



Prepared for the U.S. Senate Committee on Environment and Public Works

The Invasive Species Threat: Protecting Wildlife, Public Health, and Infrastructure.

Testimony of Slade Franklin

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Chairman Barrasso and Ranking Member Carper, as well as other members of the committee, thank you for the opportunity to speak in front of you today. My name is Slade Franklin and I serve as the Weed and Pest Coordinator for the Wyoming Department of Agriculture. For the past 15 years I have been working on the issue of invasive species in the state of the Wyoming, the western region, and the United States. My background includes serving as Chairman of the Western Weed Coordinating Committee, the State Weed Coordinators Alliance and currently I'm finishing my first term as an appointed member of the National Invasive Species Council's Invasive Species Advisory Committee as formed under the Federal Advisory Committee Act.

Through my experiences in the state of Wyoming and involvement in regional and national working groups, I've gained insight and experiences to the unique and difficult task of managing invasive species. Many see the issue of invasive species as an agricultural issue, a need to manage weeds in crop production. However, the extent of the problem is not limited by industry; by location; or by economic impacts. Urban communities deal with the issue as much as the rural communities. Species like zebra mussels can impact water supplies for livestock and municipalities. The impacts of invasive species from feral pigs, Burmese pythons; invasive weeds and pests are economically staggering. US losses alone were estimated in 2005 at \$120 billion annually, a number that is likely well below the current losses.

Additionally we are becoming more and more aware of the impacts to our native wildlife. An obvious example is the brown tree snake in Guam devouring the native song bird population or feral pig predation on ground-nesting birds and sea turtles. Or, as in the state of Wyoming and the Great Basin, invasive grasses such as cheatgrass, medusahead rye and ventenata are altering critical habitat for sage grouse and mule deer by transitioning sage brush communities from a 50 year fire cycle to a 3 year fire cycle. Recently, the Western Governors Association held a series of workshops on the issue of invasive species. During one these workshops it was reported by the Bureau of Land Management that in the last 20 years, 74% of Department of Interior acres burned have been rangelands and 80% of the 12 million acres burned have been on cheatgrass invaded rangelands. Additionally they reported that cheatgrass landscapes burn four times more frequently than in native vegetation types. In 2015 through 2017 the National Interagency Fire Center reported suppression costs exceeded \$7 billion dollars. If you do the rough math, that equates to a cost of \$5.6 billion to manage wildfires associated with, and likely exacerbated by invasive species.

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In 2016, the Invasive Species Advisory Committee published a white paper outlining the problem invasive species present for the country's infrastructure. The committee reviewed four main categories; power systems, water systems, transportation systems and housing. The issue of quagga and zebra mussels is one of the threats identified. A threat Wyoming has yet to discover in our water systems, but does currently exist in many states near us. Beyond quagga and zebra mussels, the ISAC white paper identifies threats such as Raspberry crazy ants to electrical equipment, and burrowing nutria and iguanas on flood control levees. Most concerning is the committee's conclusion that federal agencies currently lack the authority necessary to effectively prevent, eradicate, and control invasive species that impact the human-built environment. This lack of authority prevents rapid response to some of the most damaging invasive species and also limits the ability of agencies to prioritize and allocate resources.

Invasive species can also have a direct impact on public health such as introduced terrestrial pathogens and diseases. Zika virus and West Nile virus are both introduced mosquito-borne viruses that directly impact human health. Both viruses utilize native bird and mosquito species as hosts and vectors. In Wyoming, the first confirmed case of West Nile virus was in 2002, since then Wyoming, Montana, North Dakota and South Dakota have the highest average annual incidence of West Nile neuroinvasive disease reported to the Center for Disease Control. West Nile neuroinvasive disease can cause inflammation of the brain (encephalitis) and of the membranes surrounding the brain and spinal cord (meningitis). Between 1999 and 2017, over 2,000 deaths have been reported to the Center for Disease Control due to this invasive virus with an additional 137 deaths reported in 2018.

The task of managing such a vast, complex issue as invasive species can be staggering if not completely overwhelming. In the case of invasive weeds, the threat can sometimes be ignored due to the aesthetic value of some of these plants. This is why it is important to be strategic and intentional in how we manage these species across the landscape. An approach such as Early Detection – Rapid Response to emerging threats is an example of one of these strategic actions. Wyoming has taken this approach with the recent discovery and eradication of rush skeletonweed and other species in our state. The EDRR approach is analogous to the medical field where early intervention with cancer has become a standard practice for improving the likelihood of successful treatment.

Successful management is realistic, achievable, and proven. Partnerships involving federal, state, and county agencies as well as private landowners have proven to achieve landscape scale management that is beneficial to agriculture and wildlife. In Wyoming we have been successful by ensuring all parties are actively engaged in the issue from a landscape scale to a broader state scale. For example, we have multiple groups working in partnerships across federal, state, and local agencies in conjunction with private landowners, non-governmental organizations, and the land-grant university to cooperatively reduce the impact of invasive species on the variety of ecosystem goods and services provided by our wildlands.

In 1896, US Department of Agriculture botanist Lyster Dewey was requested by Congress to research how the western states could eradicate the invasive weed Russian thistle. Russian thistle had been introduced into South Dakota through contaminated flax seed and had quickly established itself throughout the west and mid-west. Some of you may recognize Russian thistle as the tumbleweed co-starring in nearly every western movie ever made. In his report back to Congress, Dr. Dewey noted a couple important points he thought congress should consider when legislating for weed management. One of his primary recommendations was, "In nearly all cases the landowner can do this work at much less cost than it can be done by public authorities." Federal and state government partners contribute greatly through their jobs, but agricultural producers are passionate and financially motivated. Their livelihoods depend on healthy ecosystems. In other words, what is good for wildlife is typically good for agriculture. Programs such as USFWS Partners for Wildlife and the USFS State and Private Forestry programs are essential tools in rewarding landowner efforts and allows them to actively contribute to improving habitat for wildlife including those recognized as species of greatest conservation need. I urge you to protect and fund these two programs accordingly and appreciate the But this not enough.

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In the same 1896 USDA bulletin Dr. Dewey states, “Next to the railroad yards and the waste land in cities and villages, the roadsides are the most important avenues for the introduction of new weeds and for the propagation of old ones. They should, therefore, be watched with special care.” Dr. Dewey’s comments are still as true today as they were then. Roads and rail lines are still one of the primary avenues by which invasive species move. In most cases, when a new invasive weed appears in Wyoming, we will find it near a road or rail line. We have watched invasive weeds such as yellow starthistle, an invasive plant that has infested 14 million acres in California, creep its way east by following the pathways humans have created. That is why when states such as California, Oregon, and Washington tell us they are concerned about a new invasive species, Wyoming pays attention. This also puts in perspective how difficult it is to manage the Yellowstone National Park and the Greater Yellowstone ecosystem when over 4 million visitors annually drive a car through one of the Park’s five entrances.

As the issue of invasive species progresses and expands, we need to continue moving the dialogue forward as to what role we can play in improving success while identifying what resources are already in place and what additional resources are needed. Just under 50% of Wyoming is managed by federal agencies, and some of the more concerning infestations of terrestrial weeds occur on these public lands. When cross-jurisdictional programs are developed, local experts should be empowered by their respective federal agencies to make critical, time-sensitive decisions utilizing the best available information without tying their hands with excessive regulation or process-based bureaucracy. It is important for the National Invasive Species Council and their staff to identify these roadblocks and remove them, thereby increasing the effectiveness of multi-jurisdictional partnerships. Examples of these roadblocks include, the National Environmental Protection Act requirements for aerial applications of herbicides inconsistently applied across the National Forests in Wyoming. The lack of categorical exclusions for Early Detection – Rapid Response impedes our ability to treat high priority infestations in a timely manner. Inconsistent risk assessment protocols for new tools by various federal agencies alienates partners abilities to implement landscape scale management. High turnover and the overall lack of dedicated invasive species management positions in the land management agencies can leave partnerships fragile. We have to increase federal agency capacity.

Capacity can be improved through policy and legislative changes, but it also needs to be improved through funding. Invasive species programs have often relied on grants and short term funding sources which are helpful with immediate or initial treatment needs, but do little to assist with long-term program objectives or planning. Effective management programs require long-term survey, monitoring and potential re-treatments which can only occur with the knowledge that the financial resources will exist. Additionally, we need to improve funding for research and development. Programs such as USDA-ARS and land grant universities such as the University of Wyoming have programs and staff that can develop new management tools including biocontrol agents while providing assistance to local partnerships with implementing scientific sound management programs.

New funding is not the only solution. In 2017, the National Interagency Fire Center reported firefighting costs were \$2.9 billion to fight fires on 10 million acres. This works out to a cost of \$290 dollars per acre. A landscape scale herbicide treatment of cheatgrass cost at most \$60/acre. If you apply the Department of Interior statistics that 80% of rangeland fires are related to cheatgrass to the 10 million acres, that means 8 million acres burned due to invasive annual grasses. The cost to treat those 8 million acres before they burn would roughly cost \$480 million compared to the \$2.3 billion it cost to fight fires on the same acreage. Yet agencies are only treating a small fraction of the infested acres, the Forest Service reported in 2015, that on average they treat 400,000 acres a year for invasive species. If the medical adage “prevention is better than the cure” is true, it may be time federal agencies look within as to how current firefighting funds are utilized and change the paradigm.

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Invasive species present a daunting task and we will only scratched the surface of the issue today. It also doesn't mean success is unachievable. In 2018 the National Invasive Species Council Secretariat's Office published a booklet called "Protecting What Matters". It includes fourteen examples of successful invasive species management programs throughout the United States and territories. Programs highlighted in the booklet range from the eradication of rats on Alaska's island ecosystems, to the management of aquatic weeds in the Erie Canal. In Wyoming, and with many of the western states, success is achievable through the leadership of state and county programs. Wyoming requires each county to have a weed and pest control district and fund them through local tax dollars. These weed and pest control districts are managed by boards consisting of local landowners and are managed by supervisors who are required by law to be pass weed and pest college courses offered through the University of Wyoming. Even our states newly elected Governor Mark Gordon stated in his first State of the State address, "I plan to work with UW's College of Agriculture and Natural Resources, our community colleges and the state's weed and pest districts to put together a program that will combine research with management. Aiming to make sure Wyoming is a leader nationally on combating invasive species." My point here is simple, if federal agencies need help; the state and county programs are willing and able. The issue is too important for western states like Wyoming to ignore.

Chairman Barrasso, thank you again for the invitation to speak with your committee. I would close by congratulating you on receiving the 2018 Wyoming Weed and Pest Council's Guy Haggard Award for your support of the organization and its purpose and goals. The Council not only appreciates all your efforts in helping bring national attention to the issue, but your efforts to address this issue through Senate File 826 the Wildlife Innovation and Longevity Driver Act also known as the WILD Act. I look forward to answering any questions the committee may have.

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