

**UH OH...44 OZ OF GLYPHOSATE DIDN'T TOUCH IT...
WHAT DO I DO NOW?**



Bryan Young

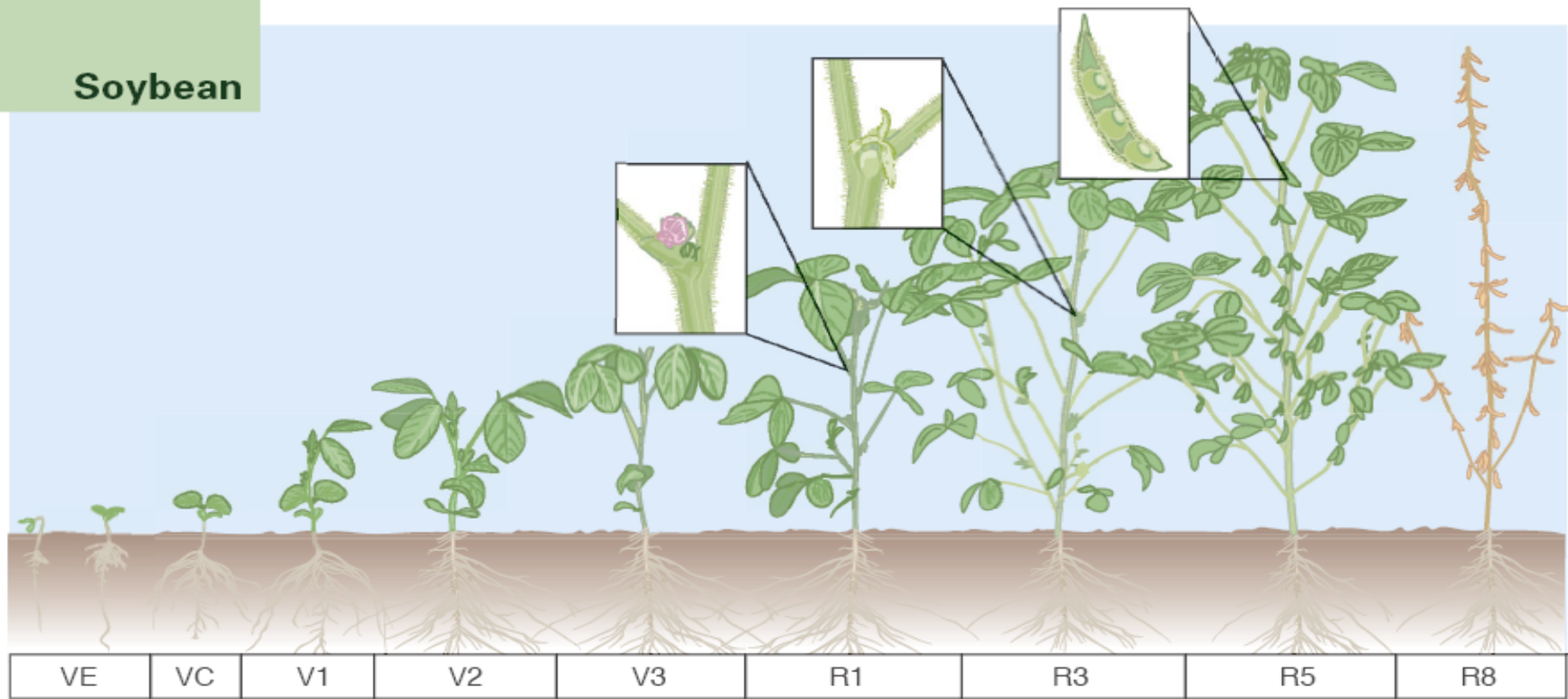
Management Options

- ❑ Short-term: Management of escaped weeds
 - ▣ Depends on calendar date, crop growth stage, and weed size
 - ▣ May include re-plant, re-spray, harvest-aid, hand-weed, or mow/disk
 - ▣ Outcomes – weed competition, reduced crop yield, weed seed production

- ❑ Long-term: Integration of alternative weed management practices or herbicide sites of action

Application Timing

Soybean



Burndown



1st POST



2nd POST

If needed

Tillage prior to planting?



At Planting





*Marestail 2009
Jackson Co., IL*



Giant Ragweed
2014, Indiana

Surviving Weeds That Require a Re-Spray Can Reduce Yield

Incomplete control with glyphosate only.



Problem solved with second glyphosate application?

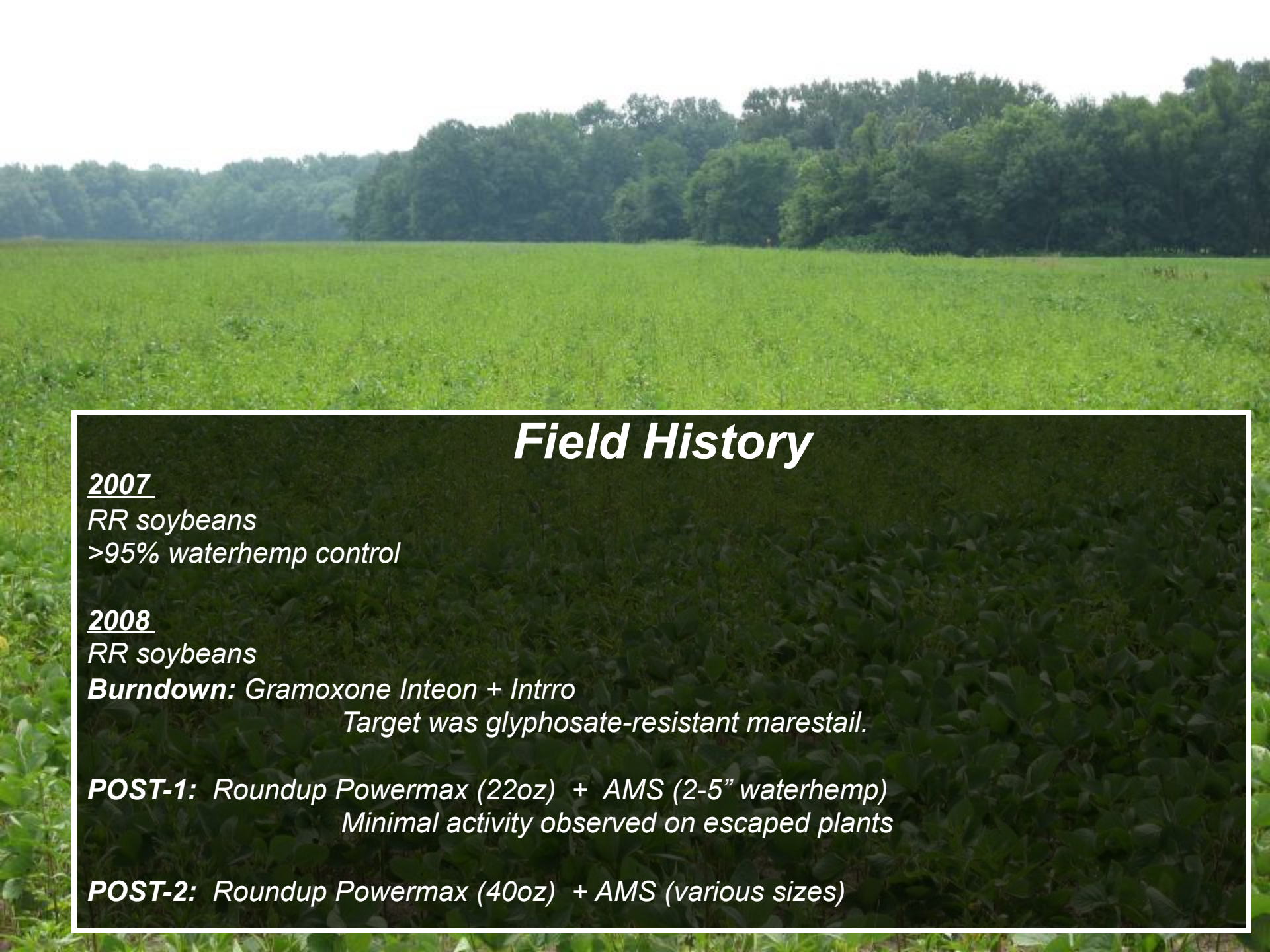


Inconsistent control may cost up to \$15 of lost yield!



Tillage after planting?





Field History

2007

RR soybeans

>95% waterhemp control

2008

RR soybeans

***Burndown:** Gramoxone Inteon + Intrro*

Target was glyphosate-resistant marestail.

***POST-1:** Roundup Powermax (22oz) + AMS (2-5" waterhemp)*

Minimal activity observed on escaped plants

***POST-2:** Roundup Powermax (40oz) + AMS (various sizes)*







***Palmer amaranth, waterhemp, giant ragweed and marestalk survivors of glyphosate - 2010
Union Co., IL***

PPO and Glyphosate-Resistant Waterhemp



*Waterhemp 2011
Jackson Co., IL*



Palmer Amaranth

Collinsville, IL



2011 – A commercial complaint

Palmer Amaranth

Collinsville, IL



2012 – Near complete yield loss





*Waterhemp 2013
Jackson Co., IL*



Escaped marestail and waterhemp



2011
Randolph Co., IL



H

P

The
on
sta
sig
gro
the

We

Is This a Desired Weed Management Strategy?



*Do you want your
kids to grow up like
this?!*



Tillage after harvest?

www.deere.com



Summary

- ❑ Management options following the failure of glyphosate depends on several factors.
 - ▣ May include chemical and mechanical weed control practices
 - ▣ The final weed control achieved will vary with each situation.

- ❑ Failure will cost you time and money in the initial year and in future years.



WEED OUT RESISTANCE

- Know Your Weeds
- Know Weed Growth
- Know Weed Seed Characteristics
- Know Herbicide Resistance

IN THE FIELD

- Rotate Crops
- Use Multiple Herbicide Sites of Action
- Incorporate Tillage Practices

SPRAY ATTENTION

- Know Herbicide Site of Action and Properties
- Manage Drift
- Know Environmental Conditions
- Know Your Neighbors

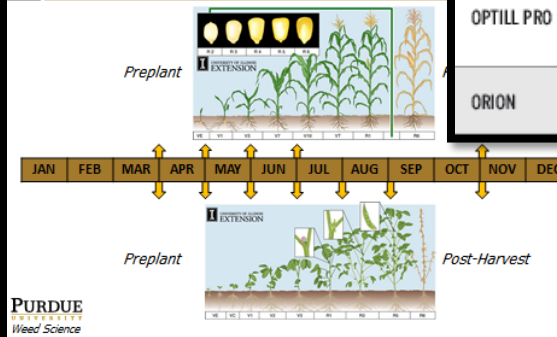
THE BOTTOM LINE

- Manage Risk
- Know Cost-Benefits of Practices
- Know the Cost of Poor Weed Control

Weed Seed Management



Critical Times for Weed Management



saflufenacil	Sharpen	14
imazethapyr	Pursuit	2
dimethenamid-P	Outlook	15
florasulam	-----	2
MCPA	MCPA	4



Supported by





Thank You!



Bryan Young
Dept. of Botany and Plant Pathology

Purdue University

915 West State St.

W. Lafayette, IN 47907

Office: 765.496.1646

Cell: 618.713.6471

Email: BryanYoung@purdue.edu

Questions?

