

20.12.05 The Environmental Imagination Hour.wav

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AS: Audio Sample

GW: Greg Wrenn

NB: Nick Balascio

RBT: Rebecca Bromley-Trujillo

BB: Brendan Baylor

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SM With its majestic beauty and abundant resources, the natural world is central to our lives. But as climate change intensifies, it just could be that art is our secret weapon in the fight to preserve the planet.

AS The clock is ticking. We have to mobilize. And in the process of mobilizing and working hard to save the earth, we have to be nourished by art. We have to be nourished by the beauty that still remains because we will get burned out. And this is why the pleasures of reading and being in nature are so important.

SM From Virginia Humanities, this is With Good Reason. I'm Sarah McConnell. Today, how art can help save the earth. And later, what lake sediments tell us about climate change.

AS Lake sediments are really this natural history book of environmental changes.

SM But first....

GW Row: my first word, my mother heard me say it in our brick house with blue shutters in Jacksonville, Florida. She had sung me the nursery rhyme many times, pretending to paddle a boat with her arms.

SM This is the opening passage of Greg Wrenn's essay, Paddle. It's about the formative role nature played in his early life.

GW I couldn't quite pronounce the R in row. So did it sound more like, oh? A faint grunt of delight or pain? In any case, it was my own. It created my universe, bizarre galaxies of hard water, declaring me a strange child, a disloyal Muppet who would conspire with words and tides, not dada or mama, but row. Life is about a dream, an echo of a dream, as when you put a conch to your ear.

SM Greg Wrenn is a poet and English professor at James Madison University. He says his students are hyperaware of climate change, but don't give as much attention to the written word. That's where his class, the environmental imagination, comes in. It's a course he teaches that fuses creative writing and the natural environment. Two subjects which he views as mutually nourishing. Greg, you grew up near the ocean in Florida. Can you remember when you first became conscious of the environment and its rapid degradation near you?

GW Oh, well, there was an experience that I had when I was nine. I guess when I first snorkeled with my mother in the Florida Keys. We were at Carysfort Reef, which in the 1970s was stunning. But we're there in 1989 and the water's murky. It's a cloudy day, lots and lots of snorkelers with their careless fins moving about. And, you know, there's a 500 -

there was, I should use the past tense - there was an ancient 500-year-old head of brain coral there. And yet I still knew at nine - and I had never been in a reef before, again it was my first time - I still knew that this was an ecosystem in grave danger. I could see the broken coral. I could see the bleaching coral. I could see the diseased coral. And somehow, I was able to intuit, before - before people were even talking about the very real prediction that coral reefs will be the first ecosystem on Earth to go extinct.

SM Listening to you, it makes me think that what we should do is save what we can of our coral reef ecosystems over and above every other ecosystem. It's such a driver of climate, of the ocean, of our dreams.

GW Yes, countless people on Earth depend on coral reefs, not for the esthetic pleasure like me, but it's their pantry, it's their 401k, it's their sea wall. And as coral reefs around the world erode and when I say erode, I mean erode because we know that reefs are made of calcium carbonate, they're made of limestone. And as the oceans acidify because they are absorbing more and more carbon dioxide, those reefs are actually dissolving. Akin to an eggshell being put into vinegar. I think - I teach these courses because I feel - I feel this helplessness in the face of so much- so much destruction, so much degradation. I need to do something, and this is this is my contribution. This is my offering.

SM I love that you are sharing these ideas with your students. You're actually an English professor teaching a course called Environmental Imagination, where you teach environmental issues through the lens of literary figures. Can you name a few of the literary figures, some of whom have been long gone, who you share with the class and how they can teach us about our current climate crisis?

GW I think someone like Walt Whitman our good, grey, gay poet. We're now living in the Anthropocene era, maybe you've heard about that. Where you know where the main driving geological force is mankind, is humanity. But when Walt Whitman was around, we weren't living in - in the Anthropocene era, we were living in what's called the Holocene era, just another interglacial period. And so he didn't - he had no idea that the world was - was, in a sense, on a path of self-destruction. Now he knew his country was, in terms of the civil war and slavery. But what he teaches us through his work and Emerson as well, is they teach us that the world is holy. Creation is holy. Nature is holy. And that the body, the human body itself is a part of nature. And nothing about the human body, nothing about its erotic activity, nothing about any of its functions is unnatural. Everything is natural. Everything is sacred. And that nature is a living, breathing, sacred text that can teach us how to survive, how to how to prevail, not just survive, but to prevail.

SM You also use the writings of Cormac McCarthy. Tell me about how Cormac McCarthy would inform your students in terms of the environment.

GW Sure. So, Cormac McCarthy wrote a stunning novel in the first decade of the 21st century called "The Road", in this novel, he imagines the total collapse of the Earth's biosphere and a father and a son make their way through this hellscape looking for safety. Now, it, of course, is a thought experiment, and I - and I speak with my students, I discuss it as a thought experiment because no asteroid can completely destroy all life on earth. No volcanic eruption, not even nuclear war, could destroy every single living thing on Earth, even mushrooms. But it's a very useful thought experiment because we take for granted the degraded environment that we have. We see it as normal, we see it as acceptable, we see it as beautiful - and it is beautiful many times in its own way - but we have no idea what we've lost. Imagine going to the Florida Keys a thousand years ago and swimming

with monk seals, which are now extinct and sharks all around you and oh, it just - it would have been incredible. So, it's important to - to undertake the thought experiment going back in time and imagining forests and coral reefs primeval. But it's also a really useful thought experiment to travel into the future or to - to imagine a future where the biosphere has collapsed, because I think that going to the hell realm, like Dostoevsky takes us to hell realms, Cormac McCarthy takes us to this hell realm and in imagining the unthinkable, I think what it does is it jolts us out of our complacency and makes us appreciate the sabal palm tree outside the window, I'm looking outside the window and I see these beautiful, sabal palm trees. They will be gone in 20 years, 15 years, I have no idea. And so to know that and to look at them, I'm looking at them right now - that is a very different experience of nature of Thoreau fishing by the moonlight in Walden Pond. It's not just that all things are impermanent, it's that there's an extra layer of impermanence because the clock is ticking. We have to mobilize. And in the process of mobilizing and working hard to save the earth, whatever that means, we have to be nourished by art, we have to be nourished by the beauty that still remains because we will get burned out. And this is why the pleasures of reading and being in nature are so important. It's a mutually nourishing relationship, actually.

SM You also use the writings of Edward Abbey. Tell me about Edward Abbey.

GW Edward Abbey was a real sourpuss. He was a real sourpuss, but he was a visionary sourpuss. And he was a park ranger in Arches National Park in Utah before it was a national park. He published his landmark book called "Desert Solitaire", because he was alone in the desert as this ranger for two seasons. And it's - it's an incredible record of one man's reckoning with - with nature as nature. Not nature as backdrop for selfies, not nature as a resource to be exploited, or to be turned into a Disney World, but nature for nature's sake, and seeing the foolhardiness of man because, while he was there in the 1950s he would see the engineers, the road engineers coming in and laying out stakes to create the roads that would ultimately bring in millions of people. And he was - it would be like me watching someone dredge a reef, it would be horrifying. And - and he would, when they would leave, he would actually pull up the stakes and throw them out. So it's a little bit of that rebellious spirit that - that I tried to, you know, to transmit to my - to my students and to embody in myself.

SM Have your own students changed over the years in terms of their personal sense of alarm over climate change?

GW Oh, my goodness, yes. And just - just their overall sense of alarm, not just about the environment. Yeah, many of my students talk about not really wanting to have children because they are so concerned about the future. Also, I've seen that students are, because we've become so - I've been teaching for close to 20 years and the written word on a page is becoming less and less compelling. And so, you know, I'm having to really encourage them and try to inspire them to look away from the screen and look at the page, and in doing so, I think they're learning to slow down. They're learning to savor each word, just like they might savor each blade of grass when they're when they're on a lawn. Just, just looking at the grass like Whitman - he just looks at the grass, he asks, what is the grass? And there are lots of answers to that. And maybe a child, an untutored, unschooled child is in the best position to answer such a question as what is the grass? And so I think there's a real yearning for innocence. There's a real yearning for safety in my students, because deep down, they, like a lot of us, realize that we're on a planet whose long-term habitability is uncertain.

SM How can you tell that they are changing in your class? How can you tell that they are slowing down and drinking in the written word? Do you have a vignette that might illustrate that?

GW Well, the first assignment in the Environmental Imagination is for them to make a close observation of a Virginia creature or landscape feature. And they have to take selfies of themselves with this creature or landscape feature. So this is forcing them to slow down, and it's forcing them to - to pay close attention to a northern tooth mushroom, a peregrine falcon, a feral cat, ice on a pond. One student wrote about the wind. And so I think, when I read these essays and I read what I - what I call their naturalist's notebooks, when I - when I read these texts that they have created, it's very exciting to me because I can - I can tell that there is a deceleration going on. But like I tell them, it's a muscle. Mindfulness is a muscle. And given the culture that we live in, it is extraordinarily easy. Like the fat people in the hover chairs and WALL-E, it's very easy for that muscle of mindfulness to atrophy.

What are some of your favorite works by students?

I had a student write about the dog food smell in Harrisonburg. And the assignment requires them to go into our local community in Harrisonburg and investigate, like Erin Brockovich, to investigate some kind of environmental conflict or problem. And so this student, she was interested in this dog food smell that sometimes descends upon Harrisonburg. But of course, it doesn't descend on Harrisonburg sort of randomly, like some sort of Saharan dust storm or something, it's not like that. We have - we, of course, have poultry plants within the city limits of Harrisonburg, which create the smell. And after it rains, the smell is particularly disgusting. And so she writes, "How are these corporations permitted to pump this smell into the Shenandoah Valley? And have such horrible working conditions?" And she wrote, this was the smell of animal and human rights violations because, of course, these - these workers are not treated very well. And so she investigated the smell. And I loved the intersectionality of it. I love how it didn't just stop with, OK, what's this dog food smell do to our bodies? But what does it do to the body politic, to the civic body? When you have workers, who aren't protected enough or given good enough health insurance or given consistent pay, so I thought that was a really incredible topic for her to pursue and she pursued it quite passionately and thoroughly.

SM Do you think there are flaws in the way climate change and environmental degradation has traditionally been taught or expressed publicly, given how widespread the problem is and how widespread denial is in America? It seems like something is not working, that there should be so much indifference and outright denial?

GW Well, I think it's - I think it's a huge problem. And I think, you know, I'm thinking of a manifesto that as one of my students wrote. I require my students to write an ecological manifesto in the tradition of Edward Abbey. And she wrote, "We must learn to value nature the same as we value money". And I think that people are a little bit - in terms of teaching, I think people are a little bit too afraid to - they give both sides, as it were, equal airtime. And I think when the other side is a bunch of lies, that's not a valid opposing argument to why we shouldn't fight for climate change or even see climate change as real. You know, I have students who don't believe that it's real. You know, at the end of the day, there's a very, very powerful set of interests that want this to be a debate. And if the Koch brothers invested as much money in the flat earth argument as they do climate change, you'd have a sizable portion of the American population who believed that the earth was flat again to. It's just where you know, where are people pumping the money into to create

disinformation, we don't need the Russians. We have our own disinformation outlets in this country. And I believe in healthy debate, but I believe that both sides need to have facts.

SM Greg Wrenn is a poet and an English professor at James Madison University. Coming up next, climate change clues buried at the bottom of Arctic lakes.

SM Back before human driven climate change, things like volcano eruptions caused the climate to fluctuate naturally. Nick Balascio is a geology professor at William and Mary. He's traveled all over the world collecting lakes sediment. And he says the sediment is like a natural history book, offering insight into environmental change over thousands of years. Nick was named an outstanding faculty member by the State Council of Higher Education for Virginia. Nick, you study the Earth's natural variability from the past. What have you learned about natural climate variability, prehuman, let's say?

NB Well, I think it depends on where you look on the planet in terms of how climate changes. And, you know, Earth's climate system naturally has a little bit of chaos that happens that is unpredictable. But then on top of that, there are these long-term changes that result from differences in the strength of the sun over decades to centuries, to volcanic eruptions and then to slight changes in Earth's orbit that cause Earth's climate and different regions to change naturally over periods of hundreds to thousands of years. And so my work is to try to understand what those natural cycles are and how different environmental systems respond to those. And then how does that compare to what's been happening since the intense burning of fossil fuels and the changes in our climate over the last couple of hundred years?

SM How would you assess the difference between the more recent climate warming and the climate variations that have occurred naturally in the more ancient past?

NB Well, I mean, the - the quick answer is that the climate system hasn't seen a warming this rapid in a long period of time. And there are, of course, times you can go back into the geologic past where carbon dioxide concentrations have been similar to today or even higher. But in terms of understanding, the rate at which they've increased is really quite unprecedented over the last hundred years.

SM You've been focusing your research on lake sediment. What are you looking for in lake sediment and in particular in lakes in the Arctic and very cold regions?

NB Yes. So the reason my work is focused on lakes and understanding the lake sediments that are accumulated at the bottom of them, is because they are really this natural history book of environmental changes, whether it's different algae that are living in the water column. They also trap sediments from things going on in the landscape around the lake, like the types of vegetation or maybe the lack of vegetation. And all of those things get washed into the lake, some of those algae die and fall to the bottom, and they're preserved at the bottom of the lake for thousands of years. And what I do is, my colleagues and my students and I, is that we travel to these places to extract samples of those sediments and try to interpret characteristics of them and how they've changed over long periods of time.

SM Your most recent work is with the Faroe Islands, halfway between Iceland and Norway. Why there? What drew your attention to the Faroe Islands?

NB Well, the Faroes represent this interesting steppingstone across the North Atlantic for how people and primarily the Norse moved and sort of hopped westward to the Faroes,

then to Iceland and then to Greenland. And it's also in a really interesting region climatically, because it's near the intersection of really important ocean currents and atmospheric currents. And so we approached it to look at how we can understand these lakes for when they've recorded natural climate changes before people showed up, and then how the landscape was changed with the first people to land on this previously uninhabited island.

SM What sort of findable evidence would there be of how early Vikings might have affected the landscape and therefore also possibly the climate around the Faroe Islands?

NB Yeah, it's less that they impacted the climate, but it's more that we were looking for clues for when people first showed up and in particular for the Faroe Islands. And when people showed up, it was that they brought grazing animals with them. And so one of the most intriguing things that we looked at was for DNA in the sediments that could be linked to some of these grazing animals and in particular sheep. And so we did work to understand the rates at which sediments accumulated and in particular one site on the Faroe Islands. And then we looked for the presence of sheep DNA and we, of course, looked back thousands of years and could not find any. And then we found it associated with, you know, roughly the timing of when the first people brought them to the islands. And those sheep, of course, there was enough of them on the landscape to provide a sedimentary DNA signal and then, of course, was associated with their work on the landscape to clear and mobilize vegetation and sediment that washed into the lake, that we could also interpret as when people first showed up.

SM What has been your biggest surprise over the years as you've been researching climate change in these Arctic and cold region lakes?

NB I don't know if it's a surprise, but maybe just one thing that I've learned to appreciate more are the different ways in which humans have lived with and dealt with their environment over different periods of time, as well as over different geographic locations, whether it's the Inuit in the high Arctic or whether it's Iron Age civilizations in northern Norway or even places I visited in the South Pacific, locations like an Easter Island. And I think how people have, you know, used their environment to their advantage, how they've had to respond to changes both natural as well as human-driven in terms of human modifications of landscapes. But I think, you know, the resiliency of people and even in these marginal locations is quite remarkable.

SM It sounds like you marvel at the climate change and the climate variations, both man-made and natural. I think every time somebody has been to a glacier and seen it disappear, it's such a threatening feeling, that it's hard not to be alarmed. But I'm interested in your take.

SM I think it is alarming because we know so much more. We know so much, and we've known for a long period of time that what we're doing to the atmosphere is not a good thing and can result in big changes. And we have all of this knowledge and information and we're not necessarily acting on it. Whereas when you look in the longer record of human activity that goes back through prehistory, people were responding to what was happening to them, but didn't necessarily know why or how. But where just - had this natural resiliency. And I think in the future we are resilient, and we ultimately will cope with this problem. But I think certain people will cope and societies will cope better. And I think the frustrating thing is that we know what our future holds in the short term. And my hope

is that at some point we start making better decisions to deal with and make sure that more people can cope with the challenges ahead.

SM Well, Nick, your work is fascinating. Thank you for sharing it on With Good Reason.

NB Well, thanks for your interest and for being willing to to learn a little bit about this.

SM Nick Balascio is a geography professor at William and Mary. He was named outstanding faculty member by the State Council of Higher Education for Virginia. This is With Good Reason, we'll be right back.

SM Welcome back to With Good Reason at Virginia Humanities. What did GMOs, HPV vaccines, indoor tanning and climate change have in common? They were the focus of a study by Rebecca Bromley-Trujillo, looking at the relationship between media reporting and scientific policy. Rebecca is a political science professor at Christopher Newport University and research lab director of the Judy Watson Center for Public Policy. And she says media coverage has a major impact on policies adopted by state lawmakers. Rebecca, you study how national news reporting on scientific issues influences the kinds of bills introduced and approved in state legislatures. Why is that key to understand? And what are you learning?

RBT So, I mean, there are many reasons this is important. Obviously, we as a society are dealing with a lot of policy issues that are scientific or technical in nature. And so how information is presented on these issues and what state legislators or members of Congress do with that information is really important in affecting our lives and what decisions are made. And we're learning that, you know, the more that these policy issues are talked about in the media, such as national coverage in The New York Times or state-level coverage, the more that state legislatures are choosing to address these issues. So introducing bills or adopting bills on a variety of topics. We also are learning that the way that they're talking about these issues matters. So not just that they're talking about them, but also the content. So are they presenting the science is uncertain? This appears to have an important effect on whether members of state legislatures take up policy issues. If the science is presented as more uncertain than they're actually less likely to consider action on policy issues, probably because it gives them kind of an out, you know, well, the science isn't quite there yet, so we don't really need to address this yet. So I've looked at a variety of issues in a series of papers on GMO food labeling, HPV vaccines, indoor tanning regulation, and then I also have a series of work on climate change policy.

SM Did you find that looking at something more narrowly focused than climate change, like GMOs or HPV vaccines or indoor tanning, gave you a better workshop for seeing how science information transmits from the news media to policymaking?

RBT Yeah, absolutely. So one of the interesting things about these issues is that they vary in important ways on a couple of dimensions. So some of these issues, as you said, are more narrow and some are more partisan or - or more salient. So, you know, an issue like GMO food labeling, this is an issue where actually liberals and Democrats are a little less trusting of scientists on GMOs and how safe they are. HPV vaccine - this is an issue where Republicans and conservatives tend to be more concerned about the vaccine and concerned about the science. Indoor tanning is sort of a - we as a public tend to trust the science linking indoor tanning with skin cancer, but we see some presentation in the media from industry indicating that it's safe and, you know, trying to protect the industry side of things. So they have these varying dimensions. And also in terms of, you know, an issue

like climate change, that is certainly a much broader issue and a very politicized issue. So these different studies looking at how the media covers these issues allows us to understand a variety of scientific issues and how they certainly vary. And based on that variance, the coverage also is different and impacts decision making differently.

SM And give me examples of what you saw.

RBT Yeah, so on these, you know, slightly more narrow issues, so the GMO food labeling, HPV vaccines and indoor tanning - for the most part, what we're finding is that when coverage in The New York Times is pretty heavy, so a lot of discussion of these issues, then we see state legislatures taking up these issues by introducing bills. And so as soon as that salience or interest or attention to an issue goes up, then we see state legislatures responding in kind and introducing more bills. But there is a caveat to that, in that if the presentation of that science in The New York Times presents the science is uncertain, then we tend to see fewer bill introductions. And, you know, this makes sense. As soon as you introduce some uncertainty, this allows those that don't really want to take action on that issue to say, you know, "well, we don't have a necessary reason to do this because the science is not quite there yet. It's still uncertain".

SM But you're not suggesting the news media be less certain or more subtle about the science if there isn't evidence to show so. Right?

RBT Yeah, so, I mean, this is an interesting thing. I mean, so journalists - they have a norm to present balance. Right. So present both sides. And oftentimes they present both sides equally. And so part of the challenge is that sometimes the science is not equal. So maybe the findings are actually very strong on one side versus the other. But sometimes those journalistic norms actually lead to a presentation that makes it seem like the findings in science are actually balanced, like each side has equal weight when maybe it doesn't in reality. And so this can kind of skew the impressions of the public and also members of government.

SM Do you find reporters and news organizations are more conservative in conservative states and more liberal in liberal states. So let's say on an issue like climate change in red states, the reporters would be more likely in the state newspapers to show a kind of balance between is climate change, human cost or not?

RBT So we see this on occasion. I would say, most of what we're seeing is the more conservative states or red states actually hardly talk about climate change at all. So when you look at the total number of articles a state does on the subject of climate change or global warming, by year, the states that are more conservative or red tend to on average, have just fewer articles. So maybe they'll only have, you know, 10, 20, 30 articles in a given year, whereas the more liberal states may have significantly more, you know, 100 plus, 200, 300, maybe even more than that, especially when we get closer to present day when the coverage has gone up. But there are exceptions to that that are really interesting, I'd say. So, you know, take a red state like Kentucky. This is a state that had significant coverage of climate change and there was significant debate. So it was not one sided. It was very much a presentation of ideas and arguments. And many of those arguments played out in the letters to the editor. And so the letters to the editor included, you know, your average citizen, also people that worked at universities in Kentucky and people that worked in industries like the coal industry. And so there was a lot of back and forth between the industry, policy makers, scientists and the public on these issues, which drove up the amount of coverage that the state had in their local paper.

SM Was that primarily because of the coal industry, that the debate was so widespread?

RBT Yes, I would definitely take that from the articles I read in that state. And - and this is a state I actually lived in for seven years. So it was kind of fascinating to follow and kind of know the context. But certainly, the coal industry is very heavy and Kentucky is very central to their economy. And so this is a concern that maybe climate change policy will be detrimental to that industry. And so there are a lot of people that are wary of climate policy for that reason. But at the same time, there are a lot of people in Kentucky that believe in climate change, believe that it's human-caused and are pushing back on this idea that we need to just go all-in on coal, that maybe, maybe there's a way to get into the green economy in Kentucky.

SM One argument you make is busy lawmakers often have to rely on national and state news reports to inform which policies they'll decide to enact. And that's everything from banning lasers, to buying jet pilots, to preventing the dumping of cancerous chemicals into drinking water. Were you taken aback by just how much of a hand the media has in shaping environmental policy?

RBT I mean, in a way, yes. But I say in our current environment, the media is just so central to so much, that it's not surprising that we see this with science. And, you know, scientists - they put out their reports, they create their studies, they don't always communicate it in a way that the average person could understand. And so the media is a source that people tend to understand. And so this is something that both lawmakers and the public are drawn to in understanding these scientific issues.

SM So the major takeaway in your research is, media reporting serves a crucial role in shaping policy and in particular, climate change policy. Why does it matter? What does it mean for climate change and other scientific issues going forward?

RBT So I think there are a few takeaways here. One is that when we see less coverage of a policy issue, it's going to get less attention. And so climate change policy is certainly something we talk about a lot as a public and among scientists and others. But when the media is not covering it, it struggles to get attention at the state legislative or the U.S. congressional level. And so sometimes newspapers are a little bit shy about linking major weather events to climate change or talking about climate change and wildfires, that sort of thing. And so when they don't really talk about it, this can affect the policy space pretty significantly. And so I'd say, you know, on issues like climate change, but also on other more narrow issues that we explore, like GMOs and HPV, there's kind of a need for, you know, interest groups, the public to - to kind of bring these issues up. And the media is something that is both a driver of issue attention, but also, you know, take some cues from others as well.

SM Rebecca Bromley-Trujillo, thank you for sharing your insights with me today.

RBT Absolutely. I really enjoyed it.

SM Rebecca Bromley-Trujillo is a political science professor at Christopher Newport University. She's also a research lab director of the Judy Wasson Center for Public Policy. Coming up next, *climacentrism*, *melansorry*, and other new words to add to your vocabulary. From anxiety to fear and anger, no single word captures the onslaught of emotions triggered by the topic of climate change. Brendan Baylor and Natalia Pilato are

art professors at Old Dominion University. Together, they've created a socially engaged art piece about sea level rise in Norfolk, Virginia, encouraging community members to invent words that better reflect how they feel about the environment.

SM Brendan and Natalia - the two of you and poet Kelly Morse, recently built an outdoor sculpture about sea level rise in Norfolk, Virginia. It's a greenhouse set up on the grounds adjacent to water that itself rises and falls. Have you been inspired by the location?

BB Yes, absolutely. The fact that we could see the water from the site where we were installing the piece and the fact that sea level rise is projected to engulf the area in water by 2100 informed our choice.

NP Yes. And for me, I live very close to there. And so during these times, especially the time of COVID, I take walks for solace for myself. And so I walk past the Hermitage at least three or four times a week. And so that sight for me is very special. And I also collect objects to make things, and so when we came to making paper and different things for projects, I collected a lot of little things from the Hermitage grounds. And I also teach some art classes there and have my students do things there as well. So the site is very close to my heart.

SM Is it true that that site is expected to be underwater in the next century?

BB Yes. Sea level rise projections show that most of Norfolk will be underwater by 2100. Remember that Norfolk is at the mouth of the Chesapeake and is experiencing sea level rise at the second highest rate in the country, second only to New Orleans. So it is one of the most pressing environmental issues in the region.

SM Is sea level rise relatively new to you as one of the many worries about climate change, Brendan?

BB For me, yes, yes. Having moved to Norfolk about four years ago, I wasn't near the sea. I've lived in Portland, Oregon, where I grew up and lived in a couple of different places in the Midwest. And sea level rise was not happening in those locations. And when I was looking for a house, when I moved here, you know, people would casually say, oh, this street floods, you know, that street floods if there's a heavy rain. And to me, as somebody who was not familiar with this nuisance-flooding, as it's called, I was very unnerved to imagine that the street, you know, that I might be moving to would periodically flood. But, you know, now that I've lived here for almost four years, I see flooding all the time. You know, in the fall near my neighborhood, one of the streets that I drive to work will flood at high tide. And so if it's high tide, I go a different way to get to work. And that has become normalized to me. But when I first arrived, it was shocking.

SM So when you set about - the three of you - to make this installation, describe it for me. And what motivated you to do it this way? It is a greenhouse on the grounds with contributions from individuals about sea level rise. Can you describe it?

BB Yeah, so - so there is two main components. There's the greenhouse structure itself, which is a plastic and metal greenhouse with images of climate change and climate destabilization printed around it. So there's photographs of people in the midst of superstorm events. There's a flood map of Norfolk, there's an image, satellite image of a hurricane, and there are silhouettes of species that are negatively impacted by climate change, like the Shenandoah Salamander and the Tiger Beetle. And then some of them

are species that are not necessarily endangered, like the horseshoe crab, but who will be negatively impacted and their presence will go on to influence many other living things. So if there's far fewer horseshoe crabs in the bay, then the birds that use their eggs to sustain themselves will no longer have a food source. And so the rich bird populations that are a special part of the Chesapeake Bay, those birds will have to find somewhere else, you know, to sustain themselves.

NP So then inside the structure, we decided that we would do a project where we made paper and then we reached out to community members to ask them to create words for the paper structure. So Kelly and I created a curriculum using Glen Albrecht's idea, who is the ecological philosopher, of creating words - new words to go with your emotions about how you're feeling about climate change. So inside the structure, as far as the visuals go, you'll come inside and you'll see the outside, which is really beautiful with all these images. And when you walk inside, you see these vines hanging and the vines are made out of handmade paper that we made in the studio. And on those vines, we were able to print the words that people contributed on our Web site. And the words are pretty powerful. So people submitted all sorts of words, I remember one of them was something like *climacentrism* - and it was just about that idea that, you know, you can't see beyond your own ideas. So it's like the inability to see that - that climate crisis solutions, there's more to them than just what you think. And then you had some really sweet ones that were like, you know, thinking about animals that live in the area. Someone came up with something called *melansorry*, which was, you know, how to how do we think about the animals and how - how are we going to take that time to feel about how they're disappearing in this time? So people were able to invent these new words to talk about their emotions and we were able to print them and then we hung them up inside the green house. So when you walk in, you can actually read these definitions and you can say, hey, I actually know that feeling and I've never really been able to express it before. And now here's a word that allows me to express that feeling that I was wondering why I was feeling this way. And I couldn't even figure out how to relate to that, but someone else did that and I get it and I feel it. And I think it moves you to want to, you know, see that change, be part of the change, be part of the conversation. So it creates a conversation because there's new words to talk about it.

SM You're right in the middle of all this, when we shut down because of COVID last spring, did that initially throw this into chaos?

NP Yes, it did, because we were you know, we have this great - Kelly and I wrote up this whole wonderful curriculum, and we were actually going to have people make the paper. So they were going to make the paper with us and then, you know, do some of the print making. And we were going to work with youth. And because we couldn't get into the schools and you can't you know, socially distance make paper with people, that we had to do those things for ourselves. But, you know, it created a whole new platform. So we went online and we figured it out anyway and we problem solved with one another. And we were so passionate about making it happen that we were sure that we wanted to still do the outreach. And we thought it was very important to have the social engagement. So we were like, we're not going to give up on this part of our plan. We're just going to find a different way to do it. So we were able to do that, it was chaotic, all of us were scared. At one point, you know, we were supposed to do a summer camp and Brendon and Kelly actually got a scare with COVID. So we weren't able to do that camp and we had to cancel it at the last minute. So we pulled through and worked together. And I think we actually found solace in each other's company and collaboration at the time, that we had something to be passionate about. And we just kept working towards that.

BB Yeah, I think for me at the beginning, COVID felt like it was kind of all-encompassing. And then after a few months, it felt really important to then also be able to be focusing on climate change at the same time. And obviously this summer has been very active in terms of climate disruption and extreme weather events. So as the show was running, wild fires were coming up to the edge of the city of Portland, where I'm from. And I was talking with my friends and family about whether or not they were going to have to evacuate because of these massive wildfires in the West. And at one point in the project, the entire structure was actually picked up and thrown 20 feet during the tropical storm Isaias. And so climate change and extreme weather physically impacted the structure as well. And so I think over time it was very useful to recenter, you know, the climate, recenter this environmental work at the same time as trying to overcome the obstacles and challenges that COVID presented.

NP I found that moment when the greenhouse was taken over by the climate - to me, that was a very profound moment. When the wind picked up our structure and threw it across the lawn and we have images of it thrown across the lawn. It was - we were trying to collaborate with the community and it was like nature was collaborating with us as well on the project. So to me, I saw it like, this is another level of engagement. Now, nature is actually engaging with our project and has a voice in our project as well. Which to me really was moving both literally and, you know, psychologically to. And so I felt like, wow, we - you know, here's this piece that we're talking about all these things happening. And it's now like on the ground and we have to put it back. But yet nature is trying to tell us something, like - and so it's trying to say, look, we need to pay attention to these things. I'm paying attention. And so I really did think that was like a profound moment in our work.

SM This is such an inspiration. Natalia and Brendan, thank you for talking with me on With Good Reason.

BB Thanks for having us.

NP Yes. Thank you so much.

SM Brendan Baylor is an art professor and Natalia Pilato was an art education professor at Old Dominion University. If you're interested in contributing a word to their art piece, head over to hothouseartproject.com. Support for With Good Reason comes from the University of Virginia Health System, a National Cancer Institute designated cancer center, researching and developing the treatments of tomorrow, uvahealth.com. With Good Reason, is produced in Charlottesville by Virginia Humanities, which acknowledges the Monacan nation, the original people of the land and waters of our home in Charlottesville, Virginia. Our production team is Allison Quantz, Matt Darroch, Lauren Francis, Jamal Millner, and Aiden Carroll. For the podcast, go to withgoodreasonradio.org. I'm Sarah McConnell, thanks for listening.