Vivian M. Cook:

Welcome to The Art of Climate Dialogue: Stories from Iowa, produced by myself, Vivian M. Cook, and The EcoTheatre Lab.

Welcome to today's conversation with plant ecologist and nature and environmental writer, Cornelia F. Mutel. To start us off, Connie will share an excerpt from her book, A Sugar Creek Chronicle: Observing Climate Change from a Midwestern Woodland.

Cornelia F. Mutel:

The consequences of climate change are profound and transformative. They include concerns about food production, water availability, emergency relief, military security, infrastructure integrity, society stability, the economy, the ecological biodiversity and integrity. As greenhouse gas emissions and average temperatures grow further, they will increasingly touch every aspect of global function and human life, from what and how we eat to where we live and how we die.

To our basic economic, political, and social stability, we are now entering a new reality. While acknowledging these facts, I now invite you to enter a different reality. To join me for a conversation at my kitchen table, a cup of tea in hand, and walk with me through the seasons of my life and of our woodland. Considering the slow, ongoing changes that bring health and resilience to such natural ecosystems and the ways that today's accelerating climate changes might alter them.

My guess is that even if you have not lived in a rural woodland, our lives are in some way similar. You too have loved family, treasured a special place, worried about illness, been touched by beauty and by loss. Felt drawn to things non-human, wondered about our rapidly changing world and worried about where the future is taking us. You too have wanted to leave a legacy of a better world.

I now invite you to come along as I share how these universal themes have played out in my life. How I have met changes and challenges, and how I have searched for health and wholeness during difficult times. A search that you too have surely made, and so I begin.

Vivian M. Cook:

Addressing climate change is urgent, but in order to move toward action, we first have to find ways to talk about climate change with one another. The Art of Climate Dialogue: Stories from Iowa is a podcast series featuring 13 conversations with artists, farmers, community-engaged researchers and community organizers and activists, who have all used arts and storytelling strategies to talk about climate change and agriculture.

Through this podcast, they generously share these strategies so that listeners can implement them in their own communities. I'm Vivian and I invite you to explore The Art of Climate Dialogue with me. As we enter into these conversations around climate action, sustainable agriculture and community-engaged arts in Iowa, The EcoTheatre Lab and I want to first recognize that Indigenous Nations have been leaders in such conversations for centuries and continue to be today.

Iowa now occupies the homelands of Native American Nations to whom we owe our commitment and dedication. Iowa is now situated on the homelands and trading routes of the Ioway, Meskwaki and Sauk, Otoe, Omaha, Ihanktonwan and Santee. Because history is complex and time goes far back beyond memory, we also acknowledge the ancient connections of many other Indigenous peoples here.

The history of broken treaties and forced removal that dispossessed Indigenous peoples of their homelands, was and is an act of colonization and genocide that we cannot erase. As a result, Indigenous ecosystems within lowa have suffered from extraction, degradation, and unsustainable agricultural

practices contributing to the ongoing climate crisis. Understanding and addressing these injustices is critical, as we work toward climate dialogue, action, and justice in our communities.

My thanks to podcast interviewees, Shelley Buffalo, enrolled member of the Meskwaki Tribe; Lance Foster, enrolled member and tribal historian of the Iowa Tribe of Kansas and Nebraska; and Sikowis Nobiss, Plains Cree/Saulteaux of the George Gordon First Nation, for their collaboration in developing this acknowledgement.

Cornelia F. Mutel, a plant ecologist by training, has written nature and environmental books for nearly a half century. Over time, she has increasingly used first-person stories and other creative writing techniques to draw her reading audience more deeply into her subject matter. Her 2016 book, A Sugar Creek Chronicle: Observing Climate Change from a Midwestern Woodland, greatly amplified these techniques. As did Tending Iowa's Land: Pathways to a Sustainable Future, a 2022 edited compendium of Iowa's environmental challenges and their solutions.

She claims that creative writing techniques better communicate important material, and simultaneously make her books more fun to read and write. Connie was, until retirement, a senior science writer at the University of Iowa's broad-based IIHR-Hydroscience and Engineering Institute. She lives with her husband in an oak woodland north of Iowa City, which they're restoring to its pre-settlement diversity and health. Welcome, Connie, and thank you so much for joining the podcast.

Cornelia F. Mutel:

Thank you, Vivian. It's really good to be here with you.

Vivian M. Cook:

At the beginning of this episode, you read an excerpt from the beginning of your book, A Sugar Creek Chronicle: Observing Climate Change from a Midwestern Woodland.

To start our conversation today, I'd love to talk more about A Sugar Creek Chronicle, including the ways you intentionally integrated storytelling techniques with climate data throughout. Can you tell us more about this book and why you wrote it?

Cornelia F. Mutel:

A Sugar Creek Chronicle is quite a bit different from other books I've written. I've written several books on Iowa's natural features and environment, but I had never thought of inserting climate change very much until amazingly so, until around 2010 when all of a sudden it just became very clear that I had been omitting the elephant in the bathtub. I decided I need to make up for that and write a book on climate change.

But what I realized is that a lot of the climate science that people are supposedly aware of, they're not aware of. At that time, people really didn't want to hear a lot about climate change, and it wasn't on the news, it wasn't in the media very much. I realized that what I needed to do was to find a better way to communicate about climate change, something that people would listen to.

I came upon this idea of writing a journal, a nature journal for one year, describing how climate change was affecting the woods in which I live. My husband and I live on about 18 acres north of Iowa City, and we can already see the effects here of climate change. We could back there in 2010 in terms of the phenology of the flowers and the like. I wanted to write a climate change journal focusing on our woods, and then bringing in the climate science and the broader effects of climate change tangentially.

The book from the beginning was a nature journal, but it also integrated first-person stories. They were my stories about raising the boys here, my thoughts about what I saw, the walks that I took through the woods. I did that very deliberately as a way of pulling people into realizing that climate change is happening. As I said in the introductory quote, to walk with me through the woods and to observe the changes that I was seeing because of climate change.

Vivian M. Cook:

Thank you, Connie. I know that I experienced that as a reader when reading A Sugar Creek Chronicle, that we do get a real sense of where you live, which maybe we recognize as other people who are living in Iowa. And how you care for that place and how we all care for, I think in some way, at least we all care for the environment around us.

Not only what it brings necessity wise, but also you talk a lot in your book about how being in the environment, being in the woodland feeds our souls in a way too that we need it for mental as well as physical health. You have studied music, biology and plant ecology and have been a science writer for many, many years.

The arts and sciences are often seen as quite separate, I think, even though maybe many of us on this podcast series would argue against that notion. You studied both music and biology in college side by side, and now you're incorporating artistic storytelling techniques like these first-person stories, journaling, observing, and translating that in a way that pulls people in. How do you think studying music influenced how you communicate science?

Cornelia F. Mutel:

I think it influenced me in a big way. I have been incorporating more creative writing techniques into my writing for many years already. I did a book back in the early 2000s with Mary Swander on Land of the Fragile Giants, through which she taught me how to incorporate storytelling techniques into the chapters that we were editing for that book.

In addition, I've always journaled, I've played with essays, I sat in on a few writing workshop classes here at the University of Iowa, and I've always been an avid reader. I think all of these experiences feed into what we eventually do with our lives, but my musical training has shaped my writing in a huge way. I think that when I started writing a book actually in my 20s, I transferred the musical skills to writing.

Rhythm, beat, cadence, tempo, melody, theme, changes in intensity, all of those features are in both writing and music. I also often hear my words as music. I think this is a good example of how we use the skills that we have to shape what we do and what becomes our career.

Vivian M. Cook:

Definitely. You talked earlier about using some of these techniques to pull your readers in, because you felt like it was really important to be talking about climate change and realize that oftentimes we aren't talking about it as much as we should. I mean music, I think for all of us in some way, when we hear music, when we're out and about, then we stop and listen because it does pull us in in a way.

I think many of us listen to music as a way to relax or think or meditate. I do see how you've done that with this book. It's really cool to hear you talk about how that background influenced what you're doing now as a way to communicate more effectively about climate change. As you've begun to use some of these more story-based communication styles in your writing, what differences, if any, have you seen in your own engagement with these topics?

Cornelia F. Mutel:

Well, I think the best example is the year 2012 when I wrote the climate journal that became the basic body of A Sugar Creek Chronicle. That year, I allowed myself to become totally immersed in our woodland to give myself to the woods.

I insisted in taking the time, I insisted to myself to give myself the time to go out and walk in our woods every single day to observe what was happening, to note changes that might be unusual. I really bonded with the woods in a way that I hadn't done before. It was a very enjoyable and very rich year.

Vivian M. Cook:

How do you think that those experiences shift your relationship with your readers too, when you're thinking about engaging with your readers?

Cornelia F. Mutel:

I think that I certainly, probably all authors, think about the different levels at which we are connecting with our readers. Certainly with climate change, but with all environmental issues, I try to connect in many different ways. The most forthright is explaining the science. That's what I do well, I explain science well. But as I've gotten older and written more books and other things, I've tried to add on increasing layers of depth.

I've become more open, I think, as I've gotten older. I want to share my inner thoughts more with my readers. I think that in order to do that, we need to become what we want to write about. If we want to write about the richness of our natural environment, we have to go out and feel and become passionate about the richness of our natural environment. I think that that added a lot of depth to Sugar Creek that I'm very pleased with.

Vivian M. Cook:

Do you think incorporating more of these storytelling approaches has allowed you to connect with more or different readers?

Cornelia F. Mutel:

Yes, definitely more. I think that my earlier books have been well accepted by people in the sciences. I did a book on restoration ecology, people doing restoration ecology, loved that book. I did a book on natural ecosystems, that's used as a text for explaining natural ecosystems in college classes.

All of those have been well-used, but this allowed me to reach people that I think had not picked up my books in the past, both different ages. I know that I've had a couple high schools ask me to come and speak to high school classes that are reading the book as a text, to people well outside of the sciences. Yeah, it's been nice. That personal connection has been nice.

Vivian M. Cook:

Yeah, that's wonderful. I know we talked about how there are students at Ames High School reading your book right now, which is where I'm recording from, and that's great.

I think you're going to talk to them a little bit about the book and also just about the problems that we're facing with climate change, and the role that young people can play in really pushing for climate action.

Cornelia F. Mutel:

Yes.

Vivian M. Cook:

That's wonderful. You mentioned this at the beginning, but A Sugar Creek Chronicle is structured in a way that moves back and forth between these weather and climate journals, as you call them in the book, and also memoirs.

As a reader myself, this way that you're writing about climate change, which is very tangible because I think of those observations that you talked about, immersing yourself in the woodland and then sharing that with us.

It's very tangible, very personal, very honest. It engaged and moved me as a reader. When you wrote these journal entries, which you divided into four seasons, right? You wrote them over a course of the year, and I'm wondering if you can share one of these journal entries with us now?

Cornelia F. Mutel:

Yes.

I wonder about these trends accelerating in the sky above me. I have always loved gazing into lowa's huge skies. I walk to the hilltop at the top of our lane, tilt my face upward and slowly turned in a circle imagining that an entire new world is opening to me. It's mountains and seas, plains and ridges, all the globe shapes and colors written on the sky by water's pen, so many clouds I think. But last night as I lay in bed, thunder rolling through the forest around me, I saw the skies in a new and different way.

I watched clouds climbing and towering and collapsing upon one another. Shimmering clouds doubling in size, time and then time again. Clouds in sheets and spirals, white and lobed shooting out funnels of rain that were turning creek beds into torrents of mud. Seized by this vision, I grasped the power that was being generated as our skies warmed. The growing heat translating to unmitigated, airborne thermal energy, pursuing release in storms such as this one.

I had a premonition of how these forces increasingly will feel. Hot skies soaking moisture from the earth, they're rising temperatures releasing raw energy that is discharged in downpours and winds that continue to grow in intensity, duration, extent, climate change. Reshaping not only our land and our daily actions, but also our relationship with the earth, as well as our very thoughts, fears, actions, and dreams.

Vivian M. Cook:

Thank you, Connie, for sharing that excerpt. When listening to it, when I read it the first time and when listening to it, I think I as a reader, I recognize those images of heat and rain and floods. We've talked about how, while it may be easy for many of us to disconnect from data about climate change or honestly anything else, it's harder to disconnect from our own or our neighbors' tangible experiences.

Approaches like journaling allow you to share your concrete experiences of the environment, how weather patterns are changing, how you personally are responding to those changes. How it's affecting all of us here in Iowa, which I think is home to maybe many of your readers. Can you talk more about how your journal entries try to tap into these local, shared experiences of climate change?

Cornelia F. Mutel:

Yes, certainly. Journaling allowed the naming of a full year of experiences. That's the beauty of journaling. You can wake up one morning and all of a sudden there's a big storm coming in, like the one that I just described in that reading. All of a sudden, it's an invitation to write about what's happening in the skies. The insertion of different ideas and events when you have a journal, never seems artificial because the journal could encompass everything.

Luckily, 2012, well, luckily or unluckily, I think was named as the first year that we here in the United States were really starting to feel the effects of climate change. Somehow fortuitously, I started writing the book on January 1st, 2012. We did have a lot of things happening, and my neighbors who at that time were not too convinced I don't think about climate change, were noticing things on their land, primarily increased erosion.

Of course, it was obvious to me that the erosion came from the increased intensity of storms, the intensity of rainfall, as well as the increase in rainfall. Our precipitation in Iowa has increased. But if I had just said, "Well, our precipitation has increased," I think it would've gone right past them. On the other hand, if I spoke to them or when I wrote in the book about my experience with increased precipitation and increased erosion on our land.

That allowed them then, it invited them to say, "Oh golly, that's what I'm noticing too. We've got this stream bed that's just going crazy down there." Then right after that, I would discuss how it's related to climate change. I think that journaling has been a very good way of drawing readers into experiences. I think when you talk about climate change, it's a good idea to remember to name local things, common experiences.

People will not connect to what's happening in Africa or Bangladesh, but they will connect to what's happening 20 feet from their house.

Vivian M. Cook:

Right. It sounds like that strategy, which you used very intentionally in a structured way in your book, also translated to some of the conversations that you might have with your neighbors.

Is how can even though you know the reasons behind these things, as someone who has studied climate change from a biology and ecology background, that if you start even just with your neighbors at this point of shared, tangible experience.

Then that can actually open the conversation for people to be receptive to having a dialogue about what's happening and why it matters to each of us.

Cornelia F. Mutel:

I'm getting better at it. It's hard to do, it's hard for any of us to do. But just yesterday, I had an experience where I was walking on a nearby road. Someone came up behind me and we started talking and she was saying how nice it was that we had warm weather to walk in in February. I walked in silence. Then I said, "I've heard that in January when it was so warm, there were a lot of bats in Minnesota coming out of hibernation. People were very concerned about the number of bats coming out of hibernation in the middle of the winter. What would happen? Would they die? Would they use up their energy that they needed to reproduce the following spring and the like?" Suddenly she stopped and she said, "I didn't know that. That really upsets me."

Then I said, "I also found in January a tree frog hopping through my kitchen floor, along my kitchen floor. That frog had come out of hibernation and somehow come into my house, and that concerned me." All

of a sudden, she was open to talking about climate change. I think that if we use those experiences, we can open conversations. We have to be courageous in doing it, and we have to do it in a pleasant way, not in an accusatory way.

Vivian M. Cook:

Right. It sounds like that conversation really started with her sharing her experience of changes that she was noticing, and then really listening to and responding to that. Thanks for sharing that story. Wow, and I understand that too I think. I grew up in Arizona and then moved to Iowa, so when there is a warm day in winter, I do have these conflicting feelings of, "Oh, this is really nice and also scary." Even over the past decade or so that I've been here, it's happening more and more.

Like in the journal entry you just shared, you talk about the beauty of the environment around you, and also the concerns you have about some of the changes you're noticing. But many of those entries do depict the beauty of the woodland where you live. You've told me that your readers have fallen in love with Sugar Creek, the place, through reading your book. Can you describe what some of these responses have been?

Cornelia F. Mutel:

Yes. I have found that some people have fallen in love, and I've actually had a few people knock on my door. People that I might have met once, but I didn't know well and say, "I've read your book. Can I come and sit at your kitchen table with you and talk, just look out the window and talk about your book?" That just astounded me.

I think that comes partly from the persona that I tried to create in Sugar Creek, as a genial grandmother sitting at her kitchen table, inviting others to come and sit down. As I said in the opening reading, have a cup of tea with me, talk with me. What I was saying there is this is a safe place.

This is a place where we might talk about problems, but we're not going to just depress each other. We're going to be open with each other about the good and the bad that's happening in the world. I think that many people now need to be in a place that's free from fear, and we can do that with all of our artistic expressions.

We can invite people into another safer world, even if it covers and mentions our problems, it still is a safe place to discuss those problems. We need those places to visit in during the troubled times that we now have.

Vivian M. Cook:

Yeah. I know the topic of climate anxiety and climate grief is coming up a lot more now, I think, in conversations around climate change. That there is this ongoing, I think, in some ways existential dread or anxiety about what's happening and not being sure what to do about it.

Creating opportunities for people to talk in a space that allows us to work through some of that grief, to express it, to share it. Then to also remember why we care about trying to make a change or what we care about protecting because of the beauty around us. I think that is really powerful.

Yeah. Is there anything else that you want to share with listeners about why you think it's important to include conversations about the beauty of the environment, to capture the beauty of the environment as you do in your journal entries to talk about climate change?

Cornelia F. Mutel:

Yes. Thank you for asking that because I do think it's very important for people to love our wounded world. Our earth is struggling to maintain its integrity, and we need to see that.

But the only way that we're going to address it, is if people do love the earth and do love the creatures of the earth so that they recognize that all life, not just human life, but all life has a place at the table.

If we start loving the world in that way, as a way of extending justice to all the species of the world, I think that will give us the motive to act in a passionate way. I do try to invite readers all the time to love our beleaguered world.

Vivian M. Cook:

Thank you for doing that, Connie, and for sharing that with some of us today through sharing your journal entries and sharing these snippets of your book and of your woodlands with us, even over just a podcast where we can't see it, but you're painting these pictures.

In between each season of journaling in A Sugar Creek Chronicle, you write in a memoir style, describing your own memories of your relationship with your environments and how those environments have changed over time ever since you were a child to now.

During these memoir sections, you also use your mother's and your own experiences with cancer as a metaphor for climate change. Could you read us one of those passages?

Cornelia F. Mutel:

Certainly.

Looking back now, I remember how those August hospital afternoons seem to stretch on forever, the hands of the wall clock barely turning. The sun poured through the west facing window, creating a heat laden August whiteness devoid of motion or color. I had plenty of time to consider the events of the past year. My mother's cancer had been diagnosed only four months before in the springtime, but now I realize that she'd had symptoms since the past fall.

Complaints of fatigue, not feeling good, declining weight, declining appetite, she brushed them aside and we did too. My dad and my sister and I, we believe that mom, like the earth itself, would be here forever. She was always robust, the healthy one in the family, the resilient one who never caught our colds or flus. Meanwhile, the functions of her body were silently shifting deep within her.

The cells that compromised her body were going wild, dividing way too rapidly and claiming control. Seating tumors in her liver, lungs, stomach, bones, eventually in her brain, cutting off her body's ability to operate as intended. Continuing without notice, until her doctor felt her enlarged liver during a routine checkup. By then she had passed the tipping point. There was nothing more anyone could do. Despite medical treatments, she declined rapidly.

If only we had been attentive to her early symptoms, I would think. If only we had read and believed the warning signs, could things have been different if we had found and treated her cancer earlier? Would she still be working in the garden and designing her stitcheries? Would our home still be a safe refuge?

Vivian M. Cook:

Wow, Connie. This moment in your book and many of the ones that follow where you talk about these experiences are extremely powerful. I think especially for those of us who have had experiences with cancer touching our loved ones or us. Then in your descriptions of the fear and grief and anxiety

surrounding both your mother's and your cancer journeys, you also use language that we have all heard when discussing climate change.

In this excerpt alone, you talk about denial and refusing to see symptoms that have been going on for a long time. You talk about resilience and lack thereof. You talk about tipping points. First of all, thank you for sharing these stories in your book and today. Can you tell us more about this use of metaphor in communicating about climate change?

Cornelia F. Mutel:

Certainly. It's interesting to me because I did not see the metaphor when I started to write and put cancer . . . Cancer has been such a big part of my life. It went into my memoir sections and I didn't see that it was a metaphor for climate change until my editor, a very good editor, said, "Connie, you've got the perfect metaphor here, but you're not developing it." I said, "Oh, what is it?" She said, "Well." Of course, it jumped out at me.

Of course, cancer and climate change are both caused by insidious, invisible substances, small substances that can kill and the likenesses are there. But using metaphor well is something that's difficult. I did have to work with somebody who guided me in using that technique. You have to choose your words. You have to have a few keyword words like tipping point, a phrase if only and the like.

You have to use them in the book, but you can't use them too much or all of a sudden, it becomes over heavy and cheap sounding. This person, friend and editor worked with me on the art of using metaphor, which taps into the subconscious. It gets the reader to tie together seemingly disparate ideas to make connections between one situation and another of great importance.

But you notice I said gets the reader to do that. You can't do that. You can't say climate change is a metaphor for cancer or vice versa.

Vivian M. Cook: Right. Right.

Cornelia F. Mutel:

You can't do that. You have to use it artfully. Here I am just saying that I had to work with someone who could guide me. I think whenever we're using some of these techniques when we're using the arts.

Whenever we use these techniques, the help of someone, an expert in the field, is important. When metaphor is used well, it's a very strong technique indeed.

Vivian M. Cook:

You talked about having readers make the connections themselves, which in my response to even just that little excerpt that you read, then I was picking up on that language without you in that excerpt, you don't even say the words climate change.

But I'm able to make those connections myself in a way where I'm connecting first and foremost, to something that seems perhaps more immediate, personal and relatable like cancer. Which then helps me and maybe other readers connect more deeply to climate change and the experiences we're all collectively going through with that.

You did this in A Sugar Creek Chronicle with cancer, this use of metaphor. Then also when COVID struck, you compared what was happening with the pandemic to what was happening with climate change. How did people respond to that comparison?

Cornelia F. Mutel:

Yes, that came out of the blue. The similarities between COVID and climate change in terms of how they affected society were pretty blatant to me, but I don't think they were at first to so many people. I wrote an article and actually gave a talk that was called COVID-19: Dress Rehearsal for a Climate in Crisis. In that paper, I didn't use metaphor, I just laid it on.

I used simile, I compared it by saying "like," and it was blatant, it was easy to do. It's something that anyone can do, but it again is extremely strong. If you say, "Well, COVID, look at what COVID was doing, this is exactly like what climate change is doing to us more slowly. It's more . . . it's not as obvious, but it's just as strong."

All of a sudden I think that people that hear that get a sinking feeling and they get climate change for the first time. I think this is something we can probably even do when talking to friends when we say, "Oh, something is like something. Climate change is like some other horrible thing that is happening, or some other horrible thing that I've noticed happening in my life or in my woodland."

That that would be something that we can do to increase the strength and the power of what climate change is doing to us more insidiously.

Vivian M. Cook:

Right. It's interesting because climate change, the climate crisis has been happening for decades now really. We've been seeing the impacts for decades, but for some reason, I think something about it maybe because it's such an all encompassing problem that is affecting different regions in different ways, it's affecting different people in different ways, different parts of the environment in different ways than it feels maybe more abstract.

Everyone knew what was happening with COVID. It was very quick and immediate and so making that comparison maybe helped us translate climate change into something that maybe wasn't so abstract after all. We're talking about these experiences that people care about and understand and how that helps them connect to the idea of climate change. You told me that when you sit down to write, you envision a reader sitting right beside you. You think about what they care about and why, and then write as if you're having a conversation with that person.

You become friends with the reader and show them kindness is what you've told me, which I think is really beautiful. How do you think not only writers like yourself, but all of us can use this technique and conversations we have with each other about challenging topics like climate change?

Cornelia F. Mutel:

I think that when I was younger, I was much more likely to be blatant and dismissive of people who were not on the same wavelength where I am. Now, especially with climate change, I've become much more empathetic with people who are deniers, people who are afraid, are dismissive, don't want to know about it because climate change is such a huge problem. It is overwhelming, and all of the non-active responses that people give us are understandable.

I think that that pushes me then further towards being gentle and being kind with other people. I think that the tone of how we communicate with others is very important. We can't preach, we can't dismiss

them. We have to come at them more through their soft underbelly and get them to open up to us. Help them to be vulnerable, and thus to accept our words as safe. That I think can make a real difference.

Vivian M. Cook:

You mentioned earlier that a lot of people have fear when it comes to talking about climate change, and it's going to be really hard to engage if we hang on to that fear. Or you're not right, terrible things are happening, you have to see it. Why aren't you talking about it? Why aren't you seeing it? But instead, figuring out how to, like you said earlier, create a safe space to have those conversations where people feel like they can be vulnerable, can talk about their grief, can talk about what they're observing themselves.

I want to talk a little bit now, we heard about all these strategies and approaches that you have used in your own books and articles, especially A Sugar Creek Chronicle. But you've not only written your own works, but have also been an editor and guide for several other climate change related books that have included contributions from many different authors. Some of these books include Land of the Fragile Giants, which you mentioned, and Compelling Ground, both of which were written to accompany exhibits created by ISU University Museums.

Then your most recent book, Tending Iowa's Land: Pathways to a Sustainable Future, also includes writings from many different authors. For these projects, you've provided guidance to the authors about the use of storytelling to make their own writing more approachable, personable, and relatable to their audiences like you've done in your work. First, for Land of the Fragile Giants and Compelling Ground, writings and visual artwork reflecting on Iowa's landscapes went hand in hand.

You talked with participants about the value of sharing multiple perspectives about the same landscape. Why is this valuable and how does this idea apply to community conversations about climate change?

Cornelia F. Mutel:

In Land of the Fragile Giants, this was the book that I mentioned earlier that Mary Swander and I edited it together. We had multiple authors, I can't remember, 12 or 15, all of whom were going to write about the Loess Hills. These came to us from different disciplines. We chose them. We purposefully joined what we called humanists, people interested in the human aspects of something with people who were in the hard sciences.

We pictured these people standing around a single entity, which was the Loess Hills, each looking at the Loess Hills from his or her own viewpoint and expressing that separate viewpoint in his or her own way. I think that with solving a problem like climate change or working to solve it, we have to realize that this is what we have to do with climate change. We have to get people, everybody really in this world, bringing his or her own talents to the table and using that to address climate change.

If we maybe, again, if we're maybe kind with other people and listen to what they have to offer, we will be more able to get some positive action from their commitment.

Vivian M. Cook:

Definitely. Thank you for sharing that story. You've shared that picture with me before of all of you standing around and looking at the same beautiful landscape in the case of the Loess Hills or the same topic, which maybe isn't so beautiful about climate change and how we all contribute very different perspectives.

How that actually helps us see the problem better is if we all share those together. I also wanted to talk about your newest book, Tending Iowa's Land, which I mentioned, and you had multiple authors working on this book. Did you apply any of the storytelling techniques that you used in A Sugar Creek Chronicle when working with these authors to write their chapters?

Cornelia F. Mutel:

Definitely. When I was approaching Tending Iowa's Land, this was the book that I put together after Sugar Creek Chronicle. I think that the response to Sugar Creek Chronicle was so much better, so much deeper than the responses to my earlier books. I had so much more fun writing it that I thought there was no way I was going to go back to a book, even a book on Iowa's environmental problems and solving them, which is very science driven.

But I didn't want to do that book in just a straight scientific description. I think that I decided I would never go back to doing that kind of book again. From the very beginning, I applied storytelling techniques and asked the authors to use stories, personal stories, both to introduce their chapters, throughout their chapters and to end their chapters.

Vivian M. Cook:

That's great. I know you also had several authors working on science chapters or discussing the problems that we're facing with our soil, with our water, with biodiversity. Then you had several authors who were also just telling stories of their relationships with the land and action they were already taking to improve soil and water quality, and to improve biodiversity and to address climate change.

Then you had several authors doing vision chapters is what you called them, of the future that they see of Iowa. Can you talk a little bit about that structure and how bringing in storytelling that is really actionoriented storytelling, that is explaining the problems and then storytelling that is looking at the future, it helped create a bigger story about climate change?

Cornelia F. Mutel:

Yes. I wondered Tending Iowa's Land to be dominated by good science, by action-oriented people and by stories of both action and the science itself. I instructed the science authors to tell first-person stories about their research and their teaching experiences and the like. And to open the chapters with a story to end the chapter with a story, and to refer to stories throughout their chapter. The interfingered essays that were written by action-oriented people in Iowa.

People like farmers, people who one was by a wildlife restoration person, one was by the person who invented Project Aware, the river cleanup trip. All of these people just to simply tell their story in a shorter essay, just tell what you've done. Those were defined by action from the beginning. Then along with the science chapters at the end of each of the four major sections, soil, water, climate, and biodiversity, I ask a scientist to write stories about his or her vision for the future.

If we did things right in Iowa, what would Iowa look like in the next 10, 20, 30 years, 40 years? I think that these visions for the future are very important because we have to have a target to aim for or we won't know exactly where we're going with solving any of these problems.

Vivian M. Cook:

Right. As part of your editing guidance for Tending Iowa's Land, you told the authors the following, and you sent this to me and I love it so I'm going to read it aloud. You said, "A delicate line I think we all walk

when explaining environmental problems to others is combating their depression and fear. Balancing truthful honesty about long-term effects with encouraging the hope and action that are crucial to a better future."

How do you think we can all use storytelling techniques such as memoir, metaphor, journaling, the techniques you've used, to help us find this balance, as we talk about climate change in our own communities?

Cornelia F. Mutel:

Stories are ancient ways of teaching other people about their environment, teaching them about how to act, carrying information into the future. If you think about it, before we had written language, stories were the ways that we created the future for the young children who were sitting around the campfire with us. Everybody loves a good story. I think it's built into our genes and stories open us to listen. If we have somebody telling us a story, all of a sudden it gets our attention.

I think that whenever we are in some discussion with someone else about environmental problems, nobody wants to talk about the problems, but everybody loves a story. We can use stories in three ways. First, we can tell our own stories open and honestly without preaching and condemning. We can show our worries and be human. We can talk about what's happening with climate change, but we don't even have to name climate change, at least not at first.

If we get people to think about these changes, I think that that's a step in the right direction. Stories are very important, again, local stories applying to what we are seeing in our own local area. The second thing I think that we need to do maybe even more, is to tell positive stories about what we have done or what we can do. What experiences we want to share with other people that have helped to solve the climate crisis just a tiny, little bit.

I know that when we got our solar panels, all of the neighbors wanted to come over and look at them and to talk about, "Well, did they really work?" This was an education in itself to just talk about the fact that we had gotten these and we said, "It's really nice to think that whenever we turn on the light, we're not putting more greenhouse gases in the atmosphere." Those are positive stories that stimulate action. Then the third thing again is to always tie stories to hope and to a vision for the future. I think this is critical.

A vision for the future is someplace that we see where we can go. We're never going to get there. It's always around the next bend. The road curves around a hillside and disappears into the distance. But the vision for the future, which may be getting our floodplains back into perennial cover, getting more cover crops in agriculture, all of these things, these visions for the future give us a specific goal to aim for, and they generate hope and hope generates action. We always need that hope, that vision for the future in the stories that we tell.

Vivian M. Cook:

Thank you, Connie. You described to me the hope and vision you would picture for yourself when you were writing A Sugar Creek Chronicle.

It was becoming overwhelming at times with just the magnitude of it all. What did you imagine during these times?

Cornelia F. Mutel:

Yes. When I was writing Sugar Creek Chronicle, the intensity and the potential effects of climate change really depressed me. Writing is such a solitary occupation. I'd spend days and weeks by myself, just myself and my ideas turning in my head. What I finally discovered one night, I can't remember why, but I actually held out my hands away from my body.

I closed my eyes and I pretended that I was holding hands with people on either side of me, people who were also working as I was on solving the climate crisis. Those people were holding hands with someone on their other side as well, so that together, the people concerned about climate change, people who were trying to do something, reached around the world. The number of people were sufficient a number to reach all the way around the world.

That exercise just holding my hands outward and feeling that energy coming to me, really gave me the energy to keep going with the book.

Vivian M. Cook:

I love that story and I think even you just sharing it is comforting to me. I feel like I understand where that comes from a little bit, especially even doing this podcast series with all of the wonderful people I've gotten to interview, even though we're talking about climate change, which is hard to talk about.

I think we all feel overwhelmed by it a lot of the time and very worried, and there's some despair in there, right? But even just talking to all of y'all over the past several weeks has given me hope, because I get to hear about the work that you're doing and that we're not alone.

There's a lot of people concerned about this and working toward it, and working toward it in really hopeful ways that envision a future. Speaking of hope and vision and action as you talked about, what role do you think storytelling can play in pushing for climate policy?

Cornelia F. Mutel:

Climate policy is what needs to change. There are plenty of individuals in the country that are changing their actions as our industries, but we need to get better policies. I think that storytelling is extremely important there. Whenever we communicate with our legislators, whether it be by email or a hearing session, or a phone call or whatever, we can just say, "This is what happened to me and it really scared me. This is what is costing me a lot of money now and it's because of climate change. I need your help. This is what I fear is happening with the quality of life for myself and for my grandchildren. I want you to help me improve that."

If we specify, if we tell stories, I think that we are more likely to reach those legislators and those people that are decision makers, much more than if we simply call and complain.

Vivian M. Cook:

What you're describing, I think, goes back to also that everyone has a perspective on this issue because it is affecting all of us in some way and will continue to. That those perspectives, those experiences are very valuable and that storytelling is a way that anyone can enter into a conversation because they have their own observations, as you do in your journals.

They have their own memories as you show through your memoir sections of your book. And they have their current experiences and questions and lived experiences in the moment of what they're scared of

for the future and what they envision for the future. Everyone can share that in some way with each other or with people who can make hopefully policy changes.

Cornelia F. Mutel:

Definitely.

Vivian M. Cook:

Thank you for sharing that with us. As we are wrapping up this episode, I want to give you the opportunity to share the three key ideas that you want people to understand and take away about your work at the intersection of arts, storytelling, and climate action.

Cornelia F. Mutel:

Well, one thing I want to stress is that story's metaphor, all of the techniques we've been talking about, encourage readers to open up to you. I'd like to encourage anyone and everyone to use these techniques, but realize when you use them that you are getting into people's subconscious or at least you have that possibility. Use them with care. Well-used, these can open people up just the way we open a can up.

Then you need to be careful about what you do with what you see inside. The second point relates to that, that again, we always have to leave whomever with hope and a vision for the future. If people leave our discussions without having hope and a vision for the future, then their fears will become a self-fulfilling prediction. We need to try to get action and not dismissal or fear. Thirdly, we need to realize that climate change is now determining the future of humanity and a society.

We all need to work with a passion, but at the same time, we need to take time to care for ourselves and to be gentle with ourselves so that we can be effective actors and continue to enjoy what we still have. All of the wonderful blessings this earth gives us.

Vivian M. Cook:

I will definitely be taking those ideas with me today. What would you say is the biggest recommendation you have for others who might want to use storytelling strategies to talk about climate change, especially in agricultural communities?

Cornelia F. Mutel:

I think that I'd like to encourage people to always have a positive vision for the future in your mind. I know that sometimes this is hard to do, especially when we learn so many negative things about climate change.

But we need to always keep in mind that place beyond the horizon. We need to work with vigor to turn the earth back into the heaven that it's been in the past. I would hope that none of our listeners give up on that.

Vivian M. Cook:

Thank you, Connie. I'm going to try to remember that too as I go for it. Thank you for sharing that with me today as well. Before we end the episode, we're actually going to have you share an excerpt that shows your own vision for the future.

But first, how can people connect with you in your work, if they want to read more of your work, see more about what you've been up to and what you've given to our communities through your writing?

Cornelia F. Mutel:

Well, of course, there's a lot on the web and that's probably where people can start. But if they want any connection, I am now retired from the university, but I do still have an office there.

They can reach me through my department, the IIHR-Hydroscience and Engineering at the University of Iowa or through the University of Iowa Press.

Vivian M. Cook:

Wonderful. Thank you so much again for sharing your work and stories with us today, Connie. To close our conversation, I'd love to share with readers an example of how your own writing, as you've recommended to other authors and to all of us today, paints a picture of what the future could be.

To send our listeners off, can you read us the final excerpt of your final chapter of A Sugar Creek Chronicle titled The Years to Come?

Cornelia F. Mutel:

We still have choices. We still can address this overwhelming problem and prevent its worst repercussions by decreasing carbon emissions, but we don't have time to waste. It's that simple. Do I have faith that this planet's people and nations will pull together to heal earth's climate? Do I remain hopeful? How could I not? After all I have learned of the creative thought, effort, energy, innovation, and diverse approaches already being directed toward climate change.

We Americans may be slow to accept this diagnosis, but once we decide on a course of action, we can move fast. At some point, I believe we will. In the meantime, we each can construct and share a vision for the future. Mine is one of high resilience and low risk, a vision of a balanced, self-healing planet with vibrant human societies and healthy, robust, self-perpetuating environments.

As I write these words, I imagine my grandchildren, Ellie, her siblings, her cousins, what do I want to leave as my legacy for them? Sitting at the kitchen table, gazing out at the birds and the trees, the answer comes easily. I want a place where they can sit in comfort and safety, overlooking a natural world that fills their needs and brings them joy.

I want to leave them a world that in some small way is healthier because of my interactions with their processes and creatures. Nothing more, but nothing less. This is my vision, one person's hopeful legacy. What is yours?

Vivian M. Cook:

Thank you for listening to The Art of Climate Dialogue and we hope you'll listen to the rest of the series. More information about podcast interviewees is available at ecotheatrelab.com. We invite you to engage in conversation with us by leaving a comment, responding to the short feedback forum in our show notes, and checking out The EcoTheatre Lab's website. We want to thank all of the organizations and individuals who made this series possible.

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