oct	Nov
teasel							
wild chervil							
wild parsnip							
Legend		Optimal Mowing Time					
		Acceptable Mowing Time					
		DO NOT MOW					







Courtesy:  
Survivor  
Medic.Wordpress.  
com

## Why Do We Care?

- Hazardous to ROW workers
  - Causes phytophotodermatitis (blistering rash)



## Research Question:

Can we integrate three goals into one management strategy?

1. Control wild parsnip
2. Reduce grass height
3. Create cost-savings





# Management Strategy

- What: Broadcast spray Plateau (imazapic) + Escort (metsulfuron)
- When: Applied when dandelions first blooming (southern WI: May 12-14, 2019) (northern WI: May 21-28, 2019)
- How: Broadcast sprayer delivering 20 GPA

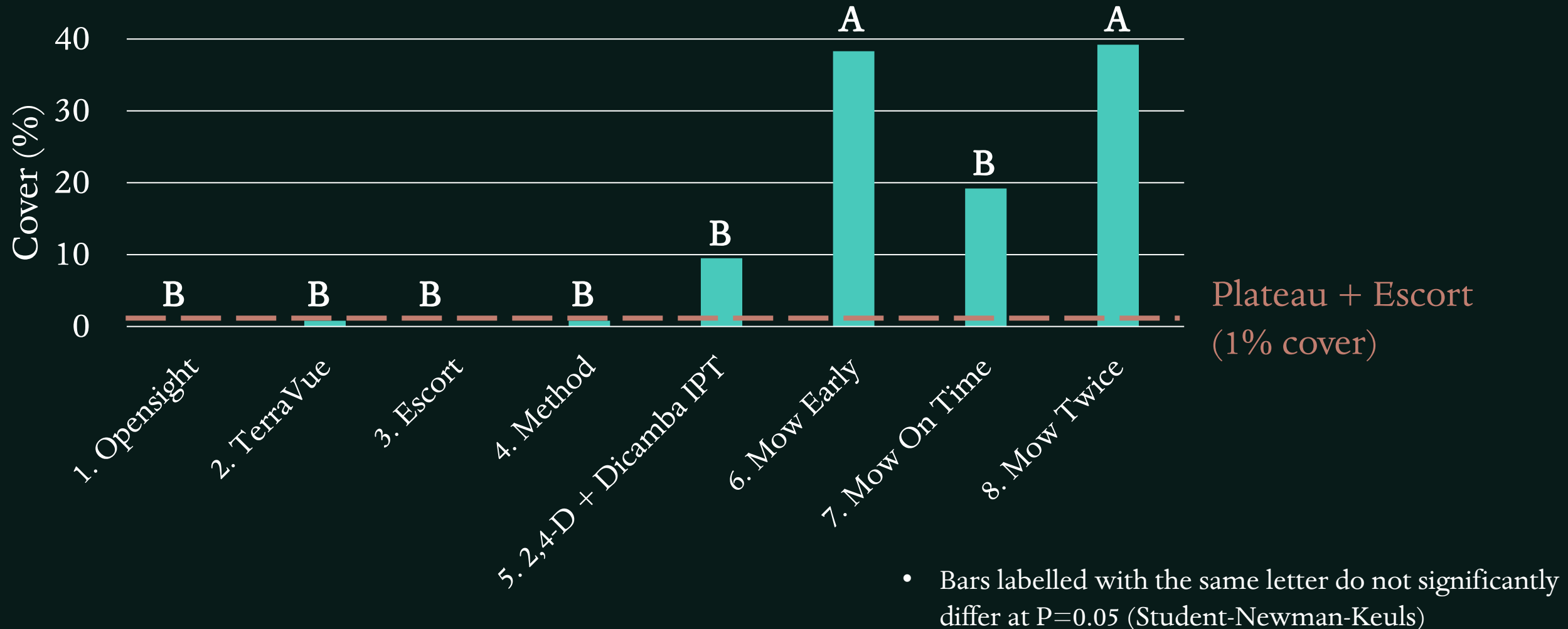
Treatment	Chemical Name	Rate	
		(g ai ha <sup>-1</sup> )	(oz product/a)
Plateau®	imazapic	70	4
Escort XP®	metsulfuron	32	0.75
Methylated Seed Oil	-	-	8



# Goal 1.

## Control Wild Parsnip (1 / 3)

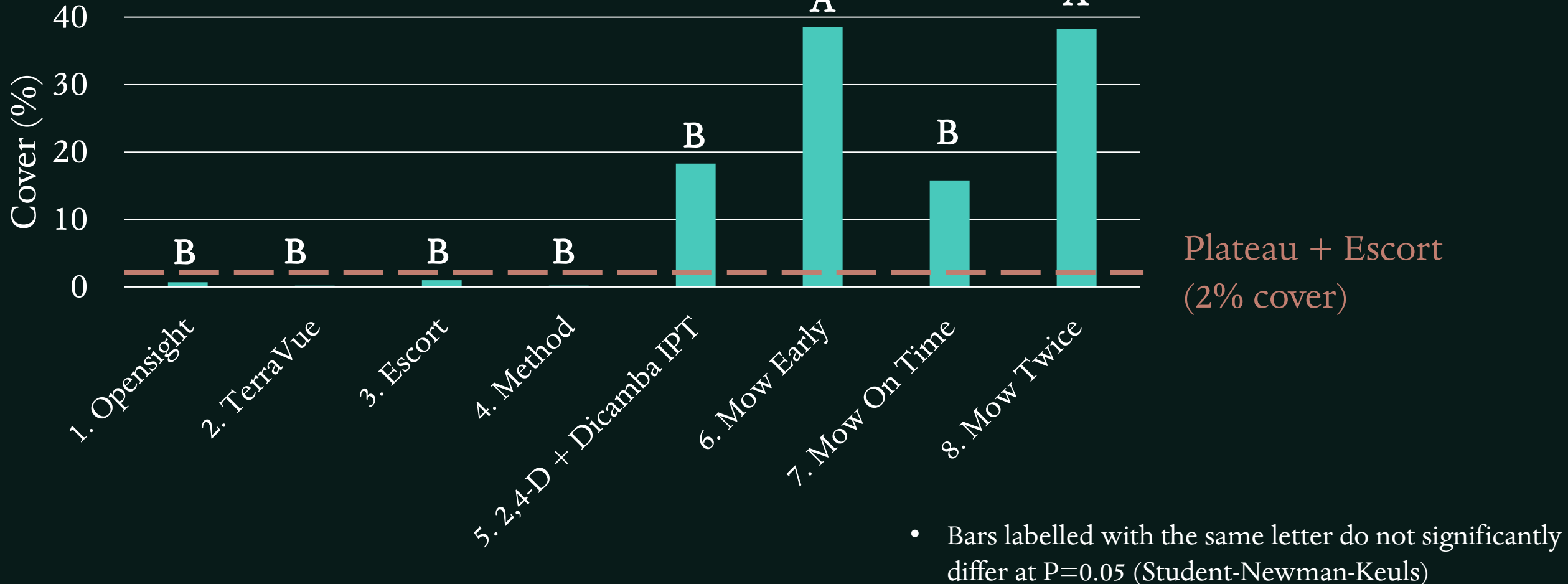
Wild Parsnip Cover  
4 MAT



# Goal 1.

## Control Wild Parsnip (2/3)

### Wild Parsnip Cover 1 YAT





# Goal 1. Control Wild Parsnip (3 / 3)

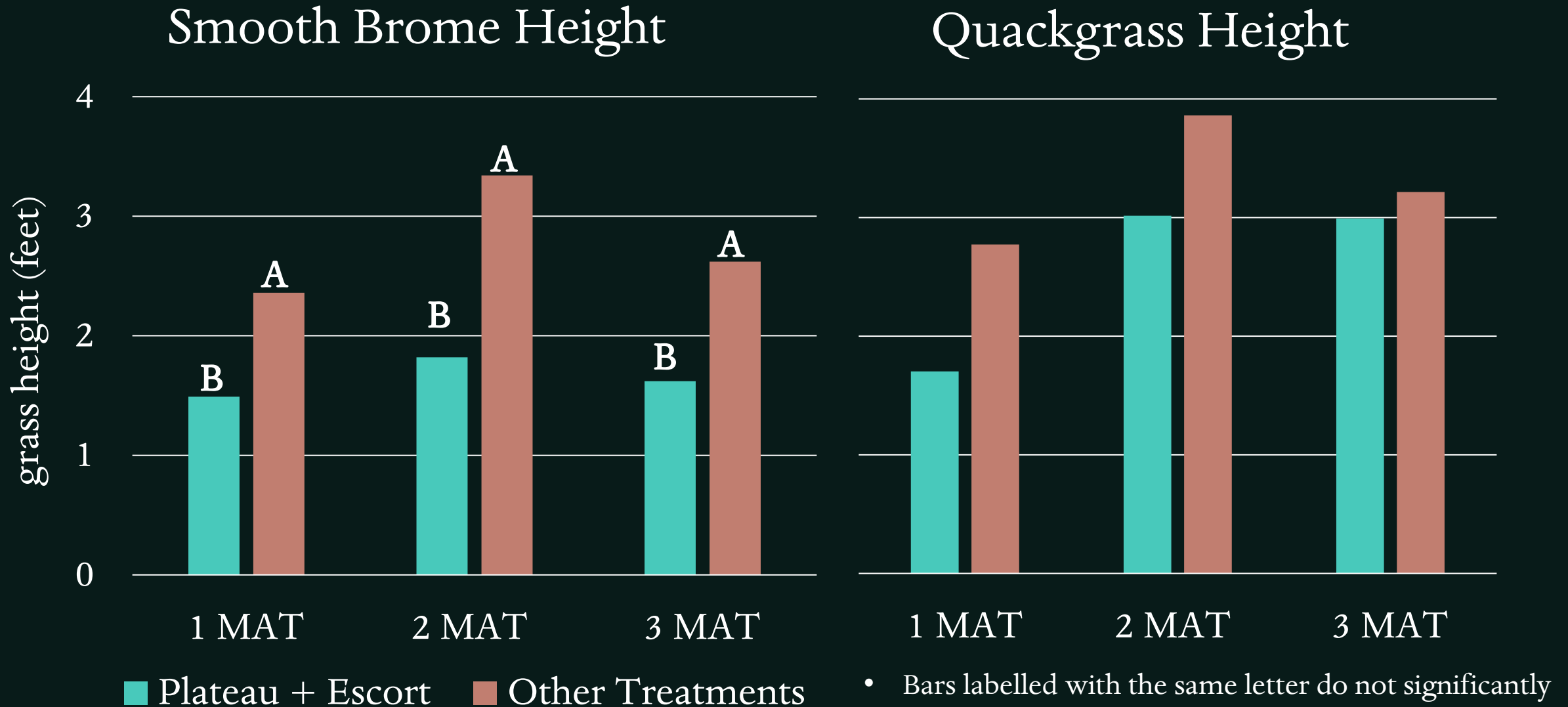
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- Area treated with Plateau + Escort between orange lines (1 YAT)
- Area treated with other standards or mowings to right of orange lines





## Goal 2. Grass Height – Reductions are Species Specific



• Bars labelled with the same letter do not significantly differ at  $P=0.05$  (SAS proc mixed)



# Smooth Brome @ 1.5 MAT

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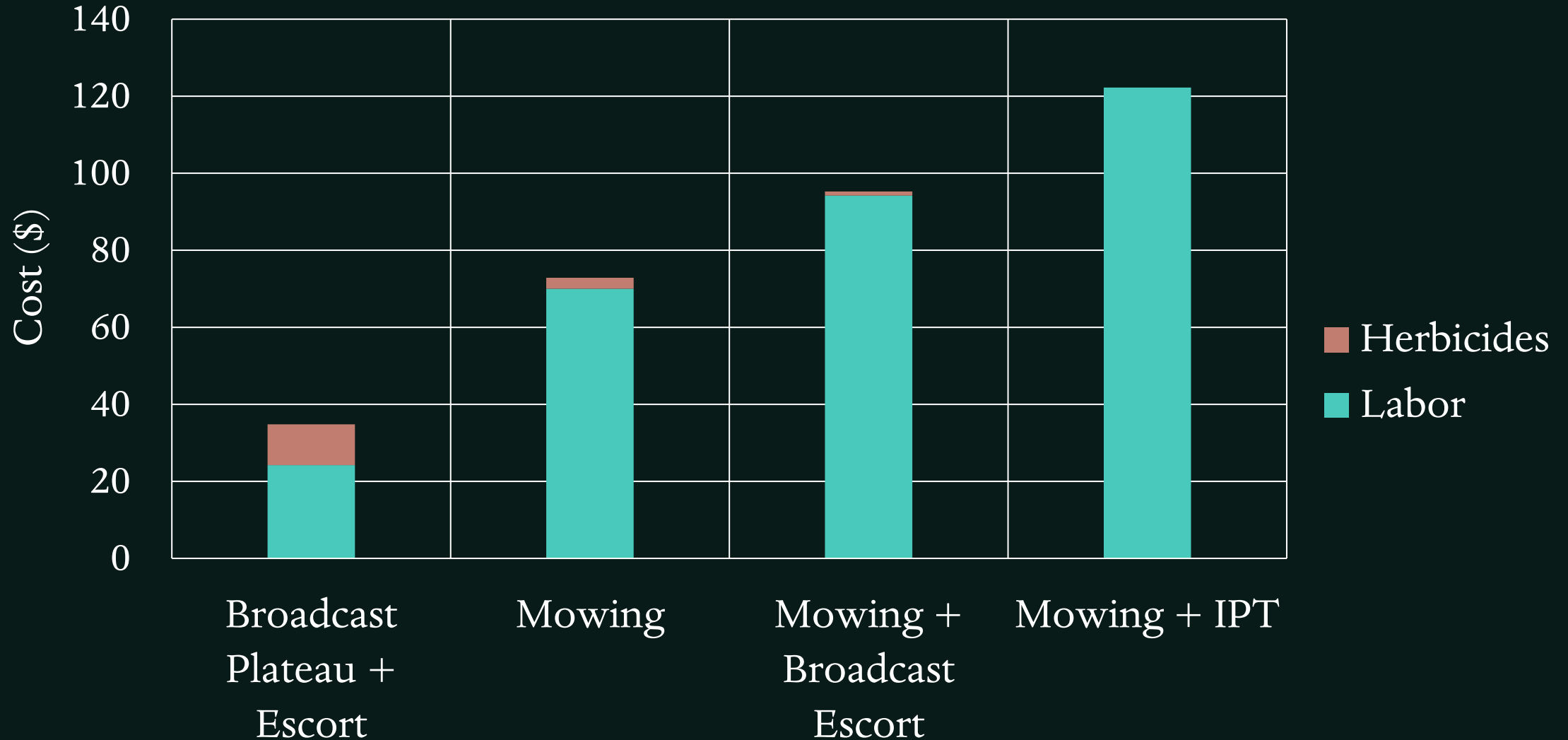
- Area beneath arrow treated with Plateau + Escort + Opensight





## Goal 3: Create Cost Savings

### Cost Per Lane-Mile (\$) (10-foot swath)





# Can We Integrate three Goals Into one Management Strategy?

## 1. Control Wild Parsnip

- 1% cover @ 4MAT, 2% cover @ 1YAT

## 2. Reduce Grass Height

- 1-3 months of reductions, but reductions are species dependent!

## 3. Create Cost-Savings

- Broadcasting Plateau + Escort is affordable compared to mowing
- Can reduce mowing events by 1+ per year

Find Out More!

Visit: <https://go.wisc.edu/0ac791>

## 2019 ROW Workshop:

Supporting data and background information

Mark Renz, Extension Weed Specialist  
Leo Roth, Research Specialist  
Jamie Patton, Outreach Specialist

Jerry Clark, Agriculture  
Leigh Presley, Agriculture  
Ken Schroeder, Agriculture  
Jeffrey, Agriculture



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## 2019 ROW Workshop:

Invasive plants are common  
Despite the desire to control  
managers from controlling  
throughout Wisconsin

To minimize these harmful  
Division of Extension is



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## 2019 ROW Workshop: Brown County

Mark Renz, Extension Weed Specialist  
Leo Roth, Research Specialist  
Jamie Patton, Outreach Specialist  
UW Madison – Division of Extension





# Questions?

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CONTACT:

LEO ROTH –

[NLROTH2@WISC.EDU](mailto:NLROTH2@WISC.EDU)



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