For Immediate Release

Front-Line Responders Fight Plant Invaders That Fuel Fires – and More

WESTMINSTER, Colorado – November 2, 2021 – Fires have had a devastating impact on communities and public lands across the western U.S. in recent years. But scientists with the Weed Science Society of America (WSSA) say effective weed control can make a difference. That's why invasive plant managers with the National Park Service make it a priority to eliminate weeds that can dry out, tumble and provide fires with a continuous source of fuel.

Fire prevention and containment measures are just one example of the important role front-line responders play in protecting native ecosystems. In addition to promoting fires, unwelcome, nonnative weeds can crowd out native species, reduce biodiversity, spread disease and inflict costly damage to roads, canals, levees and other infrastructure.

The First Response Team

Curt Deuser, a supervisory ecologist with the National Park Service, was instrumental in the launch of the first specialized team devoted to invasive plant management. His focus at the time was tamarisk (also known as salt cedar), a plant first introduced in North America as an ornamental. A single mature tamarisk plant can consume many gallons of water a day – reducing the water table and robbing moisture that cottonwoods, willows and other native species need to survive.

Nearly 30 years ago, Deuser noticed inconsistent and ineffective methods were being applied to fight tamarisk across various public lands. He worked to develop an effective, science-based methodology for managing tamarisk at 15 national park units in five western states. A traveling team trained local land managers and provided much-needed continuity and expertise. The approach was successful and the concept gained steam.

Today there are 17 Invasive Plant Management Teams tasked with fighting invasive species across nearly 300 national parks. These teams of early responders focus on identifying, containing and treating invaders, restoring native plant communities and protecting our natural

ecosystems. Over the past three years, they have actively monitored as many as 210,000 acres a year and have actively controlled weeds on an average of about 8,300 acres annually.

Early Detection/Rapid Response

Deuser says the teams strive for early detection and rapid response to prevent invasive weed species from doing significant harm to park resources. A few examples:

- The Lake Mead Inter-Regional Invasive Plant Management Team is taking steps to prevent fountaingrass from colonizing in Mojave Desert park units and along the Colorado River system. This invasive ornamental is extremely flammable and easily spread. One sign of the risk: A recent study shows that fire-prone grassy invaders like fountaingrass can increase the occurrence of wildfires by up to 230 percent compared to native habitats like sage brush. Invasive plant management specialists have worked with the park staff to remove fountaingrass from landscaping and to treat and eradicate escaped populations – preventing what might have been a catastrophic infestation.

- The Southwest Invasive Plant Management Team is focusing on early detection and control of stinknet, also known as globe chamomile. This noxious weed dries out in the summer and becomes fuel for wildfires that threaten native Sonoran Desert ecosystems.

- Park Service teams have discovered that invasive plants often make major leaps in the aftermath of a fire – creating an opportunity for early intervention. After a 2018 blaze that burned 97% of California's Whiskeytown National Recreation Area, they anticipated a vigorous flush of invasive annual grasses. By taking aggressive control actions, they were successful in keeping major infestations at bay.

Partnering to Control Weeds That Know No Borders

Invasive Plant Management Teams work closely with other agencies and organizations. One of those is U.S. Fish and Wildlife, which has its own version of the National Park Service model called "Strike Teams." Such interagency cooperation makes it easier to control invasives across broad areas.

"It's like calling in firefighters or the Marines," Deuser says. "We can send in expert crews equipped to work with local staff to fight weed infestations and to prevent them from becoming even larger-scale issues."

Like many other tactical teams, Invasive Plant Management Teams travel where the action is. And they have to be physically fit. "It's hard work," Deuser says. "You might have to hike for miles with a heavy backpack to reach problem areas, and then camp out when you get there."

But above all, team members need to understand invasive plants. Almost all have degrees in biology or environmental sciences, backed by extensive, on-the-job training in effective management techniques. They are also experienced both in sharing what they know and in marshalling teams of volunteers to extend their reach.

Jacob Barney, Ph.D., a WSSA member and associate professor of invasive plant ecology at Virginia Tech, says the 'roving expert' model adopted by the Park Service has proved to be an effective tool for managing plant invaders across our vast national parklands.

"Invasive Plant Management Teams bring strategic focus and expertise that might be lacking at the local park level," he says. "They offer the skills needed to detect and prevent the spread of new species, reduce existing infestations, and restore our native plant communities and ecosystems."

About the Weed Science Society of America

The Weed Science Society of America, a nonprofit scientific society, was founded in 1956 to encourage and promote the development of knowledge concerning weeds and their impact on the environment. The Society promotes research, education and extension outreach activities related to weeds, provides science-based information to the public and policy makers, fosters awareness of weeds and their impact on managed and natural ecosystems, and promotes cooperation among weed science organizations across the nation and around the world. For more information, visit www.wssa.net.

EDITORS: Supporting photos are available for download on the WSSA website at https://wssa.net/supporting-photos.

Press Contact:
Lee Van Wychen
Executive Director of Science Policy
National & Regional Weed Science Societies
Lee.VanWychen@wssa.net
202-746-4686