Note - ALL times are Mountain Time				
7:30-8:00	Webinar Open			
8:00-8:15	Join Webinar	Trouble shoot		
8:15-8:30	Cut-off for signing in	Pre-recorded video – how this webinar will work (i.e., polls, chats, Q&A) and how CEC submission and Certification of Completion will occur		
8:30-9:30	Labels & Pesticide Storage & Security Sandra McDonald, Mountain West PEST	Pesticide laws vary between states, but ALL states must meet the minimum requirements established in FIFRA. It is the responsibility of the applicator to know and understand the specific laws and licensing requirements of the state in which they are preforming an application. EPA, as well as states, require that applicators read and follow the product's container label. EPA regulates pesticide storage through specific storage instructions on pesticide labels. Screen grabs from Right-of-Way labels will be presented to illustrate that the pesticide label is the best guide to storage requirements for every product. Examples will include storage temperature, storage duration and whether a product interacts with other materials and should be stored separately. Some states regulate the storage of pesticides in small portable containers. Local ordinances may adopt fire, building and zoning codes that include requirements and restrictions on pesticide storage. Only authorized individuals should have access to the storage area.		
9:30-9:40	BREAK	A voiced "call-back" will occur at 60 seconds and 30 seconds remaining.		
9:40-10:40	PPE Importance and Use Throughout ALL Handling Tasks Tara Steinke, Soapweed Solutions	It is the responsibility of licensed applicators to ensure that any noncertified applicators handing pesticides while under their supervision have access to required PPE and a knowledgeable about how to maintain and use it. This presentation will cover the need to use the label required Personal Protective Equipment (PPE) not just during application but during all pesticide handling tasks. These tasks include transporting, storing, mixing, loading, applying and disposing of that product, as well as, cleaning and maintaining application equipment. Different PPE may be required by the product label based on task.		

10:40-10:50	BREAK	A voiced "call-back" will occur at 60 seconds and 30 seconds remaining.
10:50-11:50	Herbicide Modes-of-Action and Environmental Impacts Scott Nissen, retired Colorado State University	This presentation will cover factors that effect herbicide movement in the soil and water, herbicide persistence in the environment, how herbicides dissipate and degrade, and how applicators can reduce environmental risk. The real world concerns of movement of right-of-way herbicides on wind blown soil will be discussed. Herbicides kill or injure susceptible plants based on their mode-of-action (MOA). Herbicide MOA groups share symptomology. This presentation will include a review of the key, currently registered RoW herbicide families based on MOA such as the plant growth regulators, photosynthetic inhibitors, amino acid synthesis inhibitors and other important groups.
11:50-12:00	Questions & Discussion	facilitated by Sandra McDonald
12:00	LUNCH BREAK	A voiced "call-back" will occur at 5 minutes, 60 seconds and 30 seconds remaining.
1:00-2:00	Pesticide Application 101 Jerome Otto, Corteva	It is time to make a pesticide application; this presentation will detail the steps involved. Step 1) choose the proper type of equipment. Step 2) be sure that the sprayer, especially the tank and hoses, is clean and in proper working order. Step 3) calibrate the equipment. Step 4) if tank mixing, be sure that all the ingredients are compatible by doing a jar test. Step 5) measure all of the products including adjuvants into the tank precisely and in the proper order. Step 6) after completing the applicator thoroughly clean the sprayer.
2:00-2:10	BREAK	A voiced "call-back" will occur at 60 seconds and 30 seconds remaining.
2:10-3:10	Managing Right-of-Way Weeds George Beck, Alligare	Biology, ecology and impacts associated with the key right-of-way weeds, as well as, current science on techniques to manage some of the most common weeds along rights-of-way across the United States will be discussed. The importance of the choice of strategy and the timing of implementation including cultural management, mechanical or physical removal, biological control, and herbicide treatments will be presented.
3:10-3:20	BREAK	A voiced "call-back" will occur at 60 seconds and 30 seconds remaining.

3:20-4:20	Importance of Invasive Grass Management Shannon Clark, Envu	Invasive grasses, such as cheatgrass (<i>Bromus tectorum</i>) and medusahead (<i>Taeniatherum caput-madusae</i>) in the western US and cogon grass (<i>Imperata cylindrica</i>) in the southern US, are spreading at alarming rates and contributing to increased wildfire risk, loss in wildlife habitat, and ecosystem degradation. Recent research has demonstrated that long term control of invasive grasses can aid in restoration of critical pollinator and wildlife habitats, and potentially reduce the spread and devastation of wildfires. Rangelands, and rights-of-way, should be treated for invasive grasses to reduce flammable fuel loads and promote habitat restoration, as transmission lines, railroads and roads are main sources of spread for these invasive species and also serve as wildfire ignition points.
4:20 - 4:30	Questions & Wrap-up	Facilitated by Sandra McDonald
4:30-5:00	Test for California credits	This will be a 12 question test (questions will be randomized). The pass score is 70%. Can retake (this will be a different test form).

Note – Zoom polls and chats will be used during each 5 minute interval to verify participation. Poll questions can be provided. A participation report can be provided upon request.

SPEAKER BIOGRAPHIES

George Beck was a Weed Science professor at Colorado State University, now retired. His research focused on the biology of invasive or noxious weeds that are important in the western United States and developing successional weed management systems for key invasive weed species.

Shannon Clark is a Stewardship and Development Manager for Envu while also continuing to collaborate with Colorado State University Weed Science as a faculty affiliate. Shannon received her PhD in Weed Science from Colorado State University. She continued her research there as a post-doctoral researcher focusing on evaluating herbicides for invasive weed management in natural areas and rangeland. Her research also involved assessing herbicides for industrial vegetation management and rights-of-way.

Sandra McDonald founded Mountain West PEST (Pesticide Education & Safety Training) in 2009. Prior to establishing Mountain West PEST, Sandra was the Environmental and Pesticide Education Specialist at Colorado State University. She worked for 13 years at Colorado State University where she was involved in specialty crop pesticide research in addition to her role as a pesticide safety educator. Sandra also has extensive teaching experiences in pesticide safety, pesticide applicator exposure, pest management and pesticides in the environment.

Scott Nissen was a professor at Colorado State University and retired in December 2021. His responsibilities included research (applied and basic), outreach (Cooperative Extension) and some teaching. His research focused on invasive species management and adaptive strategies to establish desirable plant communities. The goal of this research was to establish sustainable plant communities that can resist re-invasion. Herbicides are an important management tool, so he also focused on herbicide fate in the environment and non-target impacts.

Jerome Otto grew up on a dairy farm in Minnesota. He graduated from the University of Minnesota in 1986 with a double major in Agricultural Economic and Animal Science. In 1987, Jerome joined Dow Chemical, now Corteva Agriscience, and has held various sales and marketing development roles since then. He is currently the market development specialist for the Pasture and Land Management business for the western half of the United States.

Tara Steinke is a safety officer and trainer for the oil and gas industry. Tara is an authorized OSHA outreach instructor for General Industry. She was part of the Colorado State University Environmental and Pesticide Education Program for 8 years; she focused on private applicators and worker protection.