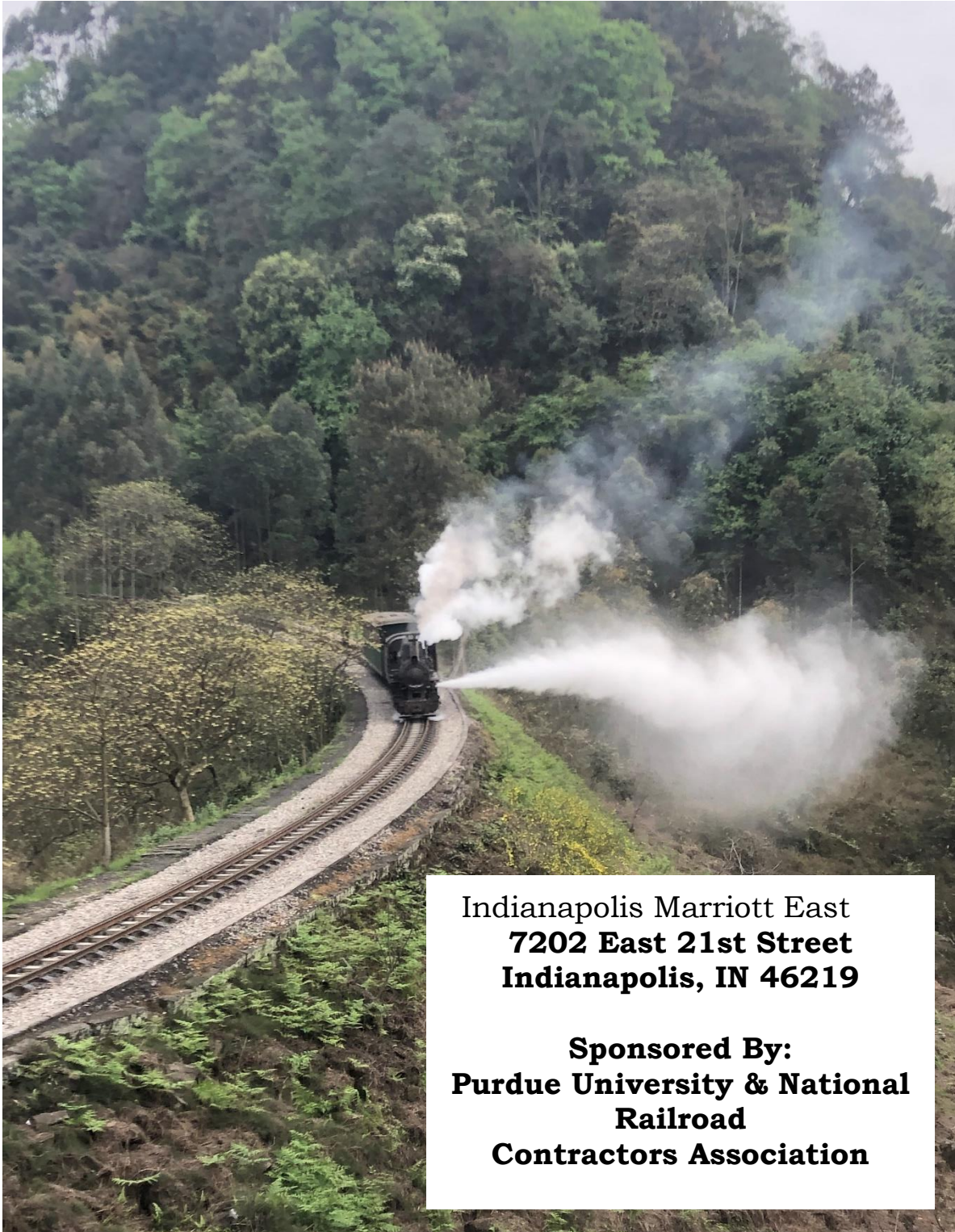


**NATIONAL RAILROAD CONTRACTORS ASSOCIATION
WEED CONTROL SEMINAR
January 27 – 30, 2020**



Indianapolis Marriott East
7202 East 21st Street
Indianapolis, IN 46219

Sponsored By:
Purdue University & National
Railroad
Contractors Association

2020 NRCA WEED CONTROL SEMINAR

Session I: Initial Certification
Meals: held in Freedom Hall
Meetings: held in Salons 5-8

Monday, January 27

8:30-11:00 am Registration (Outside Salon 4)
9:30-10:15 Introduction, Railroads and Weed Management Issues (Reid Smeda)
10:15-10:45 Right-of-way Herbicides and Application Methods (Matt Kraushar)
10:45-11:00 **BREAK**
11:00-11:45 Basic Herbicide Terminology (Reid Smeda)
11:45-1:00 pm Lunch: Session I
1:00-1:30 Application Equipment: Use and Maintenance (Reid Smeda and Matt Kraushar)
1:30-2:30 Herbicide Applicator Safety (Matt Kraushar)
2:30-2:45 **BREAK**
2:45-3:45 Herbicides in the Environment; Storage, Transportation, & Disposal (Matt Kraushar)
3:45-4:00 **BREAK**
4:00-5:00 Plant Biology and Weed Identification (Reid Smeda)
5:00-5:30 Review and Discussion (Reid Smeda)
5:30-6:30 Dinner: Session I
6:30-7:15 Supplemental Exam study session (Reid Smeda)

Tuesday, January 28

7:00-8:30 am Breakfast for Session I
8:30-9:00 Review and Discussion (Reid Smeda)
9:00-10:00 Federal and State Pesticide Laws and Regulations (Cheri Janssen)
10:00-10:15 **BREAK**
10:15-11:00 Herbicide Formulations (Cheri Janssen)
11:00-11:30 Accurate Application of Herbicides – Off-target Movement (Reid Smeda)
11:30-12:45 pm Lunch: Session I
12:45-1:30 Understanding Herbicide Labels (worksheets) (Cheri Janssen)
1:30-2:00 Weed ID Review (Reid Smeda)
2:00-2:15 **BREAK**
2:15-3:00 Application Equipment: Calibration (bring calculators) (worksheet) (Cheri Janssen)
3:00-3:45 Study Hall and Pre-test (bring calculators) (Reid Smeda)
3:45-4:00 **BREAK**
4:00-4:15 Review and Discussion (Reid Smeda)
4:15-5:45 Supplemental Exams (Reid Smeda, Rita McKenzie, Mindy Shoults) (Salons A-C)
5:45-6:45 Dinner: Session I

Wednesday, January 29

6:30-8:00 am Breakfast for Session I and II
7:30-7:45 Load bus for travel to Ivy Tech (all IN Core and ROW exam takers)
8:00-2:00 Indiana Certification Exams at Ivy Tech (Reid Smeda to accompany)
11:30 am-2:00 pm Lunch for Session I and II

2020 NRCA WEED CONTROL SEMINAR

Session II: Continuing Certification

Meals: held in Freedom Hall

Tuesday, January 28

4:00-5:00 pm **Certification and Recertification Status (Mindy Shoults)** (Patriot Board Room)

Wednesday, January 29

6:30-8:00 am Breakfast for Session I and II (Freedom Hall)

10:00 am-1:00 pm Registration

11:30 am-2:00 Lunch for Session I and II (Freedom Hall)

Moderator: (Salon 5-8)

2:15-2:30 **Opening Address.** NRCA President

2:30-3:20 **Reducing off-target movement of growth regulator herbicides.**

Dr. Bill Johnson, Purdue University, West Lafayette, IN

Auxin herbicides such as 2,4-D and dicamba are widely used in agriculture. Factors contributing to off-site movement and techniques to mitigate this are important to protect adjacent, sensitive crops as well as for the safety of the public.

3:20-3:30 **BREAK**

3:30-4:20 **Factors impacting the residual activity and off-target movement of soil applied herbicides.**

Dr. Robert Kremer, University of Missouri, Columbia, MO

Many factors impact the fate of herbicides applied to the soil. Soil properties such as texture, pH, and microbial degradation influence herbicide persistence and runoff/leaching. This presentation will cover herbicide binding, movement and biodegradation to optimize herbicide use efficiency.

4:20-5:10 **Communicating pesticide applications to the public.**

Dr. Jason Ferrell, University of Florida, Gainesville

As an applicator, your primary responsibility is to manage unwanted plants in an efficient and environmentally responsible manner. However, with the current scrutiny surrounding use of glyphosate and other herbicides, it is now important to fully understand how to interact with a concerned stakeholder. This presentation will provide a few basic techniques to concisely and professionally address questions from the public. Our goal is to raise the bar for the entire industry by demonstrate the quality of our professional applicators.

5:10-5:20 **BREAK**

5:20-6:10 **The safety and efficacy of glyphosate in IVM areas.**

Dr. Reid Smeda, University of Missouri, Columbia

The incidence of weed resistance and public sentiment toward the safety of glyphosate have put into question the future use of glyphosate. The safety of glyphosate and alternatives to glyphosate for weed control in IVM areas will be discussed.

6:10 Buffet dinner and evening activities (Freedom Hall)

Thursday, January 30

- 7:00-8:00 am Breakfast (Freedom Hall)
- Moderator: (Salon 5-8)
- 8:00-8:50 am **Fall maintenance and winterization of spray equipment.**
Mr. Fred Whitford, Purdue University, West Lafayette, IN
Safe and effective use of spray equipment is not just important during the growing season. How to maintain and prepare spray equipment for the winter is critical for proper operation the following year.
- 8:50-9:40 **Preventing the introduction and spread of invasive species in the western U.S.**
Dr. George Beck, Colorado State University, Fort Collins
Invasive species in the western U.S. have significantly impacted land use and the prevalence of native species. Preventing invasions and managing these species in non-crop areas is important to land use and ensuring public safety.
- 9:40-9:55 **BREAK**
- 9:55-10:45 **The benefits of a residual herbicide for IVM programs.**
Dr. William Witt, emeritus, University of Kentucky, Lexington
Season-long weed control in non-crop areas begins with an effective residual herbicide program. Residuals combined with postemergence compounds is also part of resistance management. The benefits of residuals and keys to safe use are the focus of this presentation.
- 10:45-11:35 am **Update on pesticide laws and regulations.**
David Scott, Office of the Indiana State Chemist, West Lafayette, IN
Updates on Federal Regulations regarding pesticide use will be provided with implications for applicators in IVM. Dicamba use continues to pose challenges and the impact of label changes will be reviewed. Safe use of herbicides must consider changes to the label and interpretation of those changes.
- 11:35-12:00 pm CCH paperwork; adjourn
- 12:00-1:00 pm Lunch (Freedom Hall)
- 12:45-2:15 pm NRCA Board of Directors business meeting (Harrison Room)

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This program is a continuing education activity of Purdue University, an Equal Access/Equal Opportunity University.