Layered Landscapes with Marion Hourdequin and David Havlick

Christiane Wisehart: Examining Ethics with Andy Cullison is hosted by the Janet Prindle Institute for Ethics at DePauw University.

Video Clip:

> Point number two reads: Big Oaks contains the danger of property damage and permanent painful disabling and disfiguring injury or death due to the presence of expended, but still live, bombs, rockets, cannon rounds, flares, and other types of warheads. Unexploded ammunition may be encountered anywhere within Big Oaks: lying on the ground or completely buried. These ammunitions can still explode, though they may have been laying in the ground for decades. I have been instructed not to approach or disturb any military equipment or ordnance discovered on Big Oaks. If encountered...

[laughter]

Andy Cullison: Christiane what are we watching here? What is this?

Christiane Wisehart: So this is part of a safety video that visitors are required to watch before you go to the Big Oaks National Wildlife Refuge in Madison, Indiana.

Andy Cullison: What?! Wait, what?!?! [laughs] Why do you have to watch this at a wildlife refuge?

Christiane Wisehart: So I thought the same thing. [laughs] But Big Oaks used to be called the Jefferson Proving Ground. And it was basically like a giant piece of land that the US Army used to test guns and bombs (including nuclear bombs) between 1945 and 1995. And *now* it's a wildlife refuge. They turned it into a wildlife refuge. But it's the kind of refuge where you can obviously still see signs of like the old military uses.

Andy Cullison: That's mind-blowing.

Christiane Wisehart: Yeah. So, so America is kind of chock full of places like this like: huge patches of land that have been abandoned and like now sit vacant. And let's say you have an old site like the Jefferson Proving Ground, and you want to take all of that unused land and turn it into a wildlife refuge. Sounds awesome, right? But how would you go about doing that?

Andy Cullison: Well, you could just tear down the Army buildings and take it back to some kind of… some kind of pre-human wilderness.

Christiane Wisehart: That's exactly what my intuition would be. And I think for a lot of people, that's what they're thinking when they hear something like "ecological restoration." But on today's show, we'll learn about an idea that is shifting the way people think about the ethics of restoring a place like Big Oaks. It's called "layered landscapes."

Andy Cullison: "Layered?" As in like, cake layer?

Christiane Wisehart: Yeah, exactly.

Andy Cullison: All right, I'm interested, take it away.

[begin music]

Christiane Wisehart: Today's episode is about the ethics of ecological restoration. We're going to hear from Marion Hourdequin and David Havlick, who edited the book *Restoring Layered Landscapes*. Together with Joe Robb, the manager of Big Oaks National Wildlife Refuge, they explain the concept of "layered landscapes," which is helping to re-shape how restorationists ought to approach their work.

[end music]

Christiane Wisehart: So last January, I visited Big Oaks in southern Indiana. Driving into this wildlife refuge is so different than entering any other national park I've ever been to. The first thing you see is a huge rusty sign that says "US Army Jefferson Proving Ground." Big Oaks is one of many military-to-wildlife, or M2W sites across America. I spoke with the refuge manager, Joe Robb:

Joe Robb: My name's Joe Robb, I'm the refuge manager at Big Oaks National Wildlife Refuge and I'm the project leader of Big Oaks in Muscatatuck National Wildlife Refuge complex.

Christiane Wisehart: As he drove me around on that rainy January day, he told me that places like Big Oaks have a slightly different mission than most national parks:

Joe Robb: So we're a national wildlife refuge which is a little bit different. We have a sister agency: the National Park Service. Our mission is for wildlife, to keep the wildlife going for the future benefit of Americans.

Christiane Wisehart: At Big Oaks, the mission is to conserve wildlife. But unlike many national parks, they're conserving wildlife in a landscape that was once used to test guns and explosives for the military. The unique character of a landscape like this means that *how* one might go about the ecological restoration there is important.

Traditionally, when restorationists began restoring a landscape, they chose a “reference condition” or a “reference point” that guided their choices. In traditional ecological restoration, the reference point was often pre-human, pre-European or pre-settlement. This basically meant that they tried taking the land back to some kind of imagined pure wilderness, stripping away the layers of human interaction with the land. But according to the scholar Marion Hourdequin, thinking about ecological restoration in this way can be problematic.

Marion Hourdequin: Sometimes it might—that model might work and there might be good reasons to do—to follow that traditional model where you try and scrape away the human influence and bring back something approximating a natural system free of human influence. But, I think the model is problematic in many contexts because it sometimes focuses on one layer at the expense of others, for example. So, often in North America the kind of baseline condition for restored sites is thought of as, or at least historically, was thought of as a pre-European settlement types of conditions and other, many scholars have pointed out that using that baseline either naturalizes the influence of indigenous peoples on the landscape or just ignores it all together.

Christiane Wisehart: And according to Joe Robb, returning to a pre-settlement reference point is often unrealistic.

Joe Robb: things have changed through time. Nothing's static— climate's changing, rain patterns are changing. The soils here are different than what they were naturally. Plus we have rare species here that are nowhere else. And so if you let it go back you're letting you know rare and endangered species potentially be affected.

Christiane Wisehart: Marion Hourdequin and David Havlick say that a way of changing this problematic paradigm of ecological restoration might be by considering something called “layered landscapes.”

Marion Hourdequin: The term layered landscape really refers to landscapes that have complex socio-ecological histories and landscapes often that change in important ways over time. Change in land uses or change in ecological systems. We like the term layered landscapes because it calls attention to the temporal and kind of, longitudinal dimensions of these places.

David Havlick: In some respects every landscape is layered. We're trying to, I think, attend particularly to landscapes where those various prior uses and prior histories seem to have some special significance, and where the meanings that we might carry forward from those prior uses or prior activities matter and ought to make a difference in terms of how we continue to exist in certain places.

Christiane Wisehart: So throughout time, landscapes collect the marks of history. Let’s say you’re looking at an open field. That field hasn’t always looked like that. Maybe 50 years ago it was a farm. Before that, it might have been a clearing created by an indigenous community.

Before that, it could have been a cluster of trees. Every piece of land has accumulated a history over time. And that history isn't just about humans and the land. Animals and weather change the landscape, too. And all those bits of human history and natural changes get layered over top one another through time.

If every site were to be restored in the traditional way, taking it back to some pre-settlement reference point, you basically end up scraping away or hiding the layers of human influence.

However, in a restored landscape like Big Oaks, some of the layers of human influence on the natural world have been left in place. There's often no distinction between wilderness and the marks left behind by the military. Here's Joe Robb again,

Joe Robb: And you can see a lot of mounds off to the side there. Those are crayfish ─ burrowing crayfish mounds and so a lot of animals use those burrows. And one of them is a crawfish frog which is a very rare species and probably the most of the crawfish frogs in the state are right here. So it's, it's a state endangered species. So this is where they had the guns set up and they shot down range into impact fields and they had people set out there watching to see those test to see if they would work and function.

Christiane Wisehart: Big Oaks isn't the only military site that's been converted to a wildlife refuge. In a place like the Rocky Mountain Arsenal near Denver, Colorado, the former uses of the site aren't as obvious as they are at Big Oaks. Much of the evidence of human interaction with that landscape has been erased. In the early 1940s, the Federal government built a chemical weapons plant on the land. It was later used by the Shell company to produce pesticides.

Marion Hourdequin: In the, you know waning decades of the 20th century and continuing into the early 2000s, they began clean up of the site and ultimately did a ─ like a multi-billion dollar clean up. They removed many of the contaminated materials, concentrated some of the remaining contamination from the site into some cap and cover landfills and then began this massive prairie restoration effort. Now they've re-introduced bison, and I mean now it's this wildlife refuge that's really rich. But if you go to the site today, I think we have found in surveys of visitors sometimes despite the name, Rocky Mountain Arsenal, don't realize that this place has a very complex history that included chemical weapons production. So, I think the idea of layered landscapes is to think about, okay let us not erase all that complex history or let's at least consider how that history might be actually preserved on the landscape itself. Cos, I guess I would say that, the Arsenal has a great visitor center that does portray this, this history but unless you're sensitive to subtle cues in the landscape that there are trees that were planted in straight rows or that there are other elements of prior military use, you may not realize the sort of… depth of the kind of social-cultural, political history and significance of the place.

Christiane Wisehart: According to David, when the Rocky Mountain Arsenal stopped chemical production, the immediate response was to get rid of the manufacturing plant's infrastructure.

David Havlick: You know, within about ten years, there was this determination that it would be a wildlife refuge and that we should return this site to a "natural state". And so I think, especially in North America or the US, the temptation has been to eradicate as many signs of that military period as possible. And we still I think have this broad cultural orientation in the US to the frontier, at least in the western US this seems prevalent. That if we can bring sites like the Rocky Mountain Arsenal back to their pre-settlement or their frontier condition, that's desirable. That that's a success story.

Christiane Wisehart: But David says that when we take away the human layers of a landscape:

David Havlick: It… I think it allows us to disregard the very real sacrifices that were made in that site.You know lives were ─ were dramatically disrupted at that site. The, the farming families were given less than thirty day's notice to evacuate. And, even before, you know, they had a chance to clear out, the Army was moving in and building this chemical weapons manufacturing plant, and the surrounding communities of Converse City and Montbello for four decades suffered from noxious fumes and contaminated groundwater and you know, the sort of, the side effects, or really the direct effects of chemical production facilities being right across the street from them.
And then ─ then served also the broader commitment that we as a country made to creating weapons of mass destruction, which, you know, in more recent years we would be shocked I think to sort of imagine ourselves embracing a chemical weapons manufacturing plant being assembled right in the midst basically right on the edge of a major city. But I think that there's important lessons there about who we are and where we've come from as a country that we're willing to make these sacrifices in this place and to just sort of have that washed away then or obscured by removing infrastructure I think is unfortunate and maybe sort of… more serious than that, is really damaging to the prospect of learning from our history

Christiane Wisehart: So when we remove the traces of human interaction with the land, we lose. We lose out on history.

David Havlick: And so when we remove all the infrastructure at a place like the Rocky Mountain Arsenal, I think it becomes quickly tempting to just think of this place as nature. And when we do that, then...I think some of the really important lives tha─that were committed to this place, and the environmental impacts, and kind of the politics, and the whole sort of political economy of that place vanishes as well.

Christiane Wisehart: And as Marion points out, we also lose a very important reminder that *humans can and do permanently change the natural world*.

Marion Hourdequin: When you go to a site like the Arsenal, it's beautiful, it looks natural, people describe it as sort of pristine, in all these ways that, with all these adjectives that we use

to describe natural places in the you know, at that site, there are still these huge landfills full of toxic waste. [begin music] You don't see them necessarily as a visitor but keeping that history visible or available to us, I think, does help us contend more seriously with the gravity of what we're doing in certain places that, it's really almost irreversible or irreversible in terms of contaminating sites without just a tremendous influx of resources.

[end music]

Christiane Wisehart: So if restorationists acknowledge the layers in a landscape, they can then do something critical, which is to acknowledge the complexity of the relationship between humans and nature. According to Marion and David, that complexity can shape how they approach restoration.

Marion Hourdequin: a lot of the traditional models for thinking about ecological restoration don't neatly apply in layered landscapes. The — the kind of original paradigm for ecological restoration is one where you have a natural landscape and then you have a somewhat discreet human disturbance and then restoration tries to bring that landscape back to the condition prior to disturbance. Layered landscapes kind of problematize that simple model, because there is no sort of discreet moment where humans intervene. The interaction between humans and nature is ongoing and over time and ... I think the other important dimension here is that, it's not always clear in these landscapes that human influence should be understood as disturbance. So, basically I think the concept of layered landscapes sort of problematizes and kind of brings to the fore questions about how we set restoration goals and what we aim to bring back to the land.

David Havlick: Bringing in the idea of layered landscapes more explicitly highlights that complexity of reference condition, and highlights that we shouldn't take for granted that there's sort of a pre-ordained state to which we should restore something, but that requires active choices and um, kind of intentionality on the part of restorationists to think about well, why are we restoring this place to this particular set of processes or conditions. And, what assumptions are we building into that, and what are we missing perhaps of significance if we choose one condition over another?

Christiane Wisehart: It isn't enough just to acknowledge the layers in a landscape, though. Marion argues that restorationists should also attend to the virtue of "receptivity" as outlined by philosopher Michael Slote.

Marion Hourdequin: The notion is, I think, one that's kind of intuitive, it's related to a kind of openness, a willingness to engage with what the world presents to you. And in some ways, Slote describes receptivity in contrast with a more kind of imposing, planning, controlling kind of approach to the world. It allows us in approaching restoration to think in ways that take account of the landscape and its history without sort of coming with a particular template or model for restoration. That kind of receptivity and openness, may allow us to see possibilities that we

wouldn't have envisioned in advance, perhaps, and to take advantage of what the landscape, as it currently exists, might offer us in some sense.

Christiane Wisehart: Marion told me that Big Oaks National Wildlife Refuge is an example of allowing receptivity to shape restoration goals.

Marion Hourdequin: Interestingly, the use of that site by the army resulted in open grassland habitat, they couldn't shoot, it's hard to test ammunitions in, like a closed forest. So, they would mow and otherwise kind of keep the forest at bay but the effect of that was that it created grassland that's really valuable bird habitat for birds like Henslow's sparrow. So the managers are actually maintaining some of these human created landscapes as wildlife habitat and as a way of maintaining sort of the diversity of habitat types that now exist in that place. And I think if you came in to that place and said, "Well, it was forest so to forest it must return" you would miss this opportunity of being kind of receptive to what's there now and why it might have value and also the value of this, you know, habitat type in the context of the larger landscape outside the refuge and relative rarity of habitat that supports these kinds of birds.

Christiane Wisehart: Rare bird populations like Henslow's sparrow are able to live in a place like Big Oaks *because* it retains traces of the former military site. Refuge managers like Joe Robb actively maintain certain aspects of the military landscape to support rare and endangered species.

Joe Robb: And so some of the grasslands you see us burn─ that keeps the grasslands shrubs kind of at a state where those species are benefited and some of the areas we're letting it go back into forests. So typically what we look at is like right here, you're in kind of a shru land woodland grassland area of where we're burning and keeping areas at a certain state. Other areas we're not burning as frequently and we're allowing it to revert to forest.

Christiane Wisehart: Do you ever get burn the grasslands?

Joe Robb: Yes, we ─ that's our staff. We have fire qualified folks on staff and we have a fire management officer that prepares plans and we decide what areas we're going to burn and we burn probably about nine to 10000 acres a year.

Christiane Wisehart: Does that feel like just part of your job or does that ever feel kind of yucky.

Joe Robb: No, it's actually ─ it's actually kind of fun. It's a very fun time to get out there because we know that it's… gives positive things to the habitat. We work as a team and it's something that humans on Earth have been doing using prescribed fire to influence habitats. The Native Americans did in these areas here to keep the bison from coming down.

[music start]

Andy Cullison: Oxford University Press has generously provided us the books that we are discussing on the show today. To find out more about Oxford University Press, visit them on the web at global.oup.com. Oxford University Press has kindly offered to provide you, the listener, with a 30% discount on *Restoring Layered Landscapes* edited by Marion Hourdequin and David Havlick. So to get a link for a 30% discount on *Restoring Layered Landscapes* visit our show notes page at examiningethics.org. Thanks again to Oxford University Press for their help with today's show.

[music end]

Christiane Wisehart: So we've discussed the virtue of "receptivity" and the part that it plays in restoring layered landscapes. According to Marion, narrative also plays an important role when considering the ethics of ecological restoration. The stories people tell about a place can highlight the interconnectedness between humans and landscape.

Marion Hourdequin: When I talk about narrative in the book, I'm building on work that's been done by other philosophers ─ Alan Holland, Andrew Light, John O'Neil, who suggest that we should be more attentive to more specific rich narratives of place that bring out the ways in which people understand places to have meaning in their lives. And, I think you know, their argument is in part that one that's sort of framed in response to kind of utilitarian ways of thinking about things where you kind of add up cost and benefits of different alternatives. And their suggestion is that kind of enumerating approach and aggregating approach doesn't actually bring out the relationships between values or the way that things hang together. And so I think narrative can be promising in restoration because it can reveal sort of the rich ways in which people and landscapes, people and ecosystems are intertwined and interact and how those relationships are sources of meaning.

Christiane Wisehart: She says that attending to narrative can highlight the importance of relational ethics in thinking about the environment and restoration. But narrative can also be complicated.

Marion Hourdequin: There is no single narrative of a place. If you ask 10 different people who live near a place or around a place or people who come to visit a place and learn about the history, they are going to tell the story of that place in probably 10 different ways. And sometimes those narratives are actually in conflict with one another. So that ─ that poses a challenge, which narrative, even if we're going to use narrative to guide restoration, which one do we choose? But then I think more generally, all narratives need to be engaged critically. I think just because a place has a story it doesn't necessarily mean that that story should be continued. I mean there are sometimes narratives that are bad or problematic, that involve you know, oppression of people or marginalization of people or damage to the la─ you know, damage to the landscape that we would want actually think about how we might re-write the narrative or alter it.

So, there are some people who are developing methods that sort of encourage people to use narrative both to articulate the ways in which they value places and places have meaning to them and then also to kind of mediate among those conflicting stories. So, there are efforts to think about how people might co-construct a new narrative for a place that perhaps integrates aspects of different narratives and tries to reconcile them. There is a potential to think about, well how could we together envision an alternative narrative that might guide us going forward.

Christiane Wisehart: When I spoke with Marion, I was really taken by this idea that narrative could help guide the restoration of layered landscapes. Actually, everything about my discussions with Marion and David stuck with me. If any of my colleagues were here, they'd tell you I wouldn't shut up about it. Even in *other* interviews. I want to close our episode today with some thoughts from a conversation I had with Kyle Whyte

Kyle Whyte: My name is Kyle Whyte and I work at Michigan State University. I hold the Timnick Chair in the humanities and I'm an associate professor of Philosophy and Community Sustainability.

Christiane Wisehart: Faithful listeners will recall him from a recent episode about climate justice. I brought up the idea of layered landscapes when we spoke about ecological restoration. For him, restoration is not just about restoring human relationships with the land. It's also about restoring human relationships *with each other*.

Christiane Wisehart: So I'm wondering, you know, if you're talking about a landscape that is kind of layered and has all of this like... it's got, you know, indigenous layers and then it's got settler colonial layers, and it's got whatever else, whatever other kind of layers. Where do you kind of… How do you figure that out?

Kyle Whyte: Right, and that's I think one of the key questions for people that are doing ecological restorations. Cause, as you say for so many years especially, you know, white people and the settler society thought that you sort of pick a point in time a particular landscape and then restore that, and there will be a very little human involvement afterwards. Yet for literally hundreds of tribes, you know, just thinking on the US side, they've been engaging in restoration, then instead of just sort of picking time t and trying to restore that, right. The idea is actually how do you restore the human connection to a landscape, or a plant or animal or environment, right. And now, for the tribes to do this, the Little River Band of Ottawa Indians in Michigan, you know, has a phenomenal sturgeon restoration program. And the way that they do it right is that sturgeon restoration is actually not just about, you know, restoring a certain number of sturgeon. Sturgeon was a traditional fish for them and major part of their culture and their diet. But actually, it's about creating an overall program that can help repair the relationships that they have with the settlers society surrounding them in Michigan. And so what that means is they actually create and it occurs every year in September, a public ceremony to release the sturgeon that are big enough to survive out in the river there. And what that ceremony does is it

conveys a number of ideas. It conveys the history of settler colonialism which led to the collapse of the sturgeon population. It conveys scientific understanding of sturgeon. It conveys tribal traditions about sturgeon. And then when each person gets to take a bucket and release one of the sturgeon back into the river that you get that personal connection. They're at the process of ecological restoration is actually much more about fixing human relationships [music] and not denying the reality, right, that settler colonialism in a highly vicious and insidious way, destroyed the very bases of indigenous political, social, cultural and economic systems.

[begin music]

Christiane Wisehart: We'll be taking a break to gear up for Season Five for the rest of the summer. We can't be totally silent ─ we've got some bonus content planned for you all. However, we won't be releasing a long-form episode in July and August. But be sure to check back with us on the last Wednesday in September for our regularly scheduled programming.

Andy Cullison: Thanks for listening. You can subscribe to the show anywhere you find your podcasts. Regardless of where you subscribe, please be sure to rate our show on Apple podcasts. That's still the best way to help people find us.

Christiane Wisehart: If you'd like more information about the topics we've discussed today, visit our show notes page for this episode at examiningethics.ORG. For updates about the podcast, interesting links and more, follow us on Twitter: @examiningethics.

Andy Cullison: And we should note that the views expressed here are the opinions of the individual speakers alone. They do not represent the position of DePauw University or The Prindle Institute.

Credits:
Christiane Wisehart: Examining Ethics with Andy Cullison is hosted by the Janet Prindle Institute for Ethics at DePauw University. Christiane Wisehart produced the show. Our logo was created by Evie Brosius. Our music is by Latche Swing and Blue Dot Sessions and can be found online at freemusicarchive.ORG. Examining Ethics is made possible by the generous support of DePauw Alumni, friends of the Prindle Institute, and you the listeners. Thank you for your support.

[end music]

Joe Robb: you guys are prepared, I like how you have boots… gear...

[laughs]

Christiane Wisehart: you have an umbrella ─

Joe Robb: hey, you're ready

Christiane Wisehart: I'm not ready to be exploded.