



NATIONAL RAILROAD CONTRACTORS ASSOCIATION

WEED CONTROL SEMINAR

January 25-28, 2016

Indianapolis Marriott East

7202 East 21st Street

Indianapolis, Indiana 46219

Sponsored By:

Purdue University

&

**National Railroad
Contractors Association**

2016 NRCA WEED CONTROL SEMINAR

Session I: Initial Certification

Meals: held in Liberty Hall

Meetings: held in Salons 5-8

Monday, January 25

11:00 am-1:00 pm	Registration	(Salons 5-8)
1:00-1:45	Introduction, Railroads and Weed Management Issues (Reid Smeda)	
1:45-2:45	Plant Biology and Weed Identification (Reid Smeda)	
2:45-3:00	BREAK	
3:00-3:30	Basic Herbicide Terminology (Reid Smeda)	
3:30-3:45	BREAK	
3:45-4:45	Right-of-way Herbicides and Application Methods (Matt Kraushar)	
4:45-5:15	Review and Discussion (Reid Smeda)	
5:15-6:15	Dinner: Session I	
6:15-7:15	Application Equipment: Use and Maintenance (Reid Smeda and Matt Kraushar)	

Tuesday, January 26

7:00-8:30 am	Breakfast for Session I (Liberty Hall)	
8:30-9:00	Review and Discussion (Reid Smeda)	(Salons 5-8)
9:00-9:30	Herbicide Applicator Safety (Matt Kraushar)	
9:30-9:45	BREAK	
9:45-11:00	Herbicide Formulations (Andrew Martin)	
11:00-11:15	BREAK	
11:15-11:45	Weed ID review (Reid Smeda)	
11:45- 1:00 pm	Lunch: Session I (Liberty Hall)	
1:00-2:15	Understanding Herbicide Labels (worksheet) (Andrew Martin)	
2:15-2:30	BREAK	
2:30-3:00	Herbicides in the Railroad Environment (Matt Kraushar)	
3:00-4:15	Application Equipment: Calibration (<u>bring calculators</u>) (worksheet) (Andrew Martin)	
4:15-4:30	BREAK	
4:30-5:00	Federal and State Pesticide Laws and Regulations (Andrew Martin)	
5:00-5:15	Review and Discussion (Reid Smeda)	
5:15-6:15	Dinner: Session I (Liberty Hall)	
6:15-7:00	Study Hall and Pre-test (bring calculators) (Reid Smeda)	
7:00-7:45	Supplemental Exam study session (Reid Smeda)	

Wednesday, January 27

7:00-8:00 am	Breakfast for Session I and II (Liberty Hall)	
8:00-8:35	Review and Discussion (Reid Smeda)	(Salons 5-8)
8:35-12:00 pm	Indiana Certification Exams (Leo Reed)	
11:30 am-12:45 pm	Lunch for Session I and II (Liberty Hall)	
12:30-2:00	Supplemental Exams (Reid Smeda, Rita McKenzie, Mindy Shoults)	

Thursday, January 28

1:00-4:00 pm	Illinois certification exam	(Salons 5-8)
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2016 NRCA WEED CONTROL SEMINAR

Session II: Continuing Certification

Tuesday, January 26

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

Wednesday, January 27

7:00-8:30 am Breakfast for Session I and II (Liberty Hall)

10:00 am-1:00 pm Registration (Liberty Hall)

11:30 am-1:00 pm Lunch for Session I and II (Liberty Hall)

Moderator: RWC (Salons 5-8)

2:15-2:25 **Opening Address.** Gerry Blase, NRCA president, Asplundh Tree Expert Co.

2:25-3:15 **Brush Control and the Science Behind It.** Dr. Walter H. Fick, Kansas State University, Manhattan, KS.

Brush species are difficult to remove and often require multiple techniques. His presentation will focus on developing a brush control plan. Plant growth and development, environmental factors, soil characteristics, and herbicide characteristics will be included. Use of prescribed burning, mechanical control, biological control, and use of herbicides will be discussed in controlling woody species such as eastern redcedar, roughleaf dogwood, buckbrush, smooth sumac, saltcedar, and others.

3:15-3:25 BREAK

3:25-4:15 **Biology of Invasive Plants and Keys to Management.** Dr. Brent Sellers, University of Florida, Ona, FL

Dr. Sellers is an Extension/Research Weed Scientist in Southern Florida and has extensive experience in identification and development of control strategies for invasive species in Florida. This includes species such as Brazilian pepper-tree, tropical soda apple, and semi-aquatic grass species. His management approaches include chemical, cultural, and biological techniques.

4:15-4:25 BREAK

4:25-5:15 **Herbicide Modes of Action and Their Symptomology.** Drs. Stephen Weller, Purdue University, West Lafayette, IN and Reid Smeda, University of Missouri, Columbia, MO

Drs. Weller and Smeda will use live, treated plants to demonstrate herbicide injury symptomology and link that to the effectiveness of herbicides and potential identification of herbicide resistance.

5:15 pm Social period and buffet dinner (Liberty Hall)

Thursday, January 28

7:00-8:15 am	Breakfast	(Liberty Hall)
Moderator: 8:15-9:05 am	RWC Protecting People and the Environment When Pulling Out Stuck Equipment. Dr. Fred Whitford, Purdue University, West Lafayette, IN For every story of a successful vehicle extraction, there is a story about something that has gone wrong — sometimes very wrong. It is essential that equipment operators recognize the real dangers associated with pulling application equipment and trucks out of mud, sand, or snow. Extracting equipment is anything but routine, and owners and operators need to understand the potential repercussions of unsafe practices. This presentation examines the ratings of towing devices and factors to consider before you pull out stuck equipment. Our goal is that equipment operators will be better equipped with the knowledge to safely and effectively extract stuck vehicles without injuring the drivers, bystanders, equipment, or the environment.	(Salon 5-8)
9:05-9:15	BREAK	
9:15-10:05	The importance of adjuvants for optimizing herbicide activity and reducing off-target movement. Dr. Bryan Young, Purdue University, West Lafayette, IN Dr. Young will describe the importance of various adjuvants for modifying spray solutions, improving herbicide contact with target plants, and optimizing uptake of herbicides into plants. The selection of the proper adjuvant can change depending on the herbicide selected and target vegetation.	
10:05-10:15	BREAK	
10:15-11:05	Following the Environmental Fate of Herbicides: Preventing Groundwater Contamination. Dr. Jason Ferrell, University of Florida, Gainesville, FL Dr. Ferrell will explain how herbicide properties and soil characteristics can indicate the sensitivity of herbicides to leach out of their intended environment and contaminate groundwater sources.	
11:05-11:35 am	Update on Pesticide Regulations. David Scott, Office of the Indiana State Chemist, West Lafayette, IN Changes in regulations regarding pesticide are inevitable. Modifications in labels of major herbicides used in the railroad industry will be presented as well as an update on current legislation pertaining to herbicides.	
11:35-12:00 pm	CCH paperwork; adjourn	
12:00-1:00 pm	Lunch	(Liberty Hall)
12:00-2:00 pm	NRCA Board of Directors luncheon/business meeting	(Harrison Room)

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