“Biological Wildfire” of Invasive Annual Grasses in the West: Urgency, Risks, and Promising New Solutions

Marjie Brown, Twitter @wildfirewriter_

07/19/2019

LOGAN, UTAH (July 15, 2019) - A recent two-day symposium brought together land managers, ranchers, ecologists, researchers, and agricultural industry representatives to take stock of what’s known about a potentially catastrophic profusion of invasive annual grasses in western rangelands and learn about promising, research-tested solutions that have been proven in the field.

Dealing with the Triple Threat Invasion: Cheatgrass, Medusahead, and Ventenata, took place at Utah State University June 25 and 26th, and was collaboratively presented by Utah State University Forestry Extension, Southern Rockies Fire Science Network, Great Basin Fire Science Exchange, and Bayer Environmental Sciences.

These invasive grass species, introduced from Eurasia to the Americas through seed-contaminated bedding, grain and straw, are causing devastating negative impacts on sagebrush rangelands by:

- Creating continuous tracts of fine fuel that amplify the intensity of rangeland wildfires threatening people, property, infrastructure, watersheds, wildlife habitat, and livestock;
- Significantly reducing or eliminating desirable perennial plants;
- Compromising nutrition for browsing livestock;
- Putting wildlife, birds, and pollinators at risk by destroying habitat and food sources;
- Threatening the long-term survival of the largest ecosystem in the US - the Sagebrush Biome.

The symposium started with an overview of these biological invaders, their impacts, and the myriad of challenges they present for land and ranch managers. It also included the environmental, cultural, and economic benefits of restoring affected rangelands and new progress being made towards finding solutions.

On Day One, Colorado State University researcher Dr. Shannon Clark presented her field trial data on the effectiveness of idaziflam in the successful long-term management of these grasses. Use of this selective herbicide, which explicitly targets the seedbank of invasive annual grasses, allows native plants to reclaim the water, soil nutrients, and sunlight they require to return to the desired landscape. Idaziflam is the generic name for the active ingredient in Esplanade®, developed by Bayer Environmental Sciences.

On Day Two, participants toured several research sites in Box Elder County, where long-term, idaziflam-treated research plots were viewed. In grass-invaded plots where native plant seeds still remained, indaziflam provided control of sufficient duration to allow depletion of the invasive grass seedbank.

Use of idaziflam resulted in these additional effects:

- Re-establishment of perennial native grasses, flowers, and shrubs through the release of remnant populations and revegetation practices
- Dramatic increases in pollinator resources
- Increased forage in mule deer winter range by spurred by significant new shrub growth
- Reduced threat of high-intensity wildfire through a 40x reduction of fine fuel biomass
- Resistance to future annual grass invasion

Bayer has worked in research partnerships with land grant universities and agencies throughout the west since 2015. The efficacy of Esplanade is documented in 100 replicated field trials to date.

“Esplanade® participates in the ecosystem instead of nuking it. It’s made a huge positive impact at the ecosystem level,” presenter Justin Hossfeld, Former President and General Manager of Sunlight Ranches. He
stressed the urgency of applying proven solutions in the face of the recent devastating fires and loss of sagebrush habitat. “Huge amounts of land will be lost. An entire ecosystem could be lost. We don’t have time.” Shannon Clark added, “The time to act is now.”

Effect of indaziflam on native species in natural areas and rangeland | Recorded Presentations

Harry Quicke - Manager
Western US Stewardship and Development
Vegetation Management / Bayer Crop Science LP
harry.quicke@bayer.com 970.833.0494

Gloria Edwards – Program Director
Southern Rockies Fire Science Network
Warner College of Natural Resources
Colorado State University, Ft. Collins, CO.
gloria.edwards@colostate.edu 970.491.2991

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www.marjiebrown.com