

Forestry ^{The} Source

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US Forest Service Issues Agency-Wide Invasive Species Policy

The US Forest Service has long battled invasive species on its 193 million acres and has conducted extensive research into controlling and eradicating a wide range of invasive terrestrial and aquatic plants, pathogens, vertebrates, and invertebrates. However, until last year, the Forest Service had no agency-wide policy for addressing invasives. The new policy, published on December 5, requires the integration of invasive species prevention; early detection and rapid response, control, restoration; and collaborative activities across all National Forest System lands.

“The integrated nature of this new approach will make the Forest Service able to more effectively manage invasive species in the context of environmental issues such as adaptation to climate change, increasing wildfire risk, watershed restoration, fragmentation of habitats, loss of biodiversity, and human health concerns,” said US Department of Agriculture Undersecretary Harris Sherman as he announced the policy. “At the same time, we will be engaging the public, including participation by tribes, in these programs and benefits.”

The agency cited estimates that non-native invasive species cost \$138 billion each year in environmental damage and other losses in the United States.

Mike Ielmini, the Forest Service’s national invasive species program manager, said the advent of the policy is a significant step for the agency.

“It’s a milestone for the agency in that it brings things together very holistically across the national forests and grasslands and helps us be better stewards of those areas,” he said. “It deals with all taxa and is a very integrated approach, so that invasive species management becomes a concept like safety: it’s part of everybody’s job, everybody has a role and responsibility. It’s not just the weed specialists or the bug specialists, but it’s also the recreation technician’s job, it’s the firefighter’s job, it’s the wildlife biologist’s job, and so on. We all have a role.”

The policy requires invasives to be addressed in National Forest Land and Resource Management plans as well as at the project level.

“In the past, it was rare that forest plans addressed invasive



Tom Heutte, USDA Forest Service, Bugwood.org

The US Forest Service’s new invasive species policy will sharpen the agency’s focus on battling Japanese knotweed and many other animal, insect, and plant invaders.

species, and when they did, it was usually just a few pieces related to weed management. There was really no focused effort to try to protect those areas—it was wait and see, watch it happen, and then try to mitigate it after the fact. It was very reactionary—it wasn’t proactive at all. Subsequent to this new policy, we are building more-detailed operational guidance that will have specific direction on how to develop forest plans that include comprehensive invasive species components,” Ielmini said.

While the new policy offers broad direction for the Forest Service as a whole, the agency also is developing a manual that spells out responsibilities at all levels, from the chief to districts.

“The district rangers and forest supervisors are going to be dealing with the specific operational parts of the policy, the integrated landscape approach. They are going to be responsible for inventorying, surveying, monitoring, and treating, as well as keeping records, which is very important from a scientific standpoint. They’ll be using an adaptive management process to ensure that they are connecting this into watershed restoration, helping to decrease the loss of biodiversity, addressing human health concerns,” said Ielmini. “Basically, every project is going to have an invasive species element to it and will be assessed,

prior to project approval, for the risk of spreading invasive species. And [plans] will include, if necessary, measures for mitigation.”

More than Weed Management

As the number of invasive species and their spread have increased over the years, Ielmini has seen an evolution in awareness of the issue.

“People aren’t just talking about weeds anymore, they’re talking about fish, mussels, birds, bugs, snakes, diseases, and so on. We’ve seen the invasives issue grow from a few high-profile species in a few types of ecosystems to pretty much every facet of the landscape,” he said. “Traditionally, we’ve focused mostly on the individual insects or diseases that kill trees. But look at earthworms—what does an earthworm mean to a forest? Well, you’re not going to see much of a forest if you have exotic earthworms wiping out the soil horizons that trees grow in.”

“Many foresters know very little about pathogens such as white-nose syndrome, a disease of bats that may have profound effects on forests in the United States,” said Ielmini. First documented in New York in the winter of 2006–2007, the disease has spread rapidly into 16 Eastern states and four Canadian provinces, and the fungus that causes it has been found as far west as Oklahoma.

“This disease is wiping out bats. We’re talking about 100 percent mortality—there is no cure. This is said to be one of the most precipitous declines in a wildlife population in recorded history. What does that mean for forests? Well, it means a whole lot. Bats are an essential controller of forest and agricultural insect pests, so what are you going to do when the bats are gone?” said Ielmini.

“We’re losing ground against invasives, and we need to step up to the plate and start dealing with this holistically. That’s the big message for foresters: that they’re not out there working against invasives in isolation, but they’re part of a wide array of professionals working across the landscape.”

Ielmini said his agency plays a very large role in fighting invasive species.

“The National Forest System has such a huge footprint across the landscape,” he said. “Twenty percent of the state of California is national forest — one fifth of the state. If we don’t do something about invasive species on those forests and the others across the nation, across all taxa, then we’re the source population. This new policy was built with that in mind.”

For the latest news on invasives, visit the “Invasives” subject area page on the SAF website at www.eforester.org/fp/pathology.cfm.