Houston's Permaculture Scene with Shawn McFarland

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Nivien Saleh
Where in Houston can you learn how to feed, build, and live in a way that's ecological?

[Intro Music]

Nivien Saleh
I'm Nivien Saleh with Houston and Nature. Perhaps you, like I, love the thought of having fresh produce at your finger tips. Imagine plucking fresh okra from a live plant and realizing that your okra tastes so much better than what you get from the store.

In that case you might have come across the practice of permaculture. There are tons of books about it, for example "Gaia's Garden" by Toby Hemenway, which is an inspiring read even if you don't have a garden.

These books teach you that there is a better way of feeding yourself, and if you have a backyard or access to a community garden, that way is within reach.

These books will admonish you to garden with wildlife instead of against it. They will show you how you can grow your own food forest – yes, that's a little forest made of edible plants - , and tell you that each plant should fulfill several functions. For example, a fruit tree can provide you with food, but it can also provide shade and act as a wind break.

So these are pretty much the things that I expected to discuss with Houston permaculture expert Shawn McFarland when she joined me for this podcast episode.

Well, that's not where our conversation went. As she quickly convinced me, the applications of permaculture go far beyond planting carrots and tomatoes.

Take a listen.

Welcome to the show, Shawn.

Shawn McFarland

Thank you for inviting me.

A Houston permaculture teacher and green architect

Nivien Saleh
Tell me a little bit about you.

Shawn McFarland

Oh, my name is Shawn, and I teach permaculture, but I'm a green architect by profession. I grew up in Houston, went to Bellaire High School, very ordinary, average upbringing, took a gap period, and then went to University of Houston and got a degree in architecture. And I have been a very regular, normal business, working for firms, minding my own business, working my way up the ladder. Then I discovered the permaculture class, took it, got certified and helped teach and organize the class from from that time on.

Nivien Saleh
Have you always done green architecture?

Shawn McFarland

Oh, not at all, no. When I was in college, we were rarely introduced to passive solar energy design, which is more like water heating and orienting windows. It was not the typical pattern in the firms that I worked with to conserve energy because air conditioning was abundant, energy sources were cheap, and I did not practice green architecture until I took the permaculture class.

Nivien Saleh
And then afterwards?

Shawn McFarland

Afterwards I had a lot of self-study and I went to work for a green architect because it's one thing to read it in books, it's another thing to actually practice it. And this person had been practicing green residential architecture for decades and had actually taken the permaculture certification about six years before I did. So I went to work for him for about five years and got the practical experience and then went on my own.

Nivien Saleh
Was that by any chance Laverne?

Shawn McFarland

Yes. Laverne Williams, a trendsetter for sure. He's very talented and was working with green building programs when I went to work for him in 2005, I think it was. LEED for homes - the Leadership in Energy and Environmental Design, which is a green building program - was brand new, and we were doing LEED for homes at that time.

And he was doing projects in Austin under the green building program there. So I know what it's like now to do a green home. Now, when I took permaculture class, my goal was to learn how to do a house off the grid. It took me about 10 years to figure that out because it's not easy to do in a city environment. So I practice some more environmentally, a low carbon footprint type of design now, where smaller is better, recycling resources, using non-toxic building materials, which is what Laverne did, too. I like to work on a smaller scale.

Few tiny houses in Houston

Nivien Saleh
Tiny houses?

Shawn McFarland

Tiny houses are illegal in the City of Houston, but they're very popular, and there are a few of them around that are under the radar.

Nivien Saleh
I watch YouTube videos about tiny houses all ...

Shawn McFarland

They're fascinating.

Nivien Saleh
Ah yes.

Shawn McFarland

It isn't the small space. It's the freedom from stuff and the freedom from mortgage payment and the freedom of space where you're going to be. It's a fascinating concept that really took off. And there's probably five TV shows right now on tiny houses and they've really influenced the industry. And the people who write the building codes are changing them to incorporate rules for building tiny houses. But right now in Houston, they are not legal.

What is permaculture?

Nivien Saleh

We do not want to get anybody into difficulty. So we will just change, subtly change the topic to back to permaculture, which apparently was very influential in your life. So tell me what permaculture is.

Shawn McFarland

Permaculture is the two words "permanent" and "agriculture." It's a design system for creating human habitat using nature as a model. The man who invented permaculture is a man named Bill Mollison. He invented it in the mid-1970s with his student, David Holmgren. They both went on to teach. And I was just reading in the Wikipedia that as of 2011, there's probably 300,000 permaculture practitioners across the globe. I'd estimate that's probably doubled by now.

Permaculture is technically a design technique, but people when they take the class, it changes the way they look at the world. It changes the way that they function in the world and make decisions about their world and the way that they can influence others and especially their children.

Nivien Saleh

Could you summarize it as: "permaculture is a design philosophy that sets out to create sustainable human settlement?"

Shawn McFarland

Yes. But you can apply that to a business plan, or you can apply that to a backyard garden, or you can apply that to, a city, a town, or just the way you choose to live your life. You can apply it to a lot of different applications.

Nivien Saleh

Gardening and agriculture

Shawn McFarland

Bill Mollison invented the words permaculture out of "permanent" and "agriculture" because he had been studying natural systems. And he didn't like the way agriculture was destroying soil quality, because our food as a result is inferior. He would say that the two words represent permanent and culture, and he always meant it to be to be representative of a way to design your your lifestyle so that we have a permanent culture, which is the essence of sustainability.

Nivien Saleh

Now, the interesting thing that you did not yet mention is that Bill Mollison developed that concept in Australia.

Shawn McFarland

Australia. And Australia is the poster child for global warming. He actually was in Tasmania, which is part of Australia. He had been a jack of all trades, and then he had an epiphany, started working for a research group that studied nature and fisheries. He had what I call a middle age crisis as a lot of people do, went off to the forest, lived there for two years and studied natural systems. Then he came back to the University of Tasmania, got his degree, and started lecturing and teaching a class. He developed a degree program called Environmental Psychology, had a student named David Holmgren, and the two of them put together this book called Permaculture One, which led up to the Designer's Manual that he that he put together in the early 1980s.

I like to think of him as a Tasmanian devil that kind of shook up the world. 1981, he got an award for his contribution of permaculture to the world called the “Right Livelihood Award,” which is the alternate Nobel Peace Prize. And he started teaching, and David Holmgren started teaching. And those students went on to teach themselves other classes. It spread all over the world.

What does permaculture have to say about the global food supply?

Nivien Saleh

You already hinted to the food supply. You say that permaculture wish to change the food supply. What does permaculture have to say about our globalized food supply?

Shawn McFarland

There's a great deal of gardening instruction in the permaculture instruction because it's important to learn how to be more self-reliant. And it's important to not buy products, especially food that come long distances from other places. The carbon footprint is very high and the nutritional value is low. So the

permaculture class has one of its sections on bountiful gardens. And it's really not about growing food. It's about the relationships of the forces in your garden to your life. You get outdoor exercise, you get sun, you get air, you commune with nature. When you grow your own food, you have independence and self-reliance, and you learn to live in harmony with nature's cycles because you're eating in season. That leads to other skills, like learning how to can or preserve food, because usually your food is very productive when it comes in. It all comes in at one time.

We are losing seed varieties

Nivien Saleh
I personally have a hard time when I go to the store figuring out what was produced where and what is in season right now. It's it's really hard because everything's available all the time. So to me, I've got to say this globalized produce supply is very convenient. But here's the thing. I read a book called "Lost Feast" by a professor. Her name is Lenore Newman. She's a Canadian. She says, "when it comes to fruits and vegetables, we have access to only a fraction of the diversity that existed a century ago. We've lost between 90 and 95 percent of named vegetable cultivars and 80 to 90 percent of fruit cultivars. If we compare the list of modern cultivars to the 1903 USDA master list of available seeds, we have lost 97 percent of the list's cultivars of asparagus, all cultivars of broccoli available at the time, 93 percent of the listed carrots, 9 out of 10 corn cultivars, 95 percent of cucumbers and onions and radish cultivars." I'm like, wow, I had no idea.

Shawn McFarland

It's agribusiness. It's agribusiness that has killed our food supply in the name of providing more food to more people. And in the meantime, they do monoculture techniques and heavy tilling, which gets rid of the topsoil and heavy, heavy use of fertilizers and chemicals. And our food quality has gone down as a result.

Nivien Saleh
Yeah.

Our globalized food supply comes with a high carbon footprint

Shawn McFarland

Now to me the real problem of importing food in at your grocery store is its carbon footprint, because if it comes from outside the country, for instance, you can get a peach in the middle of of winter or in

November. But it comes from Chile. A lot of things come in from California. They're in heavy drought. Look at all the fires going on. A lot of things are coming out of Florida, but they've been hit by some massive storms. You know their citrus crop has been impacted. So, you know, the days of all this abundance may be limited and we' ll be forced into into more local sources. But on the other hand, it offers an opportunity for the local farmers to really develop that market locally, which they've done.

Nivien Saleh
Yeah, yeah. And if anybody wonders how could we lose 90 percent of our seeds.

Shawn McFarland

Its agribusiness that's doing it. It's Dow Chemical or Monsanto, which makes the seeds that are Roundup ready and all that stuff. They bred out the diversity in these massive agricultural businesses.

Nivien Saleh
Yeah. And maybe it also helps to to say that 100 years ago, 200 years ago, people would carefully, over years and decades breed varieties that were suited to their particular local climate conditions or their winters, their summers, their droughts, their humidity. And that's why we had this enormous variety. And now we have maybe all corn being grown in one place by a big production, which uses just one corn, and all the other corn is not used, so it falls into oblivion.

Seed savers to the rescue: Bob Randall and Urban Harvest

Shawn McFarland

But the seed savers are going to help. The founder of Urban Harvest, Dr. Bob Randall, he's a big seed saver person and a big advocate of seed saving. He knows that we're in big trouble with our food supply if we're losing seeds, because a lot of the chemical companies that are producing seeds that are Roundup ready, for instance, are breeding hybrids that have to be replanted every year. It's meant as, you know, you've got to buy from us every year. So it's a built in market for them. Plus, they've depleted the soil so much they've got to use heavy chemical fertilizers to give the crops that sugar high, I call it.

Nivien Saleh
Roundup is a pesticide ... an herbicide?

Shawn McFarland

Yeah, it's called glyphosate. And glyphosate has just been exposed now as a carcinogen.

Nivien Saleh
Yes. So let's see. Let me let me just think this one together. Glyphosate is a pesticide. And what you as a farmer often want is create a crop, get rid of the pests, but continue to grow that one crop that you're interested in. So you apply glyphosate. But then you have to have a plant that is glyphosate resistant, that does not die as a result of the glyphosate application.

Shawn McFarland

Exactly.

Nivien Saleh
And that sort of plant has been bred by Monsanto or other companies.

Shawn McFarland

Mm hmm.

And it's dangerous to our health. It's been proven that way. In permaculture, we learned that there's a different way of planting your food so that you can have a food forest, and you have diversity in your garden, you don't put all your tomatoes in one place, put all your corn in one place. And you don't treat with chemicals because you're trying to get the bugs and the bees to come in and pollinate your stuff. So you have to find other methods of of non-chemical pest management. And then you get this wonderful mixture of all these foods that are ready at different times. The industrialized agriculture destroys the soil. The chemical part is the part that really bothers me. I tell people sometimes it's like giving your plants a sugar high. You know, I love to eat cheesecake and brownies and ice cream all the time. But can you imagine what that would do to my health? So if you continue to use these chemical fertilizers, you're poisoning the soil. The way that the soil interacts under the surface makes the plant grow and nourish. We talk about that in permaculture, all that stuff underneath the surface. And chemicals wash off the land into our waterways and pollute our bodies of water and ruin fisheries. Sooner or later it's going to be toxic, to to the food chain. I just think it's a real dangerous thing to do.

Urban Harvest becomes the home of Houston's permaculture scene

Nivien Saleh

So, it started out in Australia. And now it is also in Houston, and you're a lively testament of that, but Houston is so different from Australia, isn't it?

Shawn McFarland

It is. There's there's a basic curriculum that was written by the Tagari Institute that Bill Mollison founded. Bob Randall altered the curriculum to include a great deal of local material. And I mention his name because we teach our class under the auspices of Urban Harvest and he's the one of the co-founders.

Nivien Saleh

Is Urban Harvest a permaculture organization?

Shawn McFarland

Bob Randall has said many times that he built Urban Harvest on permaculture principles because he took the class in 1992 or 1994, and he went on to found the organization known as Urban Harvest, which teaches people how to grow food. They were the umbrella group that helped facilitate the class. They take registration, they take the moneys. They arrange the facilities that we teach in. And we as teachers, there's about 20 of us. We put the class together and modify it as needed over time to to teach. It's a different class than in any other place in the country because they ... they will usually teach an in-residence class where you go camp out for two weeks in somebody's farm, and you actually plant stuff for them. We have a city class, an urban class with some some influence from our rural areas. One of the places that we go to is a place called Animal Farm, which is an organic garden. They sell half a dozen markets in Austin and Houston. So we have some of our classes out there. There are examples of green building out there, and there's examples of organic gardening out there.

Nivien Saleh

I don't think I've ever heard of that. It is right outside of Houston?

Shawn McFarland

It's in Cat Springs, which is just a little bit west of Sealy. So it's about an hour and 20 minutes. And they have lots of natural building out there, cob and straw bale, and they have a huge booth at the Urban Harvest Farmer's Market. So you can get certified organic produce there from Animal Farm.

Nivien Saleh

What I'm gleaning here from you is that the permaculture axis in Houston is Animal Farm, plus Urban Harvest.

Shawn McFarland

Animal Farm, Urban Harvest, we teach at a place called Japhet Creek, and I'm trying to develop a learning center there.

Houston permaculture practitioners don’t announce themselves

Shawn McFarland

There are a lot of practitioners who blend this into their normal career path. We have two or three people that do permaculture design for other people and garden design for other people. We have people like me who practice green architecture, and I would consider that a permaculture practice. But you normally have to go to somebody's backyard to see permaculture in place. So we're at the point now where we need to consolidate the people that we know. We're putting together a database of all the people that we've graduated and getting an asset map developed so that we can connect up these people with the other people in their ... in their tribe.

Nivien Saleh

So that the network of permaculturists in Houston, in the Houston area, will be strengthened.

Shawn McFarland

Strengthened and we can outreach to other organizations too, there's just a ton of environmental groups out there, but they're just not connected. One of them doesn't know what the other one's doing, and it drives the funders, crazy because they don't know who to give their money to. How many bayou groups we have out there? Or how many nature groups do we have out there? So we want to connect with other permaculture people because we've reached a point where we've got at least 150 people who graduated from our class in the last 20 years. And they come out of the class, and they go, "Where do I plug in?" This is going to be the place where they can plug in.

It's an exciting thing to see develop. And they talked about that a great deal in the Permaculture Institute of North America's four day virtual conference.

The people that are doing it, we just don't recognize that. They don't they don't announce themselves: "Oh, I took the permaculture class 10 years ago. And this is an example of what I'm doing." They don't advertise it. So we don't we just don't know. We don't know how evident it is it is out there.

Shawn McFarland

I can give you several examples of people up in Austin who do permaculture design. Next thing you know, you've got a hotel that's got an edible garden in the front yard. Well, guess what? It was done by a permaculture designer. An edible garden in a hotel, and there are several examples of that around Rice University, too, where there's edible gardens.

Nivien Saleh

Terry and I sometimes take the bike and we were in the ... what's it called? Rice Village? It's single family houses. And there was one, they had a mixture of native plants and edibles like herbs, but also collards, facing the street and it looked so beautiful. I mean, usually I don't think of vegetables as beautiful.

Shawn McFarland

Attractive plants.

Nivien Saleh

But that person did a great job. Yeah.

Shawn McFarland

Well, I mean, there are several programs out there that teach the same lessons. So you never really ... You know, you never really know what the influence is.

The permaculture certification: a transformative experience

Nivien Saleh

Explain to me what a permaculture certification entails. It seems like something rather big.

Shawn McFarland

It is a curriculum we certify through the Permaculture Institute of North America. So they get a certificate at the end of the process that's codified by PINA. It involves a curriculum of gardening, placement in the garden, green building, alternative energy, alternative living, alternative money, restoring nature. In the city as in most areas, people have trashed their environment. So we have a very heavy contingent of restoration in our permaculture class. They start out with a baseline introduction because it's a design tool. They get an example. Then they get what the pieces and parts are. And when they finish, they do a design project. Their project isn't a Ph.D. thesis. It's just an 8 or 12 hour ... something they've already worked on, something they've already got in their in their head. And they tell us about it, explaining it to us in permaculture language. If they do that, then they get a certificate, we have a little a little communal meal, and we pump them into the system.

Nivien Saleh
And how many hours does it take to ...

Shawn McFarland

It's about a hundred.

Nivien Saleh
So we're talking about 100 hundred classroom hours or ...

Shawn McFarland

A hundred classroom hours not including the design stuff.

Nivien Saleh
That's substantial.

Shawn McFarland

That is substantial. And it's like a jigsaw puzzle when you learn the pieces and you don't quite know how they all fit together. Then at the end, when we do our tutorial orientation, I hear from students all the time, "I had no idea. And now I see how it all fits together." And doing a project, getting invested in that and getting that final certification really is icing on the cake. A lot of them are changed. They're transformed by this instruction.

Houston's permaculture architecture differs from old school architecture

In my case, I had a hard time explaining it when I first finished. It was like "What is permaculture?" And I told my boss at the time, you know, what I thought it was. And he goes, "Well, that sounds just like common sense."

Nivien Saleh
So when you say "your boss," you mean your architecture firm?

Shawn McFarland

Yes. When I was working for an architecture firm 20 years ago and my boss knew I was taking this class, he goes, "What is this?" And I told him. And he says, "Well, that just sounds like common sense to me." And I was like, "Well, if it's so damn common, why isn't everybody doing it?" What's wrong with our

systems that we're not practicing good common sense. So permaculture helps to recycle resources. For instance, as an architect, I was taught to level the site, take every blade of grass out, tree, whatever, and start over, start from scratch. We don't do that in permaculture. We evaluate what nature has given us and work with it because it is it has done its thing before we got there.

Old school architecture and the sick building syndrome

Nivien Saleh
You had something called sick building syndrome. What is that?

Shawn McFarland

I took the permaculture class, and I jumped to this other company that had an environmental department. I thought they were going to be better than they were. But they were in a building that was built in the 1970s. They designed the building. It was a highrise, and they had sick building syndrome. And the reason I know that is because lots of people were sick a lot, including me.

Nivien Saleh
OK, so sick building syndrome seems to be when a building it's fumes and vapors or ...

Shawn McFarland

I think it all boils down to their ... I think it'll all boil down to their air conditioning system probably has mold, and they're not changing their filters. And these older buildings don't take in outside air anymore. And then people bring in all kinds of toxic materials, and they go and spray for roaches and things inside the building. And I just witnessed people getting sick, and I got sick in a cycle.

I worked very hard to bring my health up, and I only got sick one time the next winter. I mean, I was in a pattern the first the first winter I worked there where I was sick a week, getting well, a week, well a week, then getting sick a week. And so every three weeks I'd get into the cycle of getting another cold or when I first went to work there, I got the flu. I had a helper, and she was getting sick all the time. I was telling the people that operated the space, I said, "This area has sick building syndrome." And he was like, "Oh, are you crazy? Oh, you're crazy. You're making it up," And it's like, well, it doesn't take a lot to figure out that you have a high absentee rate or that you have a lot of sick people around all the time. One of my supervisors was a gentleman who had a lot of experience in construction, he had to go home and create a clean living environment in his home to make up for the toxic materials in the space.

Nivien Saleh

And how did that tie into your permaculture journey, that experience?

Shawn McFarland

The first year we taught a class in permaculture after the class I took, we taught it there at the architectural library, which was really nice. They were very generous.

Nivien Saleh

In that in the building where they had as you said....

Shawn McFarland

Yes. Sick building syndrome. And then I had the opportunity to get laid off, which was a blessing. I started reading about green building, natural building products, materials, toxic building products, sick building syndrome, took workshops in sick building syndrome. It's not talked about a lot. You know, we have these ambient levels of toxins around us, like in our clothes and in our food and in our building materials and in our our pesticides and lawn care products. We have all these toxins in the air that we're absorbing all the time. And we live in a very dangerous area of the country. It's not as bad as Cancer Alley in Louisiana, but it's pretty bad here with the pollutants in the air.

Water collection to protect against flooding

Nivien Saleh

Permaculture was invented in Australia. The conditions in Australia are very different from the ones in Houston. We have lots of rainfall here as opposed to dryness there. I wonder, what are some of the principles of permaculture that work here in Houston, some signature signature principles or practices?

Shawn McFarland

Well, collecting that water is one thing. There have been studies done that will show that if everybody collects water on their own property for later discharge or for absorption into the ground, that we can mitigate our flood situation by 30, 40 percent. That's significant. If you have a site that's subject to flooding, you certainly want to know that before you move into the property. After Harvey they've now demanded that the flood maps be updated. They're not current. We have a new design standard: 500 year flood maps. We're regulated so that we have to build above that 500 year flood plain by two feet.

Nivien Saleh

So the permaculture principle that I would extract from what you just said ...

Shawn McFarland

Is try to collect, slow it down, let it seep in. If you discharge it, you know, it's just going to go downstream. And so if everybody paves over and it goes downstream, somebody downstream is suffering.

A Priority for Houston Permaculture: Flood Prevention

Nivien Saleh

So back to the idea that permaculture tries to create sustainable human settlements, um. If I combine that with what you just said about flooding, the idea is not just to reduce the possibility of flooding on your property through your own action, but also protect the rest of the community, because each each one of us is not an island, but we are part of a human community. We're part of an ecological community. And we want to, be good community members and be well integrated with our human and non-human environment. Correct?

Shawn McFarland

It's a great concept.

Nivien Saleh

Yeah.

Shawn McFarland

Right on woman. I heard the guy who heads Brays Bayou Association one time says, “Well, Brays Bayou, I don't know why we're getting all this flooding, because there's been no development." I said, "Look, up until the new rules went into place, you could take a house and take it off the lot and you could fill it full of dirt to get your house raised and you are displacing flood water to somebody else's drainage."

Nivien Saleh

And that is not what we want.

Shawn McFarland

And he wasn't taking into account all the car dealerships that are at the upper end of Brays Bayou drainage that have purposely avoided detention requirements because they've gotten right underneath the square footage requirement. So we have added bricks to the bathtub, as I call it.

Houston Permaculture wants to turn problems into solutions: flood plains, detention ponds, and parks

Nivien Saleh
So let me let me elaborate on that point a little bit, because that's important when you say they evaded the detention pond requirements. When your construction is of a certain size, then building codes require you to put in a detention pond. So if you're trying to avoid the cost for a detention pond, perhaps you will be building as big as you can all the way up to that limit where you don't have to have a detention pond. And as a result, the rest of the community suffers because there's a lot of runoff.

Shawn McFarland

And that's happening all the time. And we've had government locally, county too, county and city, that have been very pro-development. Another project for them is more money in their tax coffers. More tax, more more dollars, more dollars to spend on police, roads and things like that. I grew up in Houston, so I remember a lot of mayors that were very, very pro-development, anti-mass transit. "Let's build more freeways. Let's get people out in the Katy Prairie," and then, "Oops." Jim Blackburn has maps that show that our floodplain is increased 30 percent. That's some serious trouble that we're in. And now Houston's got a bad reputation. They're all over the national news all the time when we have the least little bit of flood. Who wants to move their company to Houston when we have a quality of life issue?"

In permaculture the best principle of permaculture is taking the problem and turning it around, and it becomes a solution. So we take that problem, which is is insufficient drainage area, and make room for the river. You know, that's what the SSPEED Center is talking about all the time, and the Dutch people do this. Take the people out of harm's way that built before there was even knowledge of what a flood plain was. Make room for that water, you know, and make a nice park space out of it and walking space and a nature spa… I was listening to a presentation by Blackburn last week. He talked about the ecological assets of Houston, and they are incredible. But if we don't get control of this flooding issue, we're all in deep, deep doo-doo.

Permaculture and the circular economy

Nivien Saleh
Permaculture and the circular economy really are completely compatible. Aren't they?

Shawn McFarland

Absolutely. We, as in business, sometimes mine our resources like we're in a giant going out of business sale. I talk about this in my class. Wood is a perfect example. We've mined wood till it doesn't exist anymore. And it's a renewable resource. But people can't think in terms of 50 years. In my world, as an architect, I believe in in in better planning. And that's what permaculture teaches too: thoughtful planning, plan out plan out the possibilities. It doesn't make any sense to me that we always react to the last crisis. Bray's Bayou over here is all designed for the last big storm, which was Allison. It's already outdated. All the improvements they've done on Brays Bayou were done for Allison.

Nivien Saleh
So this is interesting that I have you on this podcast as an architect because as I prepared for our interview, I read a book called Gaia's Garden,

Shawn McFarland

Oh yes.

Nivien Saleh
Which is a book on permaculture, gardening. And the way I think of permaculture really is primarily applied to gardening. But talking to you now, I get much more of an architecture angle.

Shawn McFarland

It's a holistic system. It's inside and out.

The impact of permaculture is difficult to quantify because it's so interdisciplinary

Nivien Saleh
To what extent have the ideas of permaculture that emerged in the 1970s radiated out in the United States to other disciplines? Do you have a sense?

Shawn McFarland

That's really hard to say. Permaculture is kind of invisible to the naked eye, because people they go and they merge it with their daily work. There are places, eco-villages and permaculture communities. But there's nothing like that here.

The problem with permaculture as the discipline is that it is interdisciplinary. It's not geology, it's not biology. It's not art. It's not architecture. It's not horticulture. It is all of those things put together. So It's hard to say how this guy influences that guy. So I would say that it's it's a hard entity to quantify in terms of how much it's influenced the world out there. I see influences all the time, but I just don't have the time to say, “Hey, did you take a permaculture class? Do you know anything about permaculture?” And people don't really say that when they're talking to you about green building. I mean, did Laverne ever tell you that he was a certified permaculture designer when you met him?

Nivien Saleh
No.

Shawn McFarland

Well, he should have. He took the class in 1994, I believe. Yeah.

Transition Houston is a Permaculture Group

Nivien Saleh
OK, um. Can you give me some examples outside of architecture? You said you can see examples everywhere.

Shawn McFarland

There's an organization called "Transition Houston," which is a manifestation of the permaculture class. Transition Initiative was born in Great Britain from a man who taught permaculture. He went to a town called Totnes, and he invented Transition Initiative, wrote several books about it. His name is Rob Hopkins. And we we have an organization in Houston called Transition Houston. It's about transitioning away from this high carbon lifestyle into a low carbon lifestyle. That can be conservation of materials, better transit, using less oil and gas. We try to manifest these permaculture principles through our meetings. We do permablitzes where we do garden builds for people. We were doing cob ovens in a couple of different locations, too, so ….

Nivien Saleh
So so I recently .... One of those many tiny houses I looked at was a cob house, and that was made from sand and straw. So is a cob oven made from sand and straw?

Shawn McFarland

Yeah, same thing. Sand and straw and clay. One of the people in my organizational team with Transition Houston did one in their backyard. Normally they're done out in the desert. They're done in the indigenous communities. They're outdoor ovens for a reason because they didn't want to heat up their their interior dwellings and create smoke. And they could cook very fast because cooking temperatures are really high, but it deteriorates like crazy in our rainy climates so that you not only have to cover it, but you have to seal it because mud daubers get into it and wasps. And they've got the ... They've got the secret sauce, these friends of mine, on how to how to, how to really create one that lasts. They use theirs as a pizza oven. They love to entertain in their backyard ...

Nivien Saleh
Cool

Shawn McFarland

... where they have a magnificent food garden. Magnificent. And they do pizza pizza parties all the time for small groups of their friends.

How are permaculture and organic gardening connected?

Nivien Saleh
For the many people that think of permaculture in the context of gardening, how do permaculture and organic gardening relate to one another?

Shawn McFarland

We advocate for organic gardening because any chemical use will kill all your beneficial insects. Your beneficial insects are your free energies. They come to your site, without you having to pay them a salary. You want to encourage beneficial insects and only about two to five percent of any insect that ever hits your plant is going to ruin it. Most of them are all beneficial. So you can entice them into your yard with flowering insectary plants and things that produce nectar. When Bob Randall was first starting to teach - he also teaches an organic certification class with Urban Harvest -, he said, "Well, people don't understand this organic stuff." He started a new tactic. He said, "Do you want butterflies? If you want butterflies, then you don't use chemicals." And so there's got to be some different things that you can do, like non-lethal pest controls and maybe some good bugs that go after the bad bugs and a dog. A dog helps keep the squirrels out of my yard. So it doesn't protect the pear tree, but it certainly protects the backyard. So there's lots of things you can do without using chemicals because chemicals are toxic. We

will poison ourselves with these chemicals. If we're just thinking that they just poison the insects, they don't.

Nivien Saleh
So organic gardening, uh, organic gardening would be could be perhaps considered a subset of ....

Shawn McFarland

Yeah.

Nivien Saleh
Permaculture.

Shawn McFarland

It's certainly something that is advocated in permaculture, which is a holistic system. And we advocate gardening because it helps us be self-reliant, gives us better nutrition, gives us exercise. And we would use organic principles in that garden so that we didn't we didn't create a toxic environment. But organic gardening by itself is is not permaculture.

A new sense of beauty emerges

Nivien Saleh
Yes, yes, it has to be embedded in that more holistic view of human interaction. Does permaculture require a different sense of beauty?

Shawn McFarland

It's often said in our class that if you're going to take care of something, it needs to be beautiful. if you're going to design a house, it needs to be beautiful, and you'll take care of it. If you're going to plant a garden, it needs to be beautiful and then you'll take care of it. The aesthetic sense of your garden is important to its permanence and your care. The first time I ever saw a permaculture garden, I thought it was messy. Now I see the diversity, and I go into the garden in the spring and I see the lizards everywhere. And ...

Nivien Saleh

I would say you have developed a different sense of beauty.

Shawn McFarland

You see, it's a paradigm shift. You look at everything completely different, and you're armed with new tools for your tool belt that help you look at things with an eye towards replicating nature and conserving energy.

Nivien Saleh
It seems then that once you take the permaculture certification, you get a sense of the interconnectedness of all things so that your ...

Shawn McFarland

Absolutely

Nivien Saleh
...sense of aesthetics changes as a result.

Shawn McFarland

Absolutely. Absolutely. Yes.

Can these ideas help Houston?

Nivien Saleh
If permaculture were widespread here in Houston, what would be the impact on life in Houston in terms of pollution, energy expenditure, flooding, wildlife?

Shawn McFarland

Everybody in general who lives in a suburban neighborhood that's got some square footage has a front yard and a backyard. And the fact that they're not planting food is a complete waste of space. They're all planting Saint Augustine grass because they've all been told that's the gold standard when the root system of the St. Augustine is minuscule - they are easy to pull up. So we would see a more diverse set of yards. There's a neighborhood that's not too far from here where they planted wildflowers, and they've got signs up every wildflower season. They're certified with the city, which you can do now. So they don't give you citations for being messy. And they're a wildflower neighborhood. Several streets. They've all banded together to plant wildflowers. So that'd be a great example of what's possible when we don't have

archaic homeowners associations. And they allow now rainwater collection, solar energy and native plants and more xeriscaping, which is without water, more drought tolerant plants. Most of the HOAs are prohibited from stopping you doing those things anymore ... There was a law passed in 2013 after the drought. And so places like Austin, they do rainwater collection all the time and xeriscaping and rock gardening; So there's a lot we can do that will change the way things look. Just in terms of food, we could grow more food here and be completely detached from the global food supply chain that's degrading our food supply and has large carbon footprints because of transport costs.

Nivien Saleh
And as a permaculturist who wants to create settlements that are sustainable and embedded into the wider ecological system, you would, for example, um, pay attention to the fact that Houston is on a very important bird migrating route and perhaps you would try to plant for birds as they have to fly over Houston from South America, Central America. They come through over the Gulf of Mexico to Houston, where they are very exhausted, and they have to land, and they have to refuel.

Shawn McFarland

Need water and food.

Nivien Saleh
They need water and food before they then head onwards in the direction of Canada. So a permaculture idea here would be to plant not just that you and I have food for ourselves, but also plants something that facilitates ...

Shawn McFarland

Absolutely.

Nivien Saleh
... the migration.

Shawn McFarland

Well, that's part of replicating nature because, your backyard garden doesn't exclude the animals that that pass through from time to time and some of which want to live there permanently because they've got these resources. My dog keeps a possum at bay in my backyard that wants to live in my attic. But I wouldn't discourage the birds. I keep my bird bath full of water. I do look forward to the day when I can have bird feeders and the dog won't discourage the birds.

Nivien Saleh

Yeah.

Shawn McFarland

We include in our environments, especially our outdoor environments, place for the critters.

You know, there are programs I think there's a local City of Houston program, too, that encourages butterfly habitat. So people are starting to be more proactive about about enhancing our nature elements in Houston, because we finally are realizing the value. And the developers have realized the value. That's why Buffalo Bayou Park got put in. It's the backyard for more densified housing over there. Same thing's happening in other places like Don Green Nature Park, where there's dense housing going up around them, and those nature spaces are just invaluable.

Nivien Saleh

Yes, and you know what, you could also do these detention ponds. We have all these detention ponds all over Houston and they are so ugly. So many are so ugly. Then they are these beautiful, beautiful ones like in Exploration Green in Clear Lake.

Shawn McFarland

Or Willow Waterhole.

Nivien Saleh

Willow Waterhole. There's an opportunity to take this land that you cannot ... that you cannot build on creating inviting habitat.

Shawn McFarland

Yeah. It's a little old school, new school stuff. The old way of doing things is being relooked at. And they're all looking at green infrastructure and enhancing our natural systems here to do a better job at the problems that we have, like flooding.

Nivien Saleh

Yeah.

Shawn McFarland

So people have better design mechanisms now. The Harris County flood control , they've done a magnificent job at Willow Water Hole. And Don Greene Nature Park. It's all nature all the time. It's a no-chemical nature park, and the county has been a wonderful partner with making sure that that that our workdays and the people that are watching and tending the park bring to them some problems, and they take care of them. And they facilitate a lot of Boy Scout projects out there. They facilitated a bunch at Willow Waterhole. So things are changing. They really are. We just have to give it a little bit more umph. Spread the word.

Nivien Saleh
And that's what we're doing.

Shawn McFarland

That's right!

Nivien Saleh
And that's what you're doing. And you're doing a very good job at it.

Shawn McFarland

Thank you.

Advice for practicing permaculture in Houston on a small scale?

Nivien Saleh
Let's say somebody has listened to this and says, "I want to learn more about permaculture, and maybe I want to practice some of it on a on a small scale." What advice would you give?

Shawn McFarland

Well, first of all, there's tons of information about it on the Internet, so that's a good place. Bill Mollison has tons and tons of videos on his YouTube you can look up. But the go-to place for us is Urban Harvest. Urban Harvest teaches the class. And they have an extensive permaculture section. They have an extensive section in their tree sale about fruit trees. Just a wonderful resource on, you know, where to plant them and what to do. Urban Harvest is the go-to place.

Nivien Saleh

And that class would also be interesting to people who do not own land where they can plant stuff but do live in an apartment?

Shawn McFarland

Oh, absolutely. We've had plenty of people who live in apartments. It's not dependent on having property to be able to practice permaculture.

Nivien Saleh
Excellent. Thank you so much for being on the show.

Shawn McFarland

Thank you for asking me.

Nivien Saleh

This is it for today. To find the episode page, go to https://HoustonNature.com/7. That's HoustonNature.com, a slash, and the number seven. On that page you will find the transcript, the link to Urban Harvest and links to both the website and the Facebook group of Transition Houston, in case you want to check them out.

Should you have thoughts about this episode and want to share them with me, you can leave me a voice message at https://www.speakpipe.com/houstonnature. That's speakpipe.com slash houston nature.

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Take good care of yourself.

For Houston and Nature, I'm Nivien Saleh.