

Silverman: Johnny, could you tell us a little bit about your organization, The Siuslaw Institute?

Sundstrom: We're located in the Siuslaw Basin. We have an office in Deadwood, Oregon dedicated to the sustainable improvement of both community and habitat, particularly in the coast range of the Pacific Northwest. Primarily, we deal with project management for restoration, education activities in local schools, sponsoring a native plant nursery at one of the local schools, publications on natural resources issues—and also occasionally producing dramatic performances in the local area.

Silverman: Please give us some specific examples of the types of restoration projects the Institute works on.

Sundstrom: One of our flagship projects, which engages all of the partners who work together here in the Siuslaw, is on Karnowsky Creek. It's right near the estuary of the Siuslaw River so it's a very important potential habitat. The creek had been straightened for drainage to support productive dairy and farming operations. Historically, the social expectations for the early settlers were that they would clear the land, make farms, raise families—and they did a good job of it. Now, we've moved on to having different social requirements and expectations from our landscapes.

The restoration work on Karnowsky included re-establishing the meander characteristics of the stream for Coho and other habitat needs. A re-configured creek also meant a new riparian area that needed to be vegetated, and we disposed of the waste from digging the new channel by creating hummocks, which gave us a different micro-habitat up and out of the rather swampy areas.

All of this activity contributes to the education of the students who are growing plants in the nursery and are engaged in the restoration and monitoring.

Silverman: Is the meandering character of the creek important ecologically?

Sundstrom: Yes. When farmers straightened these creeks, it sped them up, and this scoured out the gravel essential for spawning fish. Then the creek banks collapsed into the watercourse and covered even more spawning gravel. The straightened creeks were effective at removing water from pasturelands, but the increased velocity flushed out juvenile fish prematurely, and removed pools and backwaters and the debris that helped them hide from predators. So by creating meanders, slowing down the water, and raising the bottom of the creek, we reconnected it with the natural flood plain, providing some of the lost elements of the original habitat.

## restoration of the suislaw basin

Johnny  
Sundstrom  
interviewed by  
Howard  
Silverman  
and  
Jay Hutchins



Recently re-configured  
Roache Creek (Coho spawning  
tributary), Rodet family  
property, Siuslaw Basin

Silverman: Can you tell us how economics has shifted in the Siuslaw Basin?

Sundstrom: A whole combination of events, including regional and long-distance transport and marketing, better refrigeration, large-scale operations, and a lot of other elements reduced the competitiveness of local farming in the local market. In the last 25 years, society's opportunities and goals have shifted more to the preservation of natural habitat, so that has become the new standard for the use of some of these lands, which were marginal farmlands at best.

We went through a period of time when people who had some cattle and/or produced hay also needed to have a job in the local mills or in the fishing fleet, for the cash part of their personal economy. As these options have disappeared, we've seen a lot of people selling out or passing on. So the land is going to people who own it for non-production purposes. These new landowners present a real opportunity for restoration—if we can get them involved. One of the problems is that they often think that the best approach is to "just leave it alone, nature knows best." But we have learned that when land has been impacted by either agriculture or logging, there are critical practices that need to be applied for the real restoration of natural functions.

Silverman: For forestlands, could you tell us why such active management is important?

Sundstrom: When you have a major disturbance, whether it's natural or occurs as a result of clear cutting or other timber management options, you have a landscape that rehabilitates very slowly. Those who desire a quick return on their investment tend to over-plant. Right now, the Forest Service has a huge backlog of what they call "commercial thinning," because of over-planting of a single species—Douglas Fir. With that type of regeneration, you get over-crowding and poor species composition, which can cause disease to spread and increase fire danger from fuels building up. Probably in 500 years the forest would sort itself out, but once the land's been severely impacted, if you don't contribute to and manage that recovery, you end up with less than desirable forest characteristics, whether your goal is for Bambi or for your retirement income.

Silverman: What makes this shift towards restoration in the Siuslaw such an important story?

Sundstrom: Well, if you look at the landscape in 1990, the fisheries had collapsed due to a lot of factors, but the one that we could do something about was the in-stream rearing and spawning habitat. Those numbers crashed from what had been an annual run of 250-400,000 Coho in pre-1890 times, to 4,000. That is down to about less than 3 percent of the historic abundance.

In the forests, around 2 billion board feet were taken out of just the Mapleton Ranger District between 1960 and 1990. And so the landscape, while people continued to move here and love it because of its natural beauty, was suffering greatly and no one party had either the answers or the assets to begin to address the full range of ecological problems that we were facing.

In the Deadwood sub-basin, local citizens and agency personnel detected management issues that were caused by a lack of communication and shared knowledge, and we convened a process whereby the agencies and the operators and private interests all had incentives to come together to discuss how they could work together in the future.

The Oregon Plan for Salmon and Watersheds came out a few years later, and the Jobs in the Woods program came out, and then Senate bill 1010, which was an advisory to landowners to allow riparian vegetation to re-grow. All of these things required a cooperative approach to management of the landscape which was not based on anyone's particular boundary, expertise, or jurisdiction.

Getting private landowners to accept assistance required a kind of negotiation—"Okay, if you'll let us come onto your property to do some fish habitat work in-stream, we will also help stabilize these creek banks that are eating away at your land." In order to get the landowner to participate, you had to have both practices in the same project.

There was a time of jockeying around and finding out who could do what, what assets could be applied to what projects. The watershed council did assessments, and basically we're also blessed with agency employees who passed up promotions that would have required relocation. There's a trust level among people who have worked together over longer periods of time.

All these things came together to build a cooperative mentality and a collaborative process, so that we almost don't know how to work without that any more. It's become institutionalized and the things we've learned about partnership are becoming things that we help share with other people and other places.

Hutchins: What is the social value of this restoration?

Sundstrom: The social value in the long run is, as we say, to get agreement about having sustainable harvested timber coming down the road and abundant fish runs going up the creek in 30 years. If we all want that in 30 years, what do we need to be doing in 25, 20, 15, 10, 5 years? What do we need to do together tomorrow to reach that goal?

Now once you have that agreement, we'll get to know each other, and we'll overcome some of the social bias that we might have felt toward each other, just by finding something we can do together. So we find entry points into a person's own objectives and how they can fit into a social atmosphere that says: We want to restore the functions of the landscape and its productivity to something that is never going to be pristine, but it's something that is sustainable.

Hutchins: With people as part of the eco-system?

Sundstrom: Yes, absolutely. Our endangered species here are basi-

cally spotted owls, marbled murrelets, Coho salmon, loggers, and fishermen. We just completed the draft of a study on workforce capacity and opportunity here in the Siuslaw. We are determining how much work there is for people in thinning contracts, road decommissioning, noxious weed control, and fish habitat improvements. Although this is good, we know that restoration work is never going to replace the economy that was dependent on timber harvesting prior to 1990. So we have to diversify in other areas.

An important point is that in Mapleton today you can't see any evidence of those 2 billion board feet that came out of there in the '60s, '70s and '80s, because the profit left the area and went back to Wall Street or to the big timber companies and their shareholders. Getting to a sustainable resource economy isn't as hard if we don't have to supply Wall Street with its profit—and if we can have some basic levels of local control.

Hutchins: What misunderstandings do you encounter with people who own land and don't want to be involved in the restoration project?

Sundstrom: The misunderstanding is that such regulatory frameworks as the Endangered Species Act, Clean Water Act, and others are going to take away both freedoms and economic potential. Without education and without examples, it's very hard to overcome these perceptions. And people have been harmed—people who couldn't harvest the trees they counted on for their retirement or kids' education because there was a pair of spotted owls less than a quarter of a mile away on someone else's property.

So, we still have a ways to go toward making things equitable for the private landowner. The successful examples, where people are engaged with services and improvements on their land, are the best marketing tool we have for that, but we still have to tweak some of the regulations so that they're not so intrusive and scary to people. There should be either compensation or cost-sharing for burdens that serve the mandates of society—but don't always improve the bottom line of the landowner.

Through education, we also have to convince people that their piece of property is a part of a whole landscape—and that they and their heirs will benefit by maintaining and nurturing these resources. This is not just an obligation to society or nature, but it is a type of security for their own future.

Hutchins: What about the cost of this outreach, who pays?

We find that we don't get the financial resources for outreach or for the business of getting conservation on the ground and in the water. There is money for the actual work from the government, foundations, in-kind contributions, and landowners, but there is never enough for maintaining the capacity (office, phones, printing, training, fiscal management etc.) it takes to run a successful and comprehensive delivery system. I think we could do a lot more on the landscape if we had more support for collaboration, outreach, education, and training. Ultimately, the core values of a successful society should include the concept that Stewardship is Citizenship—and society should pay for this value and its implementation.

