MWCA SOUTHWESTERN AREA
Professional Applicator Training
February 29, 2024
Powell County Community Center
416 Cottonwood Ave
Deer Lodge, MT

8:30-8:45 ***Registration & Welcome***

8:45-9:45 ***The Battle at Big Sur ~ Bill Reynolds***
During August of 2020 the Doan Fire in the Big Sur Region of California burned 128,050 acres. In the aftermath, several varieties of invasive weeds emerged and spread in extreme terrain much too hazardous for ground control efforts. During September and May of 2023 Leading Edge Arial Technologies deployed custom unmanned aircraft system (a UAS or drone) with precision aerial imagery and spot treatment technology to the map and treat the area. This fully autonomous aerial UAS operational approach proved successful. As of May 19, 2023, more than one thousand twelve hundred points were treated with an estimated 6,000 more in a single park location. William (Bill)l Reynolds has 39 years' experience in various invasive weeds markets with specific expertise in UAS aerial imagery and agricultural products application. Bill provides tremendous knowledge and experience in the use of UAS for aerial applications, fast approaching the treatment of more than 100,000 acres. Bill leads the Leading Edge team in design, engineering, and manufacturing of PrecisionVision Unmanned Aircraft Systems. Bill has co-authored several UAS weed, pest, and other vectors treatment related articles. He also works with federal, state, county and non-profit entities nationally and internationally in the use of UAS technology for research and management projects across many application types.

9:45-10:45 ***Western Weeds to Watch For ~ Josh Wagoner***
Identification, ecology, and management of some of the highest priority and most impactful noxious weeds threatening southwestern Montana, including species such as rush skeletonweed, dyer's woad, ventenata, blueweed and more. Josh Wagoner has been the Montana Department of Agriculture's Noxious Weed Early Detection, Rapid Response Coordinator for just over two years. This position focuses on cooperative efforts to prevent or contain and eradicate especially critical new invaders. There aren't many things Josh would rather be doing than talking to and working with Montanans across the state on weed issues, seriously, so please reach out to him anytime.

10:45-11:00 ***Break***

11:00-12:00 **Biological Control in Montana ~ Melissa Maggio**
An update on the progress of the development of new biocontrol agents for houndstongue and Canada thistle will be provided. Details on the biology and use of the common and effective biocontrol systems in MT (yellow toadflax, Dalmatian toadflax, spotted knapweed, St. Johnswort, leafy spurge, etc.) will be provided as requested by attendees. Additionally, the Biocontrol Posters and updated Montana Biocontrol Field Guides will be introduced and handed out to attendees. Both the posters and field guides include information on the most common and effective biocontrol systems in Montana. Details of the plants and

insect's biology through the seasons and how to's on monitoring, collecting, and releasing are included within these educational tools. A hands-on activity will demonstrate how to utilize these materials. Melissa graduated from the University of MT with degrees in Botany and Ecology and is currently obtaining her MS through Montana State University's LRES online master's program. Prior to becoming the MT Biocontrol Project Coordinator, she worked for both agencies and non-profits focusing on land stewardship, restoration, and education. Since 2013, she has worked to provide the leadership, coordination, and education that will enable land managers in the state of Montana to successfully incorporate biological weed control into their noxious weed management programs.

12:00 – 12:45 ***Lunch - Provided***

12:45 – 1:45 **Pollinator Conservation and Pesticide Safety in Turf and Ornamental Landscapes ~ Abi Saeed**

Best Management Practices for Protecting Native Pollinators in the Landscape

IPM control options for weedy species found in turfgrass and ornamental settings in both public parks and gold courses, as well as in residential backyard environments will be discussed. Highlighted will be pollinator friendly practices to protect native pollinator species while employing weed control measures. Abi Saeed is an Entomologist with a specialization in Pollinators, Horticulture, Integrated Pest Management (IPM) Pesticides, Insect Identification, and Plant Pathology.

1:45 – 2:45 **Update on *Aquatic Plant Management ~ Thomas J. McNabb, President & Thomas J. Moorhouse, Vice President, Clean Lakes Inc.***

A review of various submerged, floating and emergent aquatic plant management projects using available technologies will be provided. Projects controlling aquatic vegetation with various aquatic herbicides will be discussed. Advances in technologies for controlling emergent and floating aquatic vegetation, as well as for controlling vegetation in hard to access areas using UAS technologies on projects throughout the western US will also be reviewed. Clean Lakes, Inc. (CLI) and its staff have been providing aquatic ecosystem restoration and maintenance services to governmental and private sector clients worldwide since the mid 1970's. The scope of services includes collaborating in research and development, development of aquatic vegetation management programs, environmental monitoring of aquatic plant communities, aquatic ecosystem mapping, implementing invasive species control programs (mechanical, biological, and through the use of US-EPA approved aquatic herbicides and algaecides), as well as services in marsh restoration, aquatic plant control, and water quality monitoring. Expertise also extends to compliance with laws and regulations including regulatory matters associated with the Pesticide General Permit (PGP) implemented under state or federal National Pollutant Discharge Elimination System (NPDES) requirements.

2:45 – 3:00 ***Break***

3:00 – 4:00 ***Strategies for Managing Invasive Winter Annual Grasses ~ Shannon Clark***

Invasive annual grasses, such as cheatgrass (Bromus tectorum), medusahead (Taeniatherum caput-madusae), and ventenata (Ventenata dubia) in the western

US are spreading at alarming rates and contributing to increased wildfire risk, reduced forage production, loss in wildlife habitat, and ecosystem degradation. An Early Detection Rapid Response (EDRR) approach has been successful in fighting new annual grass invasions, especially in areas where medusahead and ventenata are not present or still exist in small populations. Recent research has demonstrated that long term control of invasive annual grasses can aid in restoration of critical pollinator and wildlife habitats, and potentially reduce the spread and devastation of wildfires. Shannon Clark is the Range & Pasture/VM Stewardship and Development Manager for the Northern Plains region for Envu. Shannon received her PhD in Weed Science from Colorado State University. She continued there as a postdoctoral researcher focusing on evaluating herbicides for invasive species management on rangeland and ROWs before starting with the Environmental Science group at Bayer Crop Science and then Envu. She also continues to collaborate with Colorado State University Weed Science as a faculty affiliate.

Sponsored By the Southwestern Area of MWCA

$20.00 for MWCA members
$30.00 for Non-members
$10.00 Southwestern Area Coordinators
Presenters Free of Charge

Pre-register on the MWCA website at: mtweed.org or RSVP klaitala@powellcountymt.gov or 405.560.2919 (call or text) by February 23rd

Category	Credits
10 - Dealer	6
21 - Aerial	1
30 - Agricultural Plant Pest Control	3
33 - Forest Pest Control	3
34 - Ornamental and Turf Pest Control	2
36 - Aquatic Pest Control	1
37 - Right of Way Pest Control	5
39 - Demonstration & Research Pest Control	6
55 - Regulatory Weed	5
60 - Private Agricultural Pest Control	3
61 - Private Aquatic Pest Control	1