

Testimony before the Oregon Senate Committee on Environment and Natural Resources special informational hearing on *Arundo donax* on May 21, 2012

The following is a “not quite perfectly verbatim” transcript of NPSO President Judi Sanders’ remarks before the Oregon Senate Committee on Environment and Natural Resources special informational hearing on *Arundo donax* on May 21, 2012. We were only supposed to speak for 4 minutes but this ran a little longer.

“Good afternoon Chair Dingfelder and committee members, I’m Judi Sanders from the Native Plant Society of Oregon. I am accompanied today by OSU Field Crops Extension Agent, Retired, Susan Aldrich-Markham, also an NPSO member; NPSO Vice President and Legislative Chair Billy Don Robinson; and Nikki Wiseman, NPSO’s Youth Coordinator.

I’m an Oregon native but graduate school took me to Orange County California where in a 30-year period I watched *Arundo donax* invade the Santa Ana River, Carbon Canyon, and many other areas. Orange County, which has a landmass less than 1% of Oregon’s, has spent 40 million dollars in the last 15 years attempting to control it and they are still fighting the battle.

I’m going to talk about four reasons why *Arundo donax* will be an invader in Oregon if we continue on the current path.

Reason number one: existing scientific data show it to be invasive. The Global Invasive Species Database lists *Arundo donax* as one of the top 100 worst invaders. Ditomaso, et al., 2012, indicate that the 3 strongest predictors of invasiveness are whether or not there’s a climate match, whether it’s invasive elsewhere, and the amount of it in the environment. USDA-APHIS notes there’s a climate match and you’ve already heard that – but it is also true that we had a feral patch in the Medford area and ODA had to eradicate that. So clearly that’s the case. APHIS also indicates that it is invasive elsewhere, “In the United States, it is invasive from northern California across the Southwestern and Southeastern United States to Maryland.” They go on to note that it is naturalized as far north as South Bend, Indiana, and Coeur ‘d’Alene, Idaho. In reference to the third criterion, when we plant 50,000 or 90,000 acres of this or even far less, there will clearly be plenty of it to be invasive.

The second reason it will be an invader has to do with how it propagates. *Arundo* propagates by rhizome or stem segment or layering. It only takes a small amount of the plant and water to regrow. And APHIS indicates that rhizomes buried as deep as nine and one-half feet will regrow. So far the seeds are sterile but Glaser & Glick, 2012, note that can change citing Townsend’s cordgrass that was a sterile hybrid but after decades began producing fertile plants -- which would be catastrophic if *Arundo* did that.

A third reason it will be invasive is it's a traveler. It stretches its roots. APHIS notes that in Texas there are stands that are half a mile wide. That means it can grow under roads; it can grow past irrigation lines. And it might be very hard to catch those feral plants. In addition, it moves by weather events. Now winter flooding is unusual in Boardman, but the Morrow County Pre-disaster Mitigation Plan says that summer thunderstorms and floods along with wind events are risks in the area and both of those could spread *Arundo*. APHIS also notes that humans track it – in their clothing and boots. Machines move it – farm equipment and ancillary vehicles for people who work there, their trucks and so forth. PIER in 2006 indicates that a single clone can cover hundreds of acres. Everything near Boardman ultimately drains to the Columbia. And if *Arundo donax* reaches the Columbia River it will be a disaster of unimaginable proportions. We, all of us, will be responsible to the citizens of Oregon and the citizens of Washington for generations to come for the devastation it causes. And early detection is very difficult: small *Arundo* plants look like grass. The cost to monitor 50,000 or 90,000 acres will be astronomical to try to make sure it's not escaping.

The fourth and final reason it will be an invader is the short-term studies (Prosser/Boardman) do not demonstrate that it won't be invasive. They are operating on a kind of linearity principle -- but invasive species don't invade by a linear principle. It's in fact a curvilinear relationship. What happens is they creep along, they creep along, they creep along and then all of a sudden they shoot up -- a bloom so to speak. If we wait for the bloom, it will be too late. Shawna Bautista of the United States Forest Service gives the example of Yellow tuft alyssum, which we brought into the state predicted to be noninvasive. It was fine for decades but then all of a sudden it became a noxious invader. She now spends much of her job taking care of that. It's now an A listed weed in Oregon. In fact, as people have already said, *Arundo donax* was present in California for at least a hundred years before it became a noxious invader. And now it's taken up 70 million dollars, so far, in the state budget. Furthermore, Glaser & Glick, 2012 note that we don't know what the effects of climate change will be but it almost certainly will help to spread the plant.

Some, the ODA for example, have argued that there are places where *Arundo donax* won't grow, like the artic; there are places where it does grow, where it's invasive. Couldn't Oregon be that magic place in the middle where it grows but it doesn't become invasive? The answer is no. If it grows so that it is commercially viable as a biofuel, it will become an invader because it will be a very vigorous plant.

Raghu, et al., 2011, indicated "The road to species introductions is often paved with good intentions, but is littered with their consequent legacy." Control of invasive species, as you've already heard, requires a proactive approach and the time to act is now before we invest more money, time, and effort into planting this invasive species in Oregon.

I encourage you to look at page 9 and 10 of the handout I've given you, the NPSO Statement on *Arundo donax*, at the Cal Weedmapper report on the spread of *Arundo*

donax. Don't let Oregon become California.”

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