

Testimony of Mr. Wayne Padgett

**Before the House Natural Resources Committee
Subcommittee on National Parks, Forests and Public Lands**

**H.R. 1572, the Botanical Sciences and Native Plant Materials Research, Restoration, and
Promotion Act**

July 18th, 2019

Chairwoman Haaland, Ranking Member Young, and Members of the Subcommittee:

I appreciate, very much, the opportunity to speak with you today in support of H.R. 1572, the Botanical Sciences and Native Plant Materials Research, Restoration, and Promotion Act.

I am presenting testimony today in my individual capacity and my views are informed by my 30 years of Federal service as vegetation ecologist; 25 with the U.S. Forest Service at the forest, region, and national levels, and my subsequent work for the Bureau of Land Management from 2009 through 2013 as Colorado Plateau Native Plant Program Lead.

In these roles, I gained extensive experience and expertise in the challenges that face the Federal land management agencies in maintaining healthy, resilient, and economically productive ecosystems; experience such as mitigating the risk of destructive wildland fires; implementing successful landscape restoration projects to ensure continued economic and ecological productivity; and optimizing public use and enjoyment of our Federal lands.

In my judgment, H.R. 1572 is a thoughtful and calibrated approach to promoting intelligent, cost-effective land restoration and management practices that advance the foregoing objectives while maintaining and even enhancing agencies' flexibility to respond to complex specific challenges.

The bill addresses several inter-related needs, including supporting critical land restoration-related research; deploying more botanical scientific expertise in key land management agencies; incentivizing private sector production of native plant materials necessary for restoration projects, and expressly authorizing existing federal efforts to combat invasive plant species, conserve plant biodiversity, and utilize native plant materials in public land restoration.

The challenges to ecosystem health, especially in the western United States are serious and growing.

From 1985 to today, the trend in acres burned by wildland fire is increasing at a frightening rate. In 1985 approximately 3 million acres burned in the United States. In 2015 and 2017 over 10 million acres burned. And it's not just our forests that are burning.

Forest and rangeland fires have a devastating effect on the people in the communities surrounded by the fires and on the ecosystems in which they occur.

It is estimated that over 100 million acres in the West are infested with invasive species; many of those acres are covered with the highly-flammable, non-native, annual cheatgrass.

Research has shown that ecosystems dominated primarily by native plant species are four times less likely to burn than those that are covered with invasive species. In addition, they provide critical habitat for the wildlife that have grown to depend on them.

The challenges of restoring especially the driest and hottest of those systems to a more naturally functioning one is difficult with even the most knowledgeable individuals leading the way, it is nearly impossible when those skills are desperately lacking.

Experienced scientists are needed to conduct the appropriate research and to implement effective land management on the ground. In a 2010 report on *Assessing botanical capacity to address grand challenges in the United States*, over 40 percent of the federal botany employees self-reported that they would be retired by the end of this year; 2019.

I, like many others with whom I have worked throughout my career have kept to that schedule. I have been retired almost 6 years, and since then several others have followed suit. These individuals played a critical role in promoting efficient and effective land management and restoration.

Losing botanists, ecologists, and other experts is a loss not only of people on the ground, but also of crucial institutional memory.

And, when you understand that there are nearly 20 times fewer botanists and ecologists in the federal agencies than there are wildlife biologists, this has a huge impact on doing the job right in the first place.

The scope of the challenges we face is daunting, but there are successes to be built from. The Bureau of Land Management has invested in two ecoregional programs, one in the Colorado Plateau and one in the Great Basin, that are focused on the restoration of resilient ecosystems. These native plant development programs are collaborative efforts that include multiple government partners as well as the private sector – native seed growers and native seed collectors, who are perhaps the key that holds the whole program together.

HR 1572 would, in my opinion, help drive demand for native seed that the private sector can and will meet.

And not all non-native plant materials have arrived on their own. For years many select non-native species have been purposely used for fire rehabilitation because when they are seeded, they grow. But they do not provide the same biodiversity that so many of our wildlife, birds, and pollinators (critical for our agriculture industry), evolved with. And many of these species have not adapted well to this loss. The dividends to be reaped from increased native plant use like that outlined in this bill are massive.

This bill, the *Botanical Sciences and Native Plant Materials Research, Restoration, and Promotion Act*, would provide the capacity for the much-needed research for a better understanding of how federal land managers might better meet the mission of their agencies, and it provides for the staffing needed to get the job done.

Thank you very much. I sincerely appreciate the opportunity to testify before the subcommittee and would be pleased to answer any questions you may have.