

# Fire Ecology Chats: A Podcast Series by the Association for Fire Ecology



## Transcript of Episode 6 – Communicating Fire Science through Art

Host: Robert Keane (Editor of Fire Ecology and Retired Research Ecologist, USDA Forest Service)

Guests: Melanie Colavito (Ecological Restoration Institute), Collin Haffey (The Nature Conservancy), and Cari Kimball (Montana Environmental Information Center)

Link to Full Article in Fire Ecology: <https://fireecology.springeropen.com/articles/10.1186/s42408-020-00078-w>

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**Bob Keane:** Good morning everyone. My name is Bob Keane. I am the host of Fire Ecology Chats—the podcast that discusses papers that have been recently published in the journal Fire Ecology. Fire Ecology is hosted and supported wholly by the Association for Fire Ecology, and it is on the Springer website. Today we have a fascinating paper that we're going to discuss. It's a paper that you rarely see in the literature. The name of the paper is Integrating art and science to communicate the social and ecological complexities of wildfire and climate change in Arizona, United States of America. This is incredible, where we find out just exactly how art is used to communicate fire ecology. Today, we have the luxury of having three different people to represent the paper. Could each of you introduce yourselves? Cari, why don't you go first?

**Cari Kimball:** Sure, thanks so much for having us on today, Bob. My name is Cari Kimball. I'm the Development Director at Montana Environmental Information Center here in beautiful Helena, Montana and formerly of the Landscape Conservation Initiative at Northern Arizona University.

**Bob Keane:** Thanks, Cari. And you Collin?

**Collin Haffey:** Hi, I'm Collin Haffey. I work with The Nature Conservancy now in Santa Fe, New Mexico, but I am formerly with the Landscape Conservation Initiative.

**Bob Keane:** Wonderful and next, we have the senior author of the paper. Melanie, why don't you go ahead and introduce yourself?

**Melanie Colavito:** Thanks, Bob. My name is Melanie Colavito and I am the Human Dimension Specialist at the Ecological Restoration Institute. We are based at Northern Arizona University in Flagstaff, Arizona.

**Bob Keane:** Wonderful. Melanie, why don't you just go ahead and give us a quick description of the paper?

**Melanie Colavito:** Absolutely, so the purpose of this paper is really twofold. First of all, we wanted to tell the story of Fires of Change, which was a collaborative art exhibit designed to communicate about the shifting fire regimes in the Southwest. And so we wanted to tell a story of the development of Fires of Change, and the way that it integrated scientists, managers, and artists together to co-produce art pieces that demonstrate these scientific concepts. And then the second purpose of the paper was to really explore the impact of this project of

Fires of Change both on participants that attended the exhibit, and then on the participants who helped create the exhibit. So that's the overview of what the paper is trying to share with readers.

**Bob Keane:** Well, it certainly is an exciting read. Cari, why don't you tell us why is it so important that we integrate art to communicate fire ecology to Americans or anybody in the world?

**Cari Kimball:** Yeah, so I think that we can all see, you know, we're having a pretty intense fire season once again. We can all see that our relationship to wildfire here in the U.S. is very broken. With climate change, and a long history of wildfire exclusion in our ecosystems, these are just two huge forces that we're pushing back against. We can't rake our way out of this problem. We can't log our way out of this problem. We need pretty intensive policy changes to deal with this big problem. And our hope was that with Fires of Change, and this paper that we wrote describing it, that this can be a way for us to bring different parts of our communities into the conversation about repairing this broken relationship with wildfire and our fire-shaped landscapes. So we just really hope that by connecting with artists and art, it could be a pathway to bring more people into this this important project of changing the way that we live with wildfire.

**Bob Keane:** That's pretty important because a lot of people connect with art. The fire exhibit was amazing; I've seen it. Collin, why don't you tell us just exactly what was this art exhibit? What was it composed of?

**Collin Haffey:** Yeah, Bob. So this was a full on sensory experience. This really immerse people in the sights, the sounds, and really even the smells of forests and fire in northern Arizona. And so we had everything from recorded audio and video of prescribed fire and people talking about their experiences with fire to these really beautiful hollowed out logs filled in with the ash from some of the some of the recent fires, and then even some charcoal drawings of major fires in Arizona and New Mexico that were drawn with the actual charcoal from the fire. I mean, we had 13 different art pieces and then we also had these really great science quotes and policy quotes pulled from journals like Fire Ecology, where we pulled directly from the scientists' own words. And we put that right up on there so that we could put the scientific information directly next to the art and really highlight that creative process that happens in both science and art.

**Bob Keane:** Very cool. And Melanie, you mentioned something in your introduction there that really struck me is that the difference between this study and a lot of other studies is that you also conducted a survey to assess the impacts of the exhibit on the people that actually observed it. You want to tell us a little more about that survey and what you found?

**Melanie Colavito:** Yeah, absolutely, Bob. So there were actually two groups of surveys. The first group of surveys were for exhibit visitors. And the purpose of that survey was really to understand how people who attended the exhibit, perceive themselves to understand fire and the role of fire and climate change, both before and after seeing the artwork, and then also to understand their support for management actions and active fire management. And so the exhibit visitor survey really attempted to understand what changed for people after they saw the artwork and participated in that immersive experience that Collin talked about. And we also explored, you know, which pieces of art were most impactful and just kind of tried to get a sense of who was there as well. And so those exhibit surveys were, were conducted in Flagstaff and in Tucson, two of the places where this art exhibit was shown. And then the second set of surveys were actually for the creators of the exhibit. And so we had three separate surveys within that grouping, which included a survey designed for the Southwest Fire Science Consortium's executive board, a survey designed for the artists, and then a survey designed for the scientists and managers that all worked together in this collaborative process to develop the Fires of Change. And so the purpose of that survey was just to kind of understand, first of all, what was the

impact of participating? And then how did the participants who helped develop the art see this experience impacting them into the future?

**Bob Keane:** Wow, it's an amazing study, and it's amazing exhibit. So Cari, what do you think the next steps are? What's the future of this? Where can you go next?

**Cari Kimball:** Yeah, well, we'd certainly encourage fire ecologists and fire managers, people who just possess this really incredible knowledge about fire, to reach out and connect with other parts of their communities like organizations in the arts. I think that, yeah, it's such a wonderful way to build bridges and our hope is that creating connections across communities can be a way to increase understanding of fire. And hopefully, in the long run by shifting knowledge and public opinion, we can also eventually develop policies that create healthier, more sustainable approaches to living with and managing wildfire. So, we certainly have a lot to learn about how arts and science can be brought together, and it was such a wonderful experience. We hope that your listeners will have a chance to do this sort of thing themselves.

**Bob Keane:** Oh, I certainly did and I think it would be wonderful if everybody did. I wondered about the insight and foresight of these granting agencies that gave you the money to actually conduct the study? Collin, would you like to recognize these amazing people?

**Collin Haffey:** So funding for this project came from the National Endowment for the Arts, the Joint Fire Science Program Knowledge Exchange Network, and the Landscape Conservation Initiative at Northern Arizona University. The sharing of science is central to the boundary organizations like Joint Fire Science, and they were really interested in testing out new and creative ways to integrate art, management, science, communication, and knowledge exchange. So we were able to build on the ideas from around the country, and capitalize on partnerships that really made this possible and ultimately, we need to thank the many artists, fire managers, and fire scientists who participated and made Fires of Change possible.

**Bob Keane:** So tell us a little more about this boundary organization.

**Collin Haffey:** The way that we talked about boundary organizations are organizations that cross science management and science policy. And so NGOs, like the organization that Cari works for and The Nature Conservancy and the Ecological Restoration Institute, as well as Joint Fire Science and the Southwest Fire Science Consortium are all these groups that try to work across that boundary of science and management or science and policy. The idea is to convene groups and find pathways that allow knowledge to flow in both directions, so that everybody's learning from each other and we're injecting the best kind of science into management and policy. And then we're learning from our management partners about the creative ways that they're thinking about restoring more good fire, rebuilding that relationship with fire on the ground, and we're as scientists and as policy folks, we're able to sort of engage directly with the people who know the most about how fire works on the ground.

**Bob Keane:** I want to thank you all three for a wonderful podcast. It was I learned a lot in this and I hope the listeners will find this paper as soon as possible because has a lot of interesting stuff. And again, thank you all for a wonderful podcast.

**Collin Haffey:** Yeah, thank you, Bob. And thanks AFE for supporting this creative kind of work and getting the message out there.

**Melanie Colavito:** Yeah, thank you so much, Bob. What a great way to communicate about these papers.

**Cari Kimball:** Yeah, this is great. Thanks for having us on Bob.