

The Grizzly Beat
Transcript, Dr. Jesse Logan
April 25, 2016
Part 2

GT: This is Louisa Willcox and welcome to the Grizzly Beat. Today, we're sharing the second part of the interview with Dr. Jesse Logan, a climate expert, forest ecologist, and outdoorsman extraordinaire. Dr. Logan had an interesting career working for the federal government on climate change during the hostile Bush administration. Yet his passion for wilderness and wildlife never dimmed.

Jesse, the grizzly has long intrigued us for a lot for reasons, and one, I think, is because they have provided a window into the larger ecological world. The world of enormous bison and down to tiny bugs, such as the mountain pine beetle or the bark beetle. And Jesse you are a world renowned expert on the bark beetle. What do you think is the most amazing thing about the bark beetle?

JL: Cool question. That the mountain pine beetle, which is the critter that's involved in this, would easily sit on your little fingernail even if you have small fingers. It's this tiny organism and a pine tree is not simply waiting for the coup de grace. Over the millennia they have evolved efficient, in some cases, defense mechanisms against these beetles. So this whole complex evolution game that has played out that allows these beetles to kill a very dangerous host. And they're predators. Most insects, most pests, are parasites. They don't actually kill the plant, they'll eat a part of it. But the beetle has to kill the tree to successfully reproduce. And how this story has evolved over the years is fascinating. It's a great story.

And as an aside to this story, this co-evolutionary game of beetle attack and tree defenses, because whitebark has adopted this strategy, not of competition but escape to these very harsh environments -- these high elevation, really inhospitable places that whitebark live and is found. They largely avoided the beetle and they haven't evolved in as nearly an effective defense mechanism as some trees like lodgepole pine. Lodgepole has a whole sweet of resin responses that are in some cases actually toxic to the beetles. And these are much less developed in whitebark. In fact whitebark -- not only are they not well defended, their resin composition is exactly backwards. It's high in the compounds that the beetle uses for its pheromone communication system. And it's low in the compounds that are actually toxic to the beetle.

So it's an interesting story, it's fascinating; these whole co-evolutionary games are really cool and interesting. And it also opens up this avenue for research to better understand the resin capacity of whitebark. And how we might be able to effectively increase the ability of the tree to defend itself.

GT: So, Jesse, you were a researcher on climate change with federal government at a very interesting time when G.W. Bush was in the White House and the Koch brothers

were busy spending massive amounts of money to deny the existence of climate change. What exactly were you doing then, and what was your experience like?

JL: You could ask for in a word, it wasn't good. But it's really a more interesting maybe and complex story that first of all, I am really proud of the work, the part of my career in the public sector. And that includes both the military. I was drafted back in the Vietnam War. And then about half of my career I worked for the Forest Service. So particularly working in the public sector with the Forest Service.

This whole concept of public lands is really uniquely American, uniquely in the world. We're the first to come up with the idea of a National Park. And as really pretty much a direct spin off of Yellowstone National Park -- large areas around the Park were designated at that time as forest reserves and became the National Forest System. And that's under attack right now. It's our legacy that's being squandered or is at least potentially in danger of being squandered.

So I'm quite proud of my public service. But does that mean that I was in favor of the Vietnam War, or I think everything the Forest Service or the federal government does is right and in the best interest of the resource -- of course not. And so with that, that's sort of again, personal bias.

When I went to work for the Forest Service in 1992, the chief was Dale Robertson, who was soon replaced by Jack Ward Thomas with the Clinton election. And Jack Ward Thomas was really a progressive chief. He was the first chief that came in from the research branch of the Forest Service. But it also set somewhat of a dangerous precedent. He was the first political appointment. Typically the chief of the Forest Service would come up through the ranks so to speak and Clinton appointed Jack as a political appointment. But he is a good man, very progressive in his thinking. He also wasn't much of a politician, and I think the facts of life in Washington D.C. beat him down and he lasted only three years. Mike Dombeck came in after Jack and also a very progressive thinking as far as natural resources and served really the remainder of Clinton's administration. When G.W. Bush came in following Clinton's lead replaced Dombeck with another political appointment, Dale Bosworth.

And I think basically Bosworth was pretty progressive in his thoughts and a good man but he was also attuned to the political realities of the Bush administration, which dramatically changed the life for research scientists in the federal government in two ways. I think the first maybe one of the most obvious was censorship and the second was micro management. And censorship has many forms. It doesn't have to be direct. You can have repercussions to budgets, but one of the main things that happened -- there had always been a rule on the books in the Forest Service and many many regulations that govern what you can and cannot do.

It was necessary to get permission to discuss research with a journalist for example, but that had never been enforced. Anytime I'd get a call from a journalist who was interested in my research, I'd go on and on. I was happy to do it. But not too long after the Bush

administration, it became very clear that if you didn't go through the proper channels to get approval for an interview, you were going to be in big trouble. Career threatening sorts of trouble. And so, the level of permission depended on the level of inquiry. Like if you had a call from a local paper reporter, then your boss essentially at the local level could approve. But if it came from AP or something like that, then you had to get approval all the way back to the Washington office. And they could just stonewall it. A reporter calls and they say, "well I can't give this permission, you'll have to call someone else," and it goes around and around in a circle, and reporters have deadlines, editors are on them and it's difficult.

There were some reporters who stuck with it. Michelle Nihaus from High Country News stuck with it for, I don't know, six weeks probably, to finally get permission to go out in the field with me. And she wrote a beautiful argument. It's still one of the best on whitebark pine and what was going on, and that was really pretty early in the whole history -- just as things were beginning to play out with mountain pine beetle. So there was this censorship.

Then there was micromanagement. There was a scientist on my project, I was working, phone rings, she picks up the phone and this voice says "Hello, I'm Mark Rey, I understand that you have an interview with an AP reporter about the work you're doing in climate change. I know you're going to have the right answers." So here's the Under Secretary of Agriculture calling a flunky researcher, not flunky but, you know, a foot soldier research scientist telling her what she is going to say and how she's going to say it. So there was that level of micromanagement, which is really pretty amazing. Its kind of 1984 sorts of scenarios.

Along with censorship, along with the micromanagement that occurred, I said "Enoughs enough, and I have some other options. I can retire". So I did, an early retirement, and in some respects, I really missed not being involved directly in science. It's a lot of fun, really stimulating. But on the other hand, as you mentioned the timing in a way was fortuitous. I'd have never been able to be involved in the 2007 delisting and subsequent litigation had I been still a federal scientist. It would just -- that would not be compatible. Anyhow, the long answer I guess, but that's kind of the way it was.

GT: So what did all this experience teach you about the intersection of politics and science?

JL: I guess the short answer is, it doesn't work. By their very nature, scientific endeavor and political reality are incompatible. That's the reason that tenure is so vitally important in the university system. There just has to be freedom of inquiry and freedom of expression. It's absolutely essential to how science works and when you interfere with that with a political agenda, agenda-driven science, it just is not going to work. They truly are incompatible. Some agency scientists are successful in working around this. Typically they're working on problems that don't have a great deal of political interest, and others are not. It largely depends on the issue. But I think there are really good examples. Jim Hansen in climate research would be the one that comes to mind, really. And to a much

lesser extent, and influence, of course, people like me that just, you have enough trouble and finally...when you're getting up in the morning to go to what had been a tremendously rewarding and fun job becomes a chore and a burden, then you do something else. So, I don't think it's any revelation to say science and politics are oil and water.

GT: So Jesse you've also taken a really deep interest in citizen science, and the ability and interests of citizens to collect data on the natural world, and including the condition of whitebark pine, so maybe you could share how you got interested in this and what kind of impacts you saw?

JL: Well, I guess how I got interested is just a deep commitment and concern about the resource and in much larger issues, like wilderness, wildness. And I think for people to care about something, which I hope people do care about this precious small remnant of wilderness and wildness we still have, they have to be aware to care -- and it's that simple. So that I think is the major motivation behind citizen science. If you care deeply about something, you want other people to, and then it's really a natural sort of thing to do if you're a scientist.

As you mentioned, I'd been involved in a lot of different ways, even now although I'm not a working scientist, I do occasionally work as a backcountry guide. And I've been involved with guiding, and also this last winter involved with a Sierra Club group of veterans, traumatic stress recovery through an experience in the backcountry, and whitebark pine touring, ski touring in whitebark pine played a big role in that.

I also am a fishing instructor in summers for Yellowstone Association, several different classes and in that trying -- and instill it's the journey that's really important. It is about catching fish of course, but much larger than that. It's being a part of this amazing system and gaining appreciation, and a respect and love for the resource. And that's all part of really what citizen science is about. That's the most important thing. I've had people respond to me saying, "This is a life changing experience" and "That's really rewarding", so any research information, which is entirely possible with citizen science, you can get information that's stands up to the scrutiny of peer review and that sort of stuff. But that's really gravy, the important thing is to involve people in the resource and build this sense of love, respect, whatever you want to call it.

GT: So, Jesse, you've spent years of your life at this point in the wilderness, skiing and hiking and fishing. What does wilderness mean to you?

J: It's basic to my soul I guess. Apart from family and friends, it's probably the most influential and important part of my life. And it's been a constant in my life. You go through phases, you do this, you do that. But it's just this very visceral feeling of being a part of the natural world and, in particular the Rocky Mountains and the wilderness and wildness, is just a part of me. Like I say, it's the most important thing in my life outside of family.

And there have been some costs. I mentioned leaving the job at Virginia Tech, which was by far the best job I had ever had in my life, and I knew it at the time. But sometimes you have to make hard choices. And I also was for a variety of reasons fired from my first academic position at Colorado State University, and part of the reason was: "Well you care more about fishing than you do about faculty meetings." And yeah, and your point is? I remember specifically what that Department head had in mind and I remember that trip in great detail. And the faculty meeting wouldn't even be a footnote on the last page.

So I made the right choice. And I think it is always this tough to balance things, and it's just not fair we only have one life. You ought to be able to exercise all these options. But the truth is you don't. And sometimes you do have to make these hard decisions and for me, wilderness and wildness is about as important as anything there is.

GT: Well thank you Jesse. You're listening to Dr. Jesse Logan and the Grizzly Beat. Thank you for sharing your time.