

## **PLANT PEOPLE Season One Episode Six ‘What Do Plants Have To Do With Flooding?’ Transcript**

**JENNIFER BERNSTEIN NARRATION:** New York City has exactly one fresh water river, and it happens to flow right through the middle of NYBG. The Bronx River winds across the Thain Family Forest, our 50 acres of uncut forest ecosystem.

When you walk the Forest’s trails, the city seems to fade away. You may hear a siren or two, or maybe a train from the Metro North line, but otherwise you can feel transported back to the landscape of 1,000 years ago -- the calling of the birds, the rustle of the leaves, the rushing of the water. This forest is a living remnant of what New York looked like before human development. But this place can also be a reminder of our fragility -- how all this beauty can be destroyed in an instant.

**NEWS ANCHOR 1:** Good evening, I’m Judy Woodruff. On the news hour tonight: Ida’s wrath. The death toll rises as a wide stretch of the U.S., from the Gulf Coast to the Northeast, comes to grip with a long recovery ahead from the massive storm.

**JENNIFER NARRATION:** My first day as President here at NYBG in September 2021 was especially memorable. Not just because I was thrilled to start working at the Garden, but because it was also the day that Hurricane Ida pushed its way into New York City. It was bad. People lost things. People died. You could barely recognize the city in the images being shared on social media, of New Yorkers waist-deep in water, crossing avenues.

**NEWS ANCHOR 2:** In New York, residents continue to clean up debris left after the remnant of Hurricane Ida flooded the region. In Queens, a memorial was set up for a mother and son...

**JENNIFER NARRATION:** At NYBG, the Bronx River reached historic heights, washing out our forest trails. Powerful winds uprooted some of our oldest and most-loved trees.

**ERIC SANDERSON:** I'll tell you when Hurricane Ida happened, I live on City Island in the Bronx and there was lightning and storms. And so I went actually down to my basement to be safe.

**JENNIFER NARRATION:** Eric Sanderson is NYBG's Vice President of Urban Conservation.

**ERIC:** I saw water coming into the basement and we live on a hill. Even though we live on an island, we live on a 40 foot hill and in fact, I told my wife the day before that I don't think we had anything to worry about and there it was.

I was thinking a lot about like why? I mean, this is insane. There's so much water.

**JENNIFER NARRATION:** Eric has spent more than two decades painstakingly recreating historical landscape maps of New York City. And, as he realized, many of the places where flooding happened during Ida shared something in common. They may look like paved over, built up city blocks now, but historically, they were the places where streams, rivers and ponds marked the landscape.

**ERIC:** Sure enough, every one of them was on a stream, or in a wetland, or in a place that was a pond.

**JENNIFER NARRATION:** This is Plant People from NYBG. I'm your host Jennifer Bernstein, CEO and The William C. Steere, Sr. President at the New York Botanical Garden. In this episode: What do plants have to do with flooding? And, when it comes to big storms, why restoring native ecosystems may be the key to our resilience.

**JENNIFER BERNSTEIN:** I want to back up a bit first, Eric. You wrote the acclaimed book *Manhatta* and that piece of work I think took you into a journey of the history of the island of Manhattan and into a deeper appreciation maybe of the historical ecology of a place. What took you on that journey?

**ERIC:** I moved to New York City. It was 25 years ago, and I, I was from Northern California, and I'd only been in New York once before, and I never lived in a big city, and--

**JENNIFER:** Big move.

**ERIC:** It was a big move. I came for a great job. I was working at the Wildlife Conservation Society at the time.

And they were sending me all around the world to work on wildlife conservation issues. And then I would fly back to New York and frankly I was struggling finding out who Eric was in New York City. One of the ways I come to know a

place is I like to read its history, and so I was down in The Strand on 12th Street one day, this enormous used bookstore, and I saw this book called *Manhattan and Maps* that had been published the year before I came to the city. So I was thumbing through it and it had a picture of this one particular map, the British headquarters map from the American Revolution circa 1782, 1783. And it showed all of Manhattan Island, with the original topography. And with the hills, with streams, with beaches. And I knew enough about New York City that those things were not there anymore.

**JENNIFER:** Right. This doesn't look familiar.

**ERIC:** Yeah, that's right. And um, part of my work is georeferencing different kinds of maps to each other, and so I thought well, if I could georeference this map to the city grid, then we could figure out where those streams and hills and beaches were once upon a time.

It turned out that map was extraordinarily accurate. Even though it was over 200 years old, I could place it very accurately within the city grid within eventually half a block of the modern location of where those things were, those historical features. And so we started tracing them and building them in a computer.

And then I thought, the British headquarters map tells us so many fundamental things about the landscape. And not just the landscape of 1782, but the landscape of the past.

And say, what if we strip off the human features and add in some geology and soils? We could drive the landscape back to maybe just a couple hours before Henry Hudson arrives in 1609. And, you know, the Hudson moment has long been the start of all history books in New York City. And so I thought, well here is our opportunity to tell a story that's a New York story but it's about nature and about landscape ecology and about all the things I love and want to care about and have committed my life to.

So I started doing that and then reading about the plants. Actually, I came here to the Mertz Library at the New York Botanical Garden and went down in the stacks and started making lists of all the plants and all the animals.

And then at a certain point, I had all this work in the map space and then all these species lists and I wanted to connect them together. And so we developed this idea of, we call muir webs, which is sort of a network of all the habitat connections,

which allows you then to basically build a program that takes the maps and makes a projection of the habitat distribution for each of the species.

So eventually, we could build a website where you could click on the block where you lived and get a list of all the plants and animals that might have lived in that block 400 years ago.

**JENNIFER:** Oh, that's amazing.

Yeah, so you can really look back through time. So you're taking all of these different sources and you're sort of layering them, and creating a web so that you can understand how they relate to one another and then through that reconstruct this very complete picture of what the ecology was.

**ERIC:** As complete as we can say.

At one point, I hired an aerial photographer, took pictures of the city, and we matched those views as they would have looked like 400 years ago.

That's really compelling. I mean, some places, you know, are completely changed, like it's really hard. And there's other places where you see elements of it still.

**JENNIFER:** The echoes. The echoes.

**ERIC:** Yeah. Echoes. That's right. Yeah. And then why is that? Like it opens up all these other kind of interesting historical and urban planning questions and kind of imagination questions.

Like what were people thinking at each point in time that created the landscape that's the New York City that we know today.

**JENNIFER:** Well, it sort of puts you in a continuum, you know, because you can understand the world around you as sort of predestined and fixed or you can understand it as the result of many, many changes over time, human-driven changes. And when you understand it in that way, you can start to see that we can keep changing it.

**ERIC:** That's right.

**JENNIFER:** So, I'm curious, I would imagine that being here every day has caused you to learn a little bit more about the history of this site.

**ERIC:** Hmm. Indeed. Yeah.

**JENNIFER:** So has there been anything that you've learned that is interesting to you?

**ERIC:** Yeah. Well, actually I've been taking a kind of deep dive into the geological history of the New York Botanical Garden. It turns out that there's a train line, you know, a lot of people come here on the train, on the Metro-North, and that runs up a river valley which is the old river valley of the Bronx River.

And it was a stream for a long time. But that, the reason that valley is there is it's marking what's called Cameron's Line, which is the line between the ancient edge of North America and this island arc of islands that slammed into North America, slammed in a geologic sense, about 540 million years ago.

And so the rocks on the other side of the train station, on the other side of Webster Avenue, they're 1.1 billion years old.

**JENNIFER:** Oh my goodness gracious. One point...

**ERIC:** One billion years old.

**JENNIFER:** One billion years old.

**ERIC:** Like Fordham gneiss, and Manhattan schist. And those formations continue under Manhattan and a little bit of, parts of Staten Island and so forth. But here we're on a different rock formation and the line is right there.

**JENNIFER:** That's amazing.

**ERIC:** Right beside here. And in fact, the Bronx River, which now runs through the Garden, the only freshwater river in New York City, but for millions of years, it went the other way around. It went through our Twin Lakes and the building where we are right now, and then down that river corridor and channeled it out.

**JENNIFER:** Is there anywhere you go where you're not thinking about what was happening here 500 million years ago? Or has that become just part of your...

**ERIC:** No, no. I was in Brooklyn on Friday and I was a little lost, per usual when I'm in Brooklyn. Until I like orient where the moraine is and then I'm okay. Am I like over the moraine or on a coastal plane or coming up to it?

**JENNIFER:** Well, I bring this into the present moment, you know, I started at NYBG nearly three years ago, and it was actually the day of Hurricane Ida.

**ERIC:** Oh, wow.

**JENNIFER:** Which was, of course, a terrible day for New York. There were devastating floods throughout the city. And unfortunately, those floods are becoming more and more common every year.

And let's just start with the basics. Why is it happening so much more frequently?

**ERIC:** Well, there's a lot more water in the atmosphere. And it occasionally falls out. And that's why it's raining so hard. But fundamentally, it's about climate change. It's about the carbon dioxide concentration in the atmosphere, which holds in more of the sun's energy than it would otherwise.

And that heats up the air. And the temperature of the air is what gives it its capacity to hold water. And so that's why there's more, more water up there. And then that's why we're getting more intense storms because those storms are, in a sense, trying to work out that energy. It's like all this nervous energy that's in the atmosphere and you know, in some places of the world...

**JENNIFER:** A neurotic atmosphere.

**ERIC:** Yeah, and like irritated and like, you know, needing to release itself. Needs to like go run around the Garden some. And, some places that creates droughts, and in other places it creates intense rain. And the projections here in the Northeast are for more rain. Bigger storms, more frequent storms, and on average, over 15 to 20 percent more precipitation than we have seen in this historical period.

**JENNIFER:** So this is one of the effects of climate change in our region and there's been lots of modeling to demonstrate that this will continue to happen.

So then that brings us to the question of, how do we think about that as a city? And you know, I wonder about how you think about it as a time traveler as you are, how do you think about how the historical ecology should guide us as we grapple with this?

**ERIC:** When Hurricane Ida happened, I don't know if you remember, but there was a YouTube video of a flood into the 28th Street subway station. It looked like

a flash flood down the steps. It was in the middle of a wetland that you can see on that British Headquarters map.

I got a call from Rit Aggarwala, who's the Chief Climate Officer in New York City, and he said, "Eric, we've been doing modeling of intense rainfall events in New York City, and our maps look like your maps of the streams. What do you think about that?"

And I said, "I think that's interesting, but I think we should do a proper comparison." And so we developed this project together where we take our historical ecology of all the ecosystems that used to flood: the streams, the wetlands, but also the beaches and places that are on landfill, all the salt marshes, all the different kinds of wet ecosystems, if you like.

And then there's data sets from 3-1-1 calls from people calling to complain about flooding on their street, and from observations the city's made of flooding today. And they have these predictions of where it's going to flood in the future with climate change. And we basically layer those on top of each other in the computer.

And places that were wet, are wet, and will be wet, we call those "Blue Zones." And they cover 20 percent of the city.

**JENNIFER:** 20 percent?

**ERIC:** Yeah, almost a million people. And about 9 percent of all the buildings in New York City are in one Blue Zone or another. And we can even characterize them a little bit based on the kinds of flooding that we might expect there, whether it's coastal flooding or pluvial flooding from these intense rain events or some combination thereof.

And then we can overlay other things like, uh, housing projects. You know, about a third of NYCHA, the New York City Housing Project buildings, are in Blue Zones. The city disproportionately owns land, still today, in Blue Zones: parks, schools, fire stations. I think in part because they were wet in the past and through historical processes, they were less valuable to private landowners.

And so they tended to stay in the public hands. And then when the city needed space to do something, to build public housing or to build airports--JFK Airport is in a Blue Zone, LaGuardia Airport is in a Blue Zone--it's because that was the only available land, right? To build these things, was to fill in the wetlands.

And then to build these really important infrastructures. So, and I think the Blue Zone stuff's really important for a couple of reasons. One is it helps us understand that it's a large proportion--a fifth of the city about--that has the most immediate need for flood mitigation.

We have 369 Blue Zones on the current version of our maps. And that's a lot, but it's also true that 80 percent of the city is not in a Blue Zone, so it's not like all of New York City is going to wash away someday.

**ERIC:** But it's a big enough portion that it means we need to do other things in the places that are not going to be flooded.

**JENNIFER:** Right.

**ERIC:** It necessarily connects on affordable housing, on transportation, on environmental justice; because a lot of the people that live in the wettest places, the most flood prone, are also the poorest and the most marginalized in our society.

So actually I think this is actually a big opportunity for us. That there are gonna be places where we overbuilt, we're gonna have to give the land back to nature and plant some plants. And then there's gonna be other places we're gonna need to build more, and that's an opportunity to repair our transportation system and address affordable housing, and try and redress some of the environmental justice issues.

**JENNIFER:** Right, I mean it's an intersecting set of challenges and you can think about it in a way that feels a little daunting, you know, how do you address all of these complicated, intersecting issues. But if you see them as related, then you can start to see the solution set as related as well. And that can be a very powerful way to look at it.

And I think one of the things we've been talking a lot about here is that among the many things that need to happen, nature needs to be at the foreground, because that was sort of the original mistake, was thinking that we could ignore the imperatives of nature. How do you think about that in this context?

**ERIC:** Yeah, why, I think 'ignorant destruction' is a good description of the way New York City has proceeded over the last 400 years. And it's really only in the last few decades that we've really started to think about that nature can help us, not just be a hindrance to us, or just not something to be consumed, but actually something that we can collaborate with in order to make our lives better. And we



have lots of good examples of how it can work in terms of the way we manage the Thain Family Forest here at the Garden or the way other natural areas are managed in the city.

**JENNIFER NARRATION:** After the break, Eric and I discuss a radical way of re-envisioning New York City. It's one that takes into account our human needs, our ecological history, and the waterways that have always been here...and will never stop flowing beneath our feet, whether we can see them or not. Plus, how plants can actually help us to mitigate damage from torrential rain and floods. Stay with us.

**[BREAK]**

**JENNIFER NARRATION:** This is Plant People from NYBG. I'm Jennifer Bernstein. Let's turn our attention now to the positive things that we can do to prevent dangerous flooding in our city. Eric told us that there are many ongoing projects that give him hope for the future, like the Blue Belt program on Staten Island.

**ERIC:** When Staten Island, the southern part, was building out in the seventies, there was a choice. Do we extend the sewer, the storm drain network further, or do we just try and maintain the streams that we have and redesign them and reorient them to help us manage stormwater?

And so that's what they did. So the New York City Department of Environmental Protection, which managed their water, has been doing this for over 50 years on Staten Island.

**JENNIFER:** Yeah, not every solution's new.

**ERIC:** That's right, that's right. And those precedents we can bring here. You know, there's a proposal, not far from the Garden, to restore a stream that used to be there: Tibbetts Brook. And, it's not going to wind through the big Kingsbridge neighborhood it once did, but it can go down an old rail line that's not being used anymore, and therefore, take the water that otherwise would have flooded the Major Deegan, and instead run it through a stream, which is then an environmental amenity for the community.

**JENNIFER:** Well, let's talk about plants. This is a plant podcast. So, what are the various ways that plants can help?

**ERIC:** Yeah, well, you know, plants, they know a lot about water, it turns out.

**JENNIFER:** Yeah.

**ERIC:** One of my colleagues here at the Garden told me that, on average, the plants of the world process twice as much water as rivers do on a global basis.

**JENNIFER:** Wow, that's incredible.

**ERIC:** That's incredible, yeah, and they do it in multiple ways.

Just imagine, it starts raining and you're in a forest. What happens? The water comes down, it hits the leaves, it gets intercepted by the leaves. And then some of it flows down the leaves and down the stems and so it's slowing the water, right? Instead of it falling all the way through.

**JENNIFER:** It's not a deluge.

**ERIC:** There's interception. It turns out that there's nutrients that come out of the leaves and the stems and that goes down into the soil. Remember trees are, most of them are half as much under the ground as they are above the ground.

**JENNIFER:** Right, right.

**ERIC:** So they're helping form these places for the water to go and then go down into the groundwater and then eventually out into the ocean. And then the other thing that they need is, trees need water in order to do photosynthesis, right? And to do their metabolism. So they're pulling water out of the soil all the time and then piping it back up through evapotranspiration.

And the soil, if it's dry, can absorb so much more water. And you can see that if you just, if it's raining and you stand on like the edge of a lawn or the edge of a garden versus the sidewalk. I know it sounds obvious, but just watch where the water goes because like the sidewalk is like a rock, right? It's impervious and the soil is pervious and can hold, you know, a meter of water. Whereas we're talking about millimeters on the sidewalk.

**JENNIFER:** Especially soil that's alive, that's not just dirt, you know?

**ERIC:** That's right. That's right. That's right.

Not compacted, that has roots going through it. Another one of my colleagues here is very interested in how different species are keeping the soil more pervious and creating more infiltration capacity.

In a given storm event, you know, evapotranspiration can't keep up necessarily with this intense precipitation. But if it's been working for days to empty the soil, then that allows the soil to do its job. And then the other thing I would say is that, forests, they can't handle all the water either, but then they have this thing that complements them called a stream, right?

You know, the water runs off the surface into a stream. You know, we, because of our particular land tenure, we tend to think, well, we should write a rule that everybody has to manage the stormwater on their particular site, but that can be very difficult.

**JENNIFER:** Right. Because there's water coming from other places.

**ERIC:** Yeah, that's right. It's coming laterally as well as vertically. And so I think there's a lot to be learned at the landscape scale about the way plants are interacting with water. Yeah, and then there are plants, guess what, that like to live in the water, that like to live in the streams, or live in the wetlands, and so they slow the water, slow the movement of the water, they're also doing evapotranspiration. They're catching up the sediments and also capture carbon, by the way. And so nature has solutions for water-flowing.

And I would even say these disturbance factors are actually part of the way nature works.

**JENNIFER:** Right.

**ERIC:** And so I think there's also an example here comparing the way an ecosystem would manage water, the way the DEP manages water, which is capture as fast as you can the water on the street, put it into a pipe somewhere, take it to the water control plant, treat it, and then let it go, which is not really a very natural or ecological way of thinking about it.

**JENNIFER:** Right. So sort of borrowing some of the strategies that nature uses even in our built environment could be part of the solution set.

There's the plants themselves, and then there's watching what the plants are doing and learning from it for the way that we think about how our systems work, you know?

**ERIC:** That's right. I mean, there's a whole 'nother part of that, which is about, you know, because so much is about putting water in the ground but how much water can the ground absorb? Because, surface elevation is very different in different parts of the city. Like here, it's very close to the surface. You go into our forest, you know, in the valleys, there's soil, but on the top, it's basically rock, right?

And then there's other parts of the city where there's very high groundwater like in Southeast Queens. And it actually doesn't do you any good to put water in the ground in those places.

**JENNIFER:** Right, so you really do need to understand the ecology, not just of the city, but of all of the parts of the city in order to make these solutions work.

**ERIC:** Turns out the historical ecology actually does matter. For the future of the city.

**JENNIFER:** Yes, indeed. It also, it sounds like, especially as you talk about some of the research of our colleagues here at the Garden, the that specific plants matter.

I think in general, people can think of plants as just one sort of general thing. It's all green, it's all the same. But different species play different roles. So there's a lot of opportunity for us to think about how we're reintroducing species that can support the ecosystem at large and that can perform functions that we've lost in our systems.

**ERIC:** That's right. The city as it's managed its plantings in the past they mostly think about what can survive the urban environment, you know, and so they have a very sort of limited plant palette. And they've also been limited by the horticultural trade about what they can actually get, but I think there's a large interest now into being more selective and trying to lean into the native biodiversity.

That's how you sort of rebuild this ecological evolutionary architecture that is so important for the way this landscape has worked for millions of years.

**JENNIFER:** And in that way, the continuity of even very small patches of native biodiversity starts to matter a lot because if you're wanting to create a corridor for

birds or other wildlife, they need to be able to find spots along the path. And so, you know, I think people can start to think that their little patch of land or roof or their community garden or whatever it is, doesn't really matter in the bigger scheme.

But when you start to think of it as part of a bigger corridor, it matters a lot.

**ERIC:** Every little bit helps. And moreover, if we can bring a little bit of intention to it, it can even help more.

**JENNIFER:** Right. The connections between these places.

**ERIC:** As you know, Jennifer, I was very fortunate to advise Google's Ecology Program on this new building on the West Side of Manhattan, St. John's Terminal, and it's an old industrial building.

It was actually built to be the terminal for some of the trains on the old High Line. A building that's big enough, you put a train engine inside it, right, on the second floor. And so the architect, Rick Cooke, they developed this idea of like opening up the middle part and opening a 12-story office building and then have green roofs at different levels.

And so they have an acre and a half of native vegetation on this building, and because it's so strong, some of the soil is like a meter deep so they can plant trees and shrubs. And, New York City Audubon's been monitoring the birds and finding all kinds of birds they've never seen on a green roof in New York City before.

**JENNIFER:** Wow, wow.

**ERIC:** When you stand on the building, you can see the other green roofs, you know, the other balconies and potted things.

**JENNIFER:** Sort of bird's eye view, all these things go together.

**ERIC:** That's right. You can actually start to, like, see the patches coming together. It's not necessarily the same as it was, historically, but it's starting to restore some of the same functions. And I think that's very hopeful. And imagine if the Garden and the City work together to help restore the vegetation and a certain part of a watershed, say a place that is frequently flooding. Well, maybe we're also protecting homes that are downstream of that place. There are a series of kind of landscape-scale interventions that might be made that would improve the quality of

that neighborhood, decrease the flooding and provide new amenities that don't exist anymore.

**JENNIFER:** And would make the city more wonderful.

**ERIC:** Yeah, and make the city a better place to live. Because I, I'm actually worried that this problem is so big that if New York City doesn't handle it, it can really hurt the city. Because you can't live in a city that's not safe, where you don't feel like it's comfortable to live here or you can't get to work, right?

Those are essential functions the city has to do. And flooding is the kind of thing that can interfere with those. And so I think there's a really strong case to be made that we are creating the next version of New York City, the climate-adapted and resilient city that's going to allow all the other things we love about New York City to continue.

You know, its cultural amenities and its scientific creations and its economic might. All these things, you know, depend on making the city work as a whole and work as a landscape.

**JENNIFER:** And calling on that ambition that has defined New York City historically. Thinking big, you know, New Yorkers are good at that.

**ERIC:** Yeah, no, it's true.

**JENNIFER:** And if we can do that successfully, we make New York City more resilient and durable and, and we can be an example to other cities around the world.

**ERIC:** Yeah, I mean, New York has actually made so many innovations in this environmental space, like Central Park. Central Park wasn't in the original plan for Manhattan.

And there was a big fight. And then the fight was won. And then when it opened in 1851, it was such a huge success that all the cities across the United States wanted to have Central Parks of one kind or another. And then they did.

I'm hoping that, you know, our urban conservation program here at the New York Botanical Garden can be another one of those things on that list, things that New York City is giving to the world.

**JENNIFER:** If someone wanted to know what existed many years ago, where they live, where would they go to find that out, Eric? Do we have tools for that?

**ERIC:** Yeah, so right now we have our *Manahatta* data. So you can go to our website, [Welikia.org](http://Welikia.org), that's hosted by the Garden and you can double-click on any block and get it. And we are developing the data sets now to expand that over all five boroughs of New York City.

And then, we have big hopes for an exhibition here in 2026 where you'd be able to like see a map and then be able to go to that place 400 years ago and see what it sounded like and hear what it sounded like and then have it fade to the city today and then, help imagine what the future would be, to have a conversation, what a more ecological version of that neighborhood would be in the future.

**JENNIFER:** Let's talk for a moment about this idea of ecological democracy; you know, putting in the hands of people, citizens of New York, information that will help them understand how the choices that are being made around them, about how the city develops, will affect us all.

**ERIC:** That's hugely important to me, because I feel like part of the reason we made mistakes in the past is because the people that were deciding had very narrow interests and it was a very small group of people and a very kind of privileged group of people. And so it's a big part of my practice to try and open up these conversations about the environment to everybody. So we have a platform called Vision Maker, [visionmaker.nyc](http://visionmaker.nyc), which allows you to zoom to any block in New York City. You can see the historical ecology, the ecosystems that were there. You can see the current contemporary ecology, and then you can make your vision of what the future ecology would be. And it's free, and it's over the internet, so anybody can do it anytime. You can also use it in groups, like community groups...

**JENNIFER:** School kids.

**ERIC:** School kids can do it. Even developers could do it. Like the way it works now is, you know, a developer owns a piece of property, and then they say, "Well, this is kind of the program we want to do."

And then they hire some architect or landscape architect, and then they build a design and then that eventually gets presented to the community board or to the community groups and typically people complain about it, right?

But what if instead the developer said, “Okay, well, here's the kinds of things I'm thinking” and asked the community, “how would you do it?” And then when you have that review, you come back and you're like, “Okay, well, this is what we heard. These are things that most people said they wanted. And so here's our plan.” And like have a...

**JENNIFER:** More of a dialogue.

**ERIC:** A dialogue.

**JENNIFER:** There would still be complaining, of course.

**ERIC:** You know, it's sort of endemic in New York, the complaining part.

**JENNIFER:** Yeah, it's part of the process, too.

**ERIC:** Yeah, yeah. That's right. That's right.

**JENNIFER:** So Eric, you're advancing this program here, the Urban Conservation Program, and I think we're really interested in engaging people in that work both here at the Garden, but in their own lives being New Yorkers or people who are interested in this. What, what can people do?

**ERIC:** Well, I'm actually hoping that my time here is creating a hinge in the history of New York City, where we go from sort of being ignorant and a little bit abusive about the nature of our city, to being careful and intentional, deliberative, and reciprocal about the nature of the city. And that we do that by this sort of deep understanding of the historical ecology so that when we think of New York and we think of the place we live, we don't think of it just for the restaurants and the people there, but we also think of the nature of the place, including the plants of that place.

I'm really hoping to lean into the active restoration efforts of the Garden here, to lean on the horticultural expertise and the botanical expertise, and the ecosystem expertise that we have to help the city actually restore nature, that helps water and other things, as we've been discussing.

And then finally, I think, there's a role for sort of a trusted institution like the Garden that's been part of the New York City fabric for over 120 years to help build the environmental policies and the governance policies to advance this whole, you know, fabric of restoration of nature in New York City.



**JENNIFER:** It's wonderful to hear that, Eric, and it makes me think about, something I've noticed about plant people in general is that they're people who are paying a lot of attention.

And part of what you're asking people to think about is to start learning about this place that they're in.

**ERIC:** Right, yeah.

**JENNIFER:** And then once you become empowered in that way, it allows you to plug in in all kinds of ways. So if you're a community gardener, then you can think about what kind of plants you're putting in the ground in your community garden. If you have access to a rooftop, you can start to think about that dimension of it.

You can start to join with NYBG and other institutions like ours to promote these broader adoption of different kinds of approaches to the development of this city and other cities. There's so many opportunities once you start paying close attention. And I, I love that sentiment so thank you.

**ERIC:** Yeah. That's wonderful.

**JENNIFER:** So, Eric, you mentioned earlier that you joined NYBG about a year ago after a very distinguished career at the Wildlife Conservation Society, right next door. The umbrella organization for the Bronx Zoo, among other things. We love the Bronx Zoo here at NYBG and I suspect that when you were there you developed a great appreciation for animals, but you know the name of this podcast is Plant People and so my question is: have we turned you into a plant person yet, Eric Sanderson?

**ERIC:** I think I was always a plant person, although I do have fondness in my heart. When I left WCS, I wrote an email to all my colleagues saying, um, you know, I love tigers, but I'm going to be spending more time with tiger lilies now.

**JENNIFER:** Well, Eric, it's been so fun to talk to you. Thank you for making time for this. And thank you for all you're doing.

**ERIC:** Okay, thank you very much. Okay, bye.

**JENNIFER NARRATION:** Do you want to know what *your* New York City block looked like 400 years ago? Is there a former river, stream, or marsh

underneath your building—and which trees, plants, and animals lived there? Are you concerned that you might live in a Blue Zone, where your home may be more prone to flooding? If so, head to [Welikia.org](http://Welikia.org). This is where NYBG hosts Dr. Sanderson's interactive mapping project that you heard about in this episode. We'll also link to it in our show notes.

In our next episode: I'm delighted to welcome Doug Tallamy, professor of agriculture in the Department of Entomology and Wildlife Ecology at the University of Delaware. Please join us as we explore what we can do beyond our lawns to diversify plant life in our homes and gardens for a healthier environmental impact.

Plant People is a co-production of NYBG and PRX Productions.

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