



“I want to Return Native Plants to Houston”, With Katy Emde

<https://Houstonnature.com/16>

Nivien Saleh: Can you imagine our city covered in wildflowers?

I'm Nivien Saleh for Houston and Nature.

You may have come across native plant gardens: They consist of flowers, grasses, shrubs and trees that have lived in this area long before the first Spanish and Anglo settlers arrived.

These gardens appear a little less squared away, a little wilder than the ornamental landscapes so typical of Houston. And if you take a moment to look closely, you'll notice that they hum with life: There are cicadas (which you'll hear in the background of this interview). There are caterpillars, bees, bugs, butterflies and spiders. You'll also find toads, lizards, birds, and so much more.

Katy Emde of the Native Plant Society of Texas has spent at least two decades promoting the expansion of such areas - by giving lectures on identifying, sourcing, and planting natives; by selling and gifting them to the Houston public; and by finding old wild spaces and relocating their plant inhabitants before the property gets scraped and built upon.

In this episode I'll ask her how she fell in love with native plants, what they are and aren't, and why she perseveres with a passion that I find astonishing.

Nivien Saleh: Welcome Katy.

Katy Emde: Thank you. It's nice to be here.

Where does your passion for native plants come from?

Nivien Saleh: One thing that I find interesting about you is that you're so passionate about native plants. Where does that passion come from?

Katy Emde: As I've learned more, I've come to realize how big a difference native plants make to wildlife. The native plants are going to feed our native insects. And the insects are going to feed the frogs, the lizards, the spiders, the birds.

And so it just goes from there. So with native plants, there are different insects that are using different parts of the plant. It's one thing to plant plants that have a lot of nectar for the bees. We all hear about planting plants to attract pollinators, planting for pollinators.



And that's a great way to get people started with thinking about wildlife, insects and bringing nature to your garden.

But it is just one small aspect of the value of a plant, because moths, beetles and all sorts of insects use other parts of the plant. And so if they're not native, the plants may not be feeding a lot of insects. We have so many plants from China, and they do not provide food for our insects.

Nivien Saleh: For example, Crape Myrtle, which is ubiquitous, is Chinese, right? And it's everywhere.

Katy Emde: Yes.

And tallow got brought in, and there's so many trees and things because we're on the same latitude with some of these countries in these areas as you go around the world. So these plants have been brought in for whatever reason, shade, color. But they don't provide food for our insects. More and more we're realizing how important that is.

What is a native plant?

Nivien Saleh: What is a native plant as opposed to a plant that you wouldn't call native?

Katy Emde: A native plant is a plant found naturally in the ecosystem where you live. We live in the upper Texas Gulf coast. So we have Gulf Coast prairie. When native plants started gaining attention, first, it was "native to Texas."

And everybody was all excited: "Is it native to Texas?" But as time went on, people started thinking, a plant from west Texas is probably not going to do well in Houston, Texas. We have too much rain. We have a different kind of soil. Even Central Texas, the Edwards Plateau - I used to go to plant sales where they would have native Texas plants and buy these plants that just wouldn't really be successful.

They were pretty, and I was attracted to them, but they were from far away. In Texas things can be far away. So the Edwards Plateau, those plants sometimes will grow here. It's not that some of them won't survive, but they're not really happy here.

And we have different insects. So a native plant to me is one that is found in your ecosystem. When we're collecting seeds, where did the seeds come from? I stick to Harris and the surrounding counties because seeds for the same plant, say, Brown-eyed Susan, can have developed a little bit differently in different areas where there may be less rain. And so when you really get down to it, local seeds are important. Some of this stuff the insects may overcome, or it may not matter. But if you really want ed to do it right, seeds need to be collected within 75 miles of where you're going to use them. And for people doing restoration on prairies and Texas Parks and Wildlife people that is kind of their guide.



For the Houston Native Plant Society, when we have a plant sale, we say "local native plants" and "locally collected seeds" on some of the things just to say, this is really, really a good plant.

Don't get your native plants from Vermont

Nivien Saleh: Actually I learned about this before I joined the Native Plant Society. I used to have a little blog, which was mostly about food. And I was getting interested in growing your own food.

So I read this book by Bob Randall from Urban Harvest, about growing your own food and Houston. He had a little passage that said you should grow food plants all over your property. And if you can't, like in your front yard, then grow native plants. Don't grow that Augustine grass grow native plants. And I was like, "Yes, yes. I'm going to do it. I'm going to learn how to do it!" Cause I didn't really like the Augustine grass in our front yard cause I had to mow it, and it was just a pain. So I did what I knew how to do best, which is go to the Internet and find me some native plants. And I found some great nurseries, in Missouri and Vermont maybe, that sold Indian Blanket, which is a plant native to Houston. So I wrote a blog post saying, "If you want to get plants native to Houston, here are your online sources, Missouri and Vermont.

Katy Emde: Yes.

Nivien Saleh: And then some members of the Native Plant Society got wind of it and didn't think that that was such a good idea. And as a result, they roped me into the Native Plant Society somehow, where I learned how to do things better.

I learned that you're supposed to plant locally, because, as you say, there may be Indian Blanket across the continent, and they may look very much like ours, but they may be adapted to a different micro-climate, to perhaps a different kind of soil. And that's why it's a good idea, if you can, to stick to the plants that have traditionally grown here.

Now the problem with that is of course that Houston has changed so much. So how can you even try to do that?

Katy Emde: Try to do what?

How do you know what plants to native?

Nivien Saleh: How can you try to plant the plants that have traditionally grown here, if we have cultivated the land, we have imported so many things? How can you know what has traditionally grown here?



Katy Emde: That's a very good point because I've thought about the same thing. We're very lucky. We have a plant list that covers Harris and the surrounding counties. This list that we have, it's Dr. Brown's checklist.

Nivien Saleh: What do you mean by "this list that we have?"

Katy Emde: This plant list was created by Dr. Larry Brown. And there were a lot of people who participated originally in just making a list of local plants as they came across them in Harris and the surrounding counties. It's associated with the R.A. Vine Science Center and the herbarium, which was started by Dr. Vines, who those of us who grew up here knew of. So this list was started and created and continued to grow. It probably stopped growing about 2016.

The Dr. Larry Brown's checklist, which is on the Native Plant Society website, it's kind of one of my Bibles. I look there first to see which of the eight counties Larry Brown or someone found this plant in. It's really valuable as a historical record.

Nivien Saleh: So Larry Brown created a list of eight counties here. I've never heard of this list before. So this is news to me.

Katy Emde: I send the list out to anybody I can. So I will send it to you. I wish I knew more about the history, but I think the list started with Dr. Vines. And Charles Peterson worked at the science center and contributed over a thousand plants to the herbarium. So there are a number of people involved, but I guess Dr. Brown ended up the caretaker. Did he start it? I wish I knew for sure.

I want to be sure and credit anybody who was involved, but I mean, when I was out looking at prairies, I would take plants in to Dr. Brown.

Nivien Saleh: When you say you would take the plant in to Dr. Brown, you wouldn't bring it to him personally. You would take it and compare it with the list?

Katy Emde: No, I would take it to him personally. A number of us from the Native Plant Society, when we'd be out on field trips or when we would be out looking at prairies, would do that: Paul Rolling, Jed Aplaca from Houston Parks and Recreation. If we would find a plant that we couldn't identify, we would take it to Dr. Brown, who was so generous with his time. He was just wonderful. You could just hang out at the science center and look at stuff or ask him a question, and he would go get the plant out of the herbarium to show you.

It was wonderful. It's those kinds of things that inspire you to learn more. We would go on field trips with Dr. Brown and the Native Plant Society. And the most fun thing was if you could take a plant to Dr. Brown or point something out on the ground, and he'd go, "Oh!", that was so ...



Nivien Saleh: You're like, "I just got an A in class!"

Katy Emde: That's right. That's right. "High five, man, this is great." It's those kinds of things that just make you want to learn more. And there were people available. It's just harder now. People are busy.

We're not doing native plant field trips so much. But there are places you can go: Kleb Woods - they have walks. So there are places and people that are still out there teaching. You just have to look for it.

Nivien Saleh: Because I've never heard of him before, would you tell me a little bit more about Dr. Brown? Who he was?

Katy Emde: He was an incredible botanist. His name will show up in many of the Texas plant books as a source of information. I don't know a whole lot more.

Native plants vs wildflowers

Nivien Saleh: This is probably an easy one for you, but it's not straightforward to many people: Why would you call a plant a native plant rather than a wild flower?

Katy Emde: Well, you could call it a wildflower. Calling it a native plant gives it a little more definition.

Nivien Saleh: Maybe it's because when you hear "native plant," the next question is: native to where? So the word "native plant" points to a specific location, whereas wildflower, it's just "not domesticated."

Katy Emde: I mean, if somebody said I want to grow wildflowers, then they just, they have to answer the question or they have to think about wildflowers from around here? Or wildflowers from all of Texas? It works as a word, but as you say, we want wildflowers from this area. So we want native wildflowers, local wildflowers.

Nivien Saleh: Yeah. I think why flowers is perhaps just a little bit more of a loosey-goosey term. Yeah. But we do like wild flowers. Yes. we do. One thing happened to me once. I was out in front of our home talking to a very nice person about the native plants we had here and what she could grow in her garden if she wanted to. She was interested in doing that. And because she was interested, I said, "Well, I've got a bunch of seeds for Indian Blanket. Let me give them to you." She was very grateful and took them home. Then few weeks later she told me that she had had a friend here from Philadelphia. And her friend really liked Indian Blanket.

And so she had given the seeds to her friend from Philadelphia. It was meant to be a nice gesture to give those seeds to a friend from Philadelphia, and it was meant as a nice gesture



to tell me about it because wouldn't it be great to spread the seeds and give them to as many people as you can? But the problem is of course that if you believe in the idea of native plants, you would want native plants to Philadelphia to be used in Philadelphia.

From that standpoint it's not ideal to take seeds and export them to another part of the United States.

Katy Emde: Yeah, for the reasons we've said they just may not do anything for the Philadelphia wildlife.

Nivien Saleh: Exactly. You say it so much better than I do.

Katy Emde: Once you start thinking about the great things that come of doing this - and it's feeding wildlife - the more stuff you have going on in the yard, the more fun it is.

It's great fun to watch animals and little creatures - insects - flying around.

Native plants vs. state flowers

Nivien Saleh: What is the difference between a Texas native flower and a Texas state flower?

Katy Emde: We only have one state flower don't we?

Nivien Saleh: No.

Katy Emde: Well, I don't know of any state flowers other than the Bluebonnet.

Nivien Saleh: That's the one that is best known, but no, there are others.

So here's how I find out about this. I once was in Katy, in a store that specializes in pond supplies. So if you wanted to get material for your ponds, like pond liners, pond plants, maybe even fish, you would go to that store. So we went to that store. And since we were there, I asked, "Do you have native waterlilies for our pond?" And the store clerks said, "Yes we do. There it is." And he pointed at a beautiful waterlily. And I'm like, "This waterlily is way too showy to be one of our Texas plants." So I was suspicious. I asked him, "Are you sure?" He said, "Yes. It's a Texas state waterlily. It's a native plant."

The plant in question is called *Nymphaea Texas Dawn*. It was created in 1985 by Kenneth Landon, a Texas waterlily expert from I think San Angelo, and it is a cross between *Nymphaea Mexicana*, which is a Texas native plant and a hybrid, which is called Pink Starlet. And I have no idea where that plant comes from.

Nymphaea Texas Dawn is a state plant. It was passed through the legislature, and it got the declaration, "This is our state waterlily of Texas." But the reason why it got that declaration was not because it represents Texas nature, but because it was created by a Texas waterlily



expert and it was widely successful in the international world of waterlilies. What that means is you have to be really careful when you go to a store and someone says, "Yes, this is our state flower." That does not necessarily mean that it's a native plant.

Katy Emde: No. I mean, that sounds like the title is bought. I'm not saying money crossed hands. But that's really very odd.

That's why you need Dr. Brown's list. You take Dr. Brown's list, you look it up and you say, "No, this is not, this is not from our area. You can call it whatever you want. This is not from our area." Yeah. It is difficult. And, and, uh, you know, I've had discussions about the native to Texas, and it's just like, well, just tell people. If you want to sell a native to Texas plant, just tell them where it's from, help people to make an educated decision.

Just saying it's a native Texas plant, that'll bring people in, but it's not enough information to really do the good that they may think they're doing by buying this native Texas plant. The plants that are going to do best are the ones from our area.

So that's very strange. I'll have to research that and see what else is on the Texas state list. We have a state grass, and it's a good one. I can't think of it right this second. We have a state tree, I think it's the pecan. Bluebonnets really are not that much from our area. So I don't pay a lot of attention to bluebonnets.

Nivien Saleh: They're very hard to grow here, at least in our front yard.

Katy Emde: Yeah. I've never had any success. Some people do, but I don't. So I just look for what's out on our prairies and what's in our woods.

Nivien Saleh: Take a look at that state list. I mean, at the, I guess the number of plants that have been named or official Texas plants take a look.

Store clerks sometimes don't know

Katy Emde: Yeah. Well, and

Nivien Saleh: I don't think that the store clerks have ill will when they give you that information. I think they just don't know better. And that's one problem too. I've often gone to stores and asked, "Is this a native plant, really?" And they say, "Yes, yes." And then it turned out, no, it was from Florida. That's one of the problems that you run into when you when you, when you have an interest in planting native for the local wildlife, and you have to count on the help of people you think know more than you, and then it turns out they don't.

Katy Emde: I agree that I don't think people are trying to trick you. I'm at the point where I have a pretty radical view. But, but well-meaning native plant people, some of the plants



that show up in plant sales and I called them and I say, "Look, these plants are not from our area." But they sell them anyway. And, you know, I don't get it.

It's not what I believe. Especially when it's a plant sale from an environmental group. I just think we should be the teachers. I'm not saying that any of these groups have, or have not had, I'm just going to name some plant sales. The Arboretum has plant sales. Mercer has plant sales. Those are the ones that come to mind. Audubon has great plants. So there are a lot of places trying to get plants out. Occasionally at a plant sale, I think they've made a wrong choice. And I tell them, and then they have to make their choice.

But nobody's doing it to be malicious. It's just a difference of opinion.

How native plants support wildlife

Nivien Saleh: it's a different set of opinion. And sometimes people just really don't know where these plants come from. They just don't know.

You say native plants, support wildlife. Please explain the many ways in which a native plant can support wildlife other than just presenting them with a pretty flower that offers them pollen or nectar.

Katy Emde: It's about maybe 10 years ago that I started looking into moths. Nobody was paying attention to moths. I wanted to give a talk at the state Native Plant Society. So I picked moths. And it was just amazing. People were just so surprised at the variety of moths, that there were so many and they were so colorful. So my interest in moths has continued.

So when I find a moth, I look it up to see what the host plant is. So this moth is going to eat the leaves. And then sometimes they wrap themselves up in the leaves and pupate in a leaf or after they're ready to pupate and make a chrysalis they'll crawl down into the ground.

These are caterpillars, excuse me. The moths themselves will come to the flowers. The caterpillars will be feeding on the leaves. Sometimes they feed on the pedals. Sometimes they feed on the interior of the plants. Beetles also use plants as host plants.

So they're eating the leaves or the stem. So those are a couple of the obvious ones. Leafhoppers, all sorts of little insects are around the plants, chewing on things, sucking the juices. And some of them, like the moths, use specific plants.

I get so tickled. You'll be reading some leaf hopper or some beetle is such a pest to the soy farms. And you think we're the ones that have come in, and we're the ones making a problem for them. They're not pests, they're just doing their thing. So many things that are called pests. If you just learn to live with it, especially in your garden, you don't need to kill them because they're not doing that much damage to your plants, they generally come



back. So I would say it's really the leaves in addition to anything around the flower that they're eating.

Nivien Saleh: I would say that in the case of a field of soy plants, which is a monoculture, they can be a real problem, because once they've discovered the soy plants and they like them, they probably reproduce like crazy. But you're right. In gardens, where we do not have to depend on the garden for our livelihood or for our food it's a different question. So we can, I think be a little more welcoming of these critters. We have a bush in front of our house called a Spicebush, which is a host plant to the Spicebush Swallowtail. The grownup, butterflies come and lay their eggs. And honestly, I don't know how they find this thing. It's not that big. I've never seen it with any flowers, but they find it. They lay their eggs on it. And the caterpillars, they chew up the leaves. And as a result, we get beautiful butterflies and we have Spicebush Swallowtails around our house all the time because of that little Bush.

It's just wonderful.

Katy Emde: Yeah. It's magical when you start seeing things flying around. I had some t-shirts made that have on the back of them my quote , "I want a garden that is filled with plants that are chewed up by bugs." I was looking in your pond over there, you have some powdery Thalia, and the leaves are just stripped.

And that could be from a Brazilian skipper that uses that as a host plant. The leaves are almost nonexistent at this point, but it's such a good sign that something's been eating them.

Nivien Saleh: I agree with you. Absolutely. So plants do not just serve as nectar sources, but for all kinds of other purposes. They can also provide shelter, right?

Katy Emde: Correct. Absolutely.

Nivien Saleh: I think some of the plants, if you don't cut them all the way to the ground, but leave a stick of the plant that is left to dry, it gets hollow on the inside.

And then solitary bees or wasps may use them to lay their eggs in them.

Katy Emde: Yes, absolutely. That's another use of them.

And as far as the moths, some of the plants that are native are not exactly garden plants. They're just junky plants. I don't use the word weed really, but so plants that people wouldn't really care about. And then I find they are a host plant for a moth. I mean, almost every plant is a host plant for some moth.

There's this one vine called melonette. It is so annoying, and it makes this weblike thing. And I just used to rip it out.



Then I discovered It is host plant for the most lovely moth. It has brown edging around its wings and is iridescent and translucent. So that's beautiful. Then it has a puff at the end of its abdomen which it waves back and forth, spreading pheromones and attracting a mate.

They're just lovely. They're delightful. And so now of course I have to live with the melonette. But it's worth it to me because I've got these incredible moths. So It's those little discoveries and the things that we don't see, those things are going on all the time, these little things.

There are lots of payoffs.

Native plants give a sense of place

Nivien Saleh: That's one big reason why native plants are desirable. Another one I've heard from Jaime Gonzalez a few years back. He says that native plants give us a sense of place. When you travel, you encounter these chain stores, like maybe McDonald's or Target or Walmart, and you have them all over the country. But then there are other things that really make you feel, oh, I'm in St. Louis or I'm in New York or I'm in Houston. And the plants that are native to our ecoregion are part of what creates a feeling "I'm in Houston." What do you think of that?

Katy Emde: That's a good point. If you have a native plant garden with some prairie plants or some of the woodland plants, it does, it looks like this area. It doesn't look like Austin. So it's going to add some dimension to our sense of place.

It's a really good thing. It was so much fun driving down the street, looking for your house, and your garden, your front yard, it's just like, wow.

There's so many, you know, grass and azaleas. If that's what you want, fine. But you are growing a dead zone. To find a place that has life and looks like Houston, looks like a prairie, really, does help.

The more people that can do it, it'll be really neat.

Native plants and flood protection

Nivien Saleh: Thank you. Then another reason why I've heard that you would want native plants specifically in Houston is because they have such deep roots. And that is good for flood protection. What do you think of that?

Katy Emde: I don't know that in home gardens they would do much for helping with flooding. On prairies, on big expanses, they can hold a lot of water, and it's a good thing. The



deep root part is good. People talk about the idea that natives use less water. I'm not sure that's completely true or quite as meaningful because we have different soil.

In our gardens, you know, we have fryable soil that it's not as dense as what you're apt to find on a Gulf Coast prairie, whether it's a clay prairie or whether it's a sandy loam. The soil difference is going to make some difference. Don't think you don't have to water in your garden.

When we had the drought in what, 2011, the prairies, they were never watered. They bounced back. But it's a different soil.

When this really dense sandy loam dries, it's going to dry on the top first. It gets rock hard. SO it's holding the moisture down below in. So the Prairie can survive the drought, but in your garden, if we have a drought, you're going to need to water it because the soil is so different, you know?

I don't want to mislead anybody because I hear that, and I think, "Oh, I'm not sure."

Nivien Saleh: I agree with you. I was told, "Plant native, and you won't need to water." My experience is, yeah. I don't need to water, but the plants sure look happier and healthier when I do water. Maybe you don't need to water them as much as you would have to water other plants, but they do look better in your front yard when you give them water - especially in the summer, like in July, when there's not much rain, and you made a very good point here, the difference between the prairie, where these plants can survive without watering and the front yard is the soil.

But also I would like to say, native plants have played a really important role in protecting Katy from being flooded they hold in so much ... Katy Prairie holds so much water. It's partly because these prairie plants have very, very deep roots, so they can store a lot of water deep, deep down. But if I look at our front yard, many of these plants cannot store a lot of water because they are annuals. And annuals have tiny little roots.

If you want to have plants that really store water, you would have to plant these big grasses, like bluestem, or other perennial plants that you allow to be there for a long time, because it takes a long time to develop deep roots like that.

Katy Emde: Yeah. And grasses are great for that. Grasses have the particularly really deep roots.

Native plants and carbon sequestration

Nivien Saleh: Another reason why native plants are great is carbon sequestration. I've heard that argument. And I think that, too, applies to prairies where you have a larger amount of plants that you allow to develop deep roots because these deep roots store carbon underneath the soil, because the roots are carbon.



It may not apply so much to a frontyard.

Katy Emde: I'm not an expert on carbon sequestration. So I can't say a lot. I can't comment on whether or not you would be helping with that.

Nivien Saleh: That is very ethical of you, wanting to only provide information that you absolutely have, which makes you a great guest. Oh, and that brings me to the point. You wanted to talk about ...

Katy Emde: Native plant rescue.

What is native plant rescue?

Nivien Saleh: What is native plant rescue?

Katy Emde: One aspect of it is discovering prairie remnants in Harris and the surrounding counties.

Nivien Saleh: SO What you're looking for is in all that built area that is Harris and perhaps Waller and some of the surrounding counties, you're looking for these prairies that have been there since before 1750, when the settlers came. That is what you're looking for. Of course these prairies that you would find are small. So you call them remnant.

Katy Emde: Yes, exactly. The reason to look for native prairie remnants are to find seed sources for genetic diversity. Also when we're doing that we find that a number of them are for sale.

They're going to be scraped. Then it's like, maybe now we need to go dig plants from that prairie. So you have to contact the owner to get permission. That goes back to the fun of contacting people. I love trying to track somebody down and contact them and say, "You have this piece of land. We would like to walk on it, maybe collect seeds, maybe dig some plants. It's a process. You don't want to overwhelm someone with questions. And it's so interesting because people, are often like, "Well sure." or, you know, "Really?" they're surprised that we are interested in their 10 acre piece of land that has grass on it.

It's a lot of fun, and it is important work to try to save some of this stuff.

Nivien Saleh: How many rescue missions are there in this area?

Katy Emde: When Lan Shen, Jane Reiersen and I were sitting around years ago, we thought, " We know of these remnants - let's make a list."

So we made a list of these places and made contacts. Only one person is the contact with the owner so that they don't have a bunch of people calling them. They always talk to one



person and whoever wanted to do it. Right now there is a prairie in the Katy area that has been available for rescues and seed collection for five or six years.

It's supposedly going to be scraped soon. So people have been going out there with permission from the contact.

So you asked about how many, I'm sorry, you asked about how many. It just varies. I may just go out and do it on my own. I had been to a little prairie remnant earlier in the summer and had reported that it was there, and I had gotten some stuff. Now it's being scraped. Anyway, so it kind of varies.

Nivien Saleh: I would like to say thanks to the owner of the land for permitting this kind of effort. That's really great. But also I would like to say thanks to you, Katie, and to Lan Shen and to all the others who are braving the heat and going out there with the shovels to do that kind of work.

Katy Emde: I have the treasure hunter gene. For me, it's like out hunting treasures.

How can people find native plants for their gardens?

Nivien Saleh: How would you recommend people that are interested in natives but don't know all that much about it: how would you recommend that they go about finding those plants for their gardens or their front yards?

Katy Emde: Finding the plants themselves?

Nivien Saleh: Yes.

Katy Emde: Well, be sure and look at the Native Plant Society Houston website, the Arboretum, Mercer, and go out to those places too, and if you can, get a little familiar with things. You just have to watch for the plant sales. We give away plants sometimes at the native plant meetings. Oh. And Audubon, I keep forgetting about Audubon's native nursery that they have open year round.

Nivien Saleh: Also the Museum of Natural Science.

Katy Emde: Yes, they have a couple of plant sales, and they've just put in a nine natives shade garden. I haven't been to see it yet. The museum, their plant sales, a lot of it is because of the Cockrell Butterfly Center. They have butterfly plants, but a lot of them may not be native.

Nivien Saleh: Yeah. So I think what you'll readily admit is that it is a little hard for a person who says, "Oh, this is a great idea. I know nothing about plants, but I'd like some, for my garden." It's a little hard to get those plants because you can't just go to any garden store.



And some of the garden stores in Houston, if they know what they're doing, they will guide you to native plants.

But first of all, you have to know that you're speaking to people who understand the subject matter. You have to find those stores. And then the other thing is: These plant sales - Wildscapes Workshop, Houston Arboretum, Mercer Arboretum - they sell these plants maybe once or twice a year, not all year round.

So it is a little hard, right?

Katy Emde: Right. But I just thought of a couple more, uh Mary Carol, uh,

Nivien Saleh: Edwards. Mary Carol Edwards.

Katy Emde: Yes. Thank you. All of a sudden the last name escaped me. Mary Carol Edwards has wetland plants and she's open always. And Mark Morgenstern - you can buy from him all year.

You would have to contact him.

Mary Carol Edwards, who is Green Star

Nivien Saleh: Greenstar Wetland Plant Farm.

Katy Emde: Yes. Mary Carol. And I'm probably forgetting somebody that I will regret not mentioning. There are several people now working hard at growing these things.

Where can Houstonians learn about native plants?

Nivien Saleh: So that's where people can buy these plants. Where can they learn about them?

Katy Emde: The Arboretum has classes. If you volunteer out at Mercer Arboretum and work in their greenhouse, you're going to learn stuff. At Memorial park, the Memorial park greenhouse, they have workdays on Thursdays where they're potting up plants. You can volunteer at some of these work days, and you're going to start learning stuff.

There are people there who know things, and you can just say, Hey, what is this? Or I don't think this grass would work for me, but do you have another thing to suggest? Volunteering is a really good way.

Nivien Saleh: I've got some suggestions to number one, join the Native Plant Society. There's not a big commitment of time. It's a chapter meeting every third Thursday of the month. One reason why it's good to be part of that community is because you create connections to people that can then give you advice when you need it.



What you want to do is be part of the network. So being in the Native Plant Society is a good way, but of course volunteering in those other organizations such as the Houston Arboretum is also a very good way to enter the network.

Katy Emde: You're right. It's meeting people and asking questions. Sometimes we have plants to give away at the Native Plant Society. So that can happen.

But it's the network that is where you start building people that you can talk to.

The Native Landscape Certification Program

Nivien Saleh: And in fact, the Native Plant Society offers the Native Landscape Certification Program. I know the people that have put it together - they turned it into four or five modules, each of which lasts a day, and you learn about the value of native plants, what native plants grow, trees, vines, what to plant where and how to landscape - all kinds of stuff.

Katy Emde: Yes, it's a great learning experience.

It's a very popular class. That's another good way. And there's some new books that have a lot of information.

Great books on Texas native plants

Nivien Saleh: There's one book that I really liked. It's a bigger tome it's by the late Sally and by Andy Wasowski, "Native Texas Plants - Landscaping Region by Region". So there you have many different plants and it tells you, " This grows in the Edwards Plateau or in West Texas or in the Houston area or in the Rio Grande Valley.

It describes the plant, tells you how much water it needs, and it has a nice photo. It gives also some advice on creating landscapes. That's a really good resource.

Katy Emde: Yes. Yes. That is a good book. In terms of inspiration and really guiding people about things to think about, " Bringing Nature Home," by Doug Tallamy tells you about the difference to wildlife that having natives gives.

There are pictures of vast lawns , and they are just dead zones. And there's a chart in there that's so meaningful. It's a list of forbs - flowers - that serve as host plants for moths. Number one at the top of the list is goldenrod.

Doug Tallamy says that 115 moth species - and this covers the whole United States. So let's say half of them are in Texas. 115 species of moths use goldenrod as their host plant.



Nivien Saleh: Golden rod has a bunch of different,

Katy Emde: all. Yes. There are many species. Yes. Think about that, how meaningful that plant is to all those moth. And he tells you how many thousands of caterpillars it takes to feed a nest of baby birds.

Nivien Saleh: Yeah. So many. If you need inspiration, no matter where you live, if you live in Houston or anywhere else in the United States, or even in another country, he gives you the rationale why you would maybe think globally but plant locally.

Apps for learning about natives

More resources. Now let's go technological, digital. There are great applications that are available right now for your iPhone or your Android phone. One of them is iNaturalist, which allows you to take a photo of a plant. And then it gives you a number of possibilities of what it might be - automated by their database. And then of course you can submit it to the community for further feedback.

iNaturalist the app is one thing. And one that I love is called "Picture This." It's much like iNaturalist, but it's a little quicker and sometimes it's probably wrong, but it's amazingly correct. So you just hold your phone up, take a photo of the plant, and it'll run it through its global database and tell you what it most likely is. It's such a cool learning tool. So if you ever want to go walk through the Arboretum, take that app with you and you can learn really quickly what plants those are.

Katy Emde: I've not heard of the second one. I've not ever used it, but, but yeah, it is good. And they can be wrong, but still, for starting to learn, it is really handy, and then you can get somebody else to confirm it down the road. You can also, then go to places like the Ladybird Johnson Wildflower Center website, and it'll kind of confirm well, yeah, this is that.

So by cross-referencing things, you can add to the information that you may have gotten from iNaturalist .

I definitely recommend the Wildflower Center.

Nivien Saleh: Yes. That brings me to yet another database, the USDA, United States Department of Agriculture, Native Plants Database. Ideally you put in the scientific name of the plant, because different people have different common names for the same plant.

If you put in the scientific name, the Latin name, it will tell you where it is native, if it is native at all. So it might be native in the north of the United States or in Texas. And if it shows you that it's native in Texas, you can zoom in on that map and find out in what counties it is native.



It is pretty cool.

Katy Emde: Yeah. So if I am looking up where a plant might be found, I look at Dr. Brown's list to see if he lists it in Harris and the surrounding counties. I look at the USDA site, which is not quite as complete, but very good website. So I look there and then there's one other website, and this is when you're getting pretty technical, but it's a good resource.

Nivien Saleh: That's for the nerds.

Katy Emde: that's right, for the nerds. Is BONAP.

It relates to herbarium specimens. And it's kind of the same thing. You can get it down to counties, in what counties these plants are found . If I'm really working hard to find out where this plant is found, I look at all three sites because none of them are perfect.

Have you observed a change in the aesthetics of gardening?

Nivien Saleh: Lots of resources here. You've been doing this for now for over 20 years, late 1990s to today that's over 20 years. Have you observed a change in the aesthetics of gardening? Has the native plant movement that we saw in Texas, but also maybe in other places in this country, had an impact on how people think about gardening?

Katy Emde: I don't know. It doesn't seem to have had a huge impact. Garden clubs, they want to hear speakers on native plants. And so I think it's just keeping talking, continue to get plants out there. The biggest thing is getting plants out there, having enough plants

Nivien Saleh: to sell.

Katy Emde: To sell, to give, to sell, to put somewhere. I think that's what everybody is striving for – to have more plants. Because people are interested, and it is such a learning process because not very many people are gonna just scrape it all and do native plants. So I'll settle for a little bit by little bit.

Nivien Saleh: Yeah.

Katy Emde: Like your yard. Native plant yards stick out because there aren't that many of them. But Rice installed a prairie and, um, you know, places are doing things.

Nivien Saleh: Memorial Park. They've been redesigning ...

Katy Emde: Yes.

Nivien Saleh: Redesigning.

Katy Emde: In Glades area?



Nivien Saleh: Yes.

Katy Emde: Yes. They're getting more focused on native plants and in the new, um, I forget what the tunnel thing is called, the big grassy thing that they're building over Memorial Drive, that's going to be with natives.

Nivien Saleh: What I just heard from you is a little bit of a downer. There you've been working for over 20 years, and not much has changed. Why are you keeping doing it? Is it optimism or is it just hardheadedness?

Things have changed

Katy Emde: Well but I mean, things have changed. I mean, Memorial Park is creating areas with native plants.

Sometimes they might not be the plants I would pick. At least they're probably all from Texas, unless something sneaks in. I mean, there's a beautiful muhly. That is much showier than our Gulf Muhly.

Nivien Saleh: Okay. Let's let's for, for people who don't know what muhlies are ...

Katy Emde: Oh, yes.

Nivien Saleh: What is a muhly?

Katy Emde: Okay. Gulf Muhly is a beautiful grass. It's a fluffy grass.

It's maybe three feet high.

Nivien Saleh: and pink in the fall?

Katy Emde: It has a pink inflorescence in the fall. The top part where the flowers are, it's pink. And there's one that is from Florida, and it's showier. It has found its way into numerous places, city places, parks places. But it's from Florida.

It is a Muhly, and my concern is that when we sell local Gulf Muhly, people will think, " but wait, this doesn't look like that. I thought I was getting that!" I mean, so, so it, I don't

Nivien Saleh: I want the showy thing!

Katy Emde: That's right. You don't want people to be disappointed. Because they're expecting it to be showier. And it's from Florida.

So I don't know what that means for our insects. Do the grass-loving insects use that? Does it have a different flavor? Does iplaka



t have a different rigidness that the insects can't eat through? Some people might say, "Oh, you're just being way too picky. At least it kind of looks like a native and maybe over time ..." But once it's in, people, they're not taking it out. I mean, they're

Nivien Saleh: It's like you're adopting a child. The child comes, you put it in the ground, and then somebody says, "Oh no, you got the wrong child. Send it back. We replace it." "No, it's my family."

Katy Emde: Yes. Now when you say putting the child in the ground, it gets a little creepy.

So I'm not sure that works. Let's call it something else. but so yes, and the work it takes, I mean, once it gets established, who wants to dig up grass with long roots, you know? So, things happen. I can't always blame people, but things are better.

People are trying. I mean, the Parks Department is doing great things. I'm happy about that. I guess, because Houston's so big, it's hard to see these things because they're spread out.

Nivien Saleh: I think in Pearland there are some city efforts if I remember correctly. So all the stuff is good. And we do it for the critters.

Don't we?

Katy Emde: Yes, we do. And by doing it for them, it helps us. It makes it really fun in the garden.

You watch things flying around and I know that there's more activity, so that makes it fun.

Let Doug Tallamy inspire you

Nivien Saleh: What else would you like to leave our listeners with?

Katy Emde: I think that Doug Tallamy's book is so important. That's a good way to learn about why do these things. I recommend starting there and come to the Native Plant Society. And look for opportunities, because it's so funny how one thing leads to another. I started as a plant person, and then you realize, the insects are important or the birds. I mean, bird people start with birds, and then they come to plants, or they come to insects. Everything is so connected, you have to start somewhere.

So if you can't get into native plants, hopefully, you're a bird enthusiast, or you're an insect enthusiast, or you love some sort of other animal, because once you start learning about one thing, you're going to start learning more about other things.

And everything starts at the ground with the plants.

Nivien Saleh: Eventually we'll get you.



Katy Emde: Yes. Yes. Eventually that's right. Eventually you will go, "I think I need to go to the Native Plant Society meeting. I want to know more." Yes.

It's like you said, it it'll get you.

Nivien Saleh: Good. Thank you very much, Katie.

Katy Emde: Well, I enjoyed it. Thank you.

Nivien Saleh: This wraps up today's conversation. It leaves me full of admiration for all those wonderful people who seek to open up spaces for Houston's small wildlife. But it also leaves me with a question: Can supply of local natives be scaled if our best case scenario happens and demand for these plants takes off? Cause here's the thing: If we only use remnant prairies from within 75 miles of Houston for our seed supply, we will not be able to cover Houston in wildflowers, as I imagined at the start of this episode. The reason is that original prairie - land that has not been plowed since 1750 - is exceedingly rare and is getting rarer by the day.

I don't know the answer. But perhaps you do?

For episode transcripts and links to some of the resources we mentioned, go to <https://HoustonNature.com/16>. That's HoustonNature.com/ the number sixteen, for episode sixteen. On that page you'll be able to sign up for the Nature Memo. This way, you'll get a notification whenever a new podcast episode is ready. And of course, as always: If you enjoyed this episode, please share it with a friend.

For Houston and Nature, I'm Nivien Saleh