

Podcast Series: Holistic Nature of Us

**Episode # 47: Meet Craig Floyd, Farm manager Coogan Farm
in Mystic Ct**

<http://www.judithdreyer.com>

Hi I'm Judith Dreyer,

Thank you for joining me for this pod cast series "The Holistic Nature of Us".

My intent is to take us, you and I, into a better understanding of the concepts behind our holistic nature and how that ties directly to the holistic nature of the world around us. How can we connect the dots in practical ways that we are nature and nature is in us?

I will be featuring authors and educators, practitioners and others whose passion for this earth helps us create bridges. We'll see what's trending, what's relevant to our world today, not just for land use, but to connect the dots between nature and ourselves. It's time for practical action and profound inner change so our natural world is valued once again.

Today I'm delighted to introduce you to Craig Floyd. Craig Floyd is the farm manager for the Coogan Farm which is a part of the Denison Pequotsepos Nature Center here in Mystic Connecticut.

Welcome Craig. It's nice to have you.

CRAIG: Well I'm honored to be here, thank you.

JUDITH: What I'd like to do is have you tell us a little bit about yourself and the farm and how things got going over there, and some of the perks of the farm.

CRAIG: Well I'm a 72-year-old farmer. My family has been farming on one spot since 1712. I own Connecticut's first certified humane farm and in 2014 I was offered a position at the Denison Pequotsepos Nature Center or DPNC here in Mystic Connecticut. I took over as the farm manager in September of 2014. And one of the things we wanted to do, we purchased

this property in 2013 and we wanted to keep the farm and it's the last open space in Mystic. It's a significant farm because it was established in the mid 1600s and it was in fact the last open space in Mystic. We wanted to save it so that people could come and enjoy nature and walk on our 45-acre farm. It also connects to our main campus, to really be able to enjoy this. But my focus has been the *Giving Garden* and at my age I realized very quickly that I can't do both my farm and this farm really well. I'm concerned about feeding people. At our garden we donate 100% of what we grow to the Gemma Moran Food Bank in New London to help feed the 23,000 people that are food insecure in New London County. Most people are probably aware there are 40 million food insecure people in this country. Thirteen million are children. Frankly I don't understand why but we developed this garden. In the first year in 2014, we did 2,080 pounds and last year we did 17,000. We have donated over 20 tons of food, which equates to about 96,000 meals in the past 4 years and I would say that this is not your typical farm. This is a regenerative farm. It's a no till, no spray farm. If it doesn't go in my mouth; it doesn't go in the soil because I don't want it to go in a child's belly. We don't spray. We don't use any pesticides or herbicides or anything like that. So, we are 100% donor sponsored financed and my work force is all volunteers. In 2018 I had about 370 volunteers that did 2,500 hours. So, it's all about the mission and the community helping the community and we're blessed to be here.

JUDITH: It's a fabulous project. For those of my listeners who are not familiar with Connecticut, the Mystic coastline by Mystic Seaport, Mystic Aquarium is really lovely and the fact that you take 43 acres for farming and all that you've contributed is outstanding, you know, not only for fulfilling your goal and your mission and your heart's desire but contributing to the health of the community because you're doing regenerative farming.

CRAIG: Yeah, the issue is that in the 1940s we had to make ammonium nitrate because we were in a war and we needed to blow stuff up. And then after the war was over the chemical company said what are we going to do with all of this ammonium nitrate. Oh, we'll sell it to farmers, and they can give it to the plants. Well what they did is they fed the plants, killed the soil. With that in mind, in 2014 the United Nations put out a worldwide alert that at the current rate of soil degradation we have 60 years of soil left on the entire planet. It's not good and we will lose water before we lose soil. So one of the things that we're trying to do here, education is one of my primary responsibilities and we have continuing gardening classes all year

round and you can find out about those on our website www.dpnc.org but we're here to teach the volunteers a mother earth way friendly to actually work with the soil and have absolutely outstanding production. Most people's gardens are getting 15-20% of the plant's capability. We can show you how to do a lot more than that with absolutely no chemicals, just using natural stuff and focusing really strongly on microbiology. If you don't have the little worker dudes don't care what you put in the soil it's not going to be fed to the plant. So, when we really focus on microbiology and we teach that to people and we've been very successful.

JUDITH: Could you tell us a little bit more about that because I'm personally fascinated by the mycorrhizal hyphae, the fungal network, the microbes in the soil and how they're all so interconnected. And it's caused me to change how I manage my little garden in my neck of the woods for our food production to try to keep the network intact. But how do you approach that with newbies, so to speak?

CRAIG: With newbies the fastest way is to purchase it. You can purchase microbiology which makes it relatively easy. Not everybody wants to go out and buy a microscope and look at a soil sample and see whether you've got good nematodes or bad nematodes, or the bacteria that's in there. And what you're actually trying to do, you would like to have 75,000 species of bacteria and 25,000 species of fungi in your teaspoon of soil. Most people aren't going to go to that extreme so there's places like Advancing Ecoagriculture in Ohio where you can buy microbes. Also, right here in Connecticut one of my favorite things to put on the garden is called Quantum and it comes from Green Earth Ag and Turf and they're in Branford I believe. One gallon will treat an acre. Now I'm here to tell you if you are growing any kind of a leafy, whether it's swiss chard or kale or whatever, and you apply some quantum to that leafy crop, let's say on a Friday. And Saturday and Sunday you take the days off and you come back on Monday you're going to be really very surprised at how much your vegetables, the leafys have jumped and how they have turned much darker green. I have had buckwheat jump 8" in 4 days.

JUDITH: Tell us again, what is in Quantum? What is it again?

CRAIG: It's all microbiology. Anybody that's interested I can send you the PDF that tells you what all those little creatures are that are in Quantum and not only that, it's why is this particular guy in here? What does he or she

bring to the soil? Why do I need that? And it's amazing. And if you're living in the city and you don't have a garden, but you've got a yard, you put Quantum on the yard and your neighbors are not going to be happy with you because you're going to have the best grass in the neighborhood.

JUDITH: Hmm. Which I like to discourage a little bit.

CRAIG: Me too.

JUDITH: Yeah, I'd like to see more natural landscapes out there that promote not only biodiversity for our critters, but also repairs the soil. It grows better nutrients in the soil, and it keeps that microbial network stronger so that we have nutrient rich food. I think you and I talked about this prior to the podcast but some of our food is like there's nothing in it. We all know the hothouse tomato has no flavor. Yes. it can last on the shelf a bit longer but we want juicy tomatoes filled with nutrients, etc.

CRAIG: Well herein lies the issue. It's that your listener's food, and there's probably a few exceptions but not many, has lost 50% of it's nutritional quality since 1940 and it loses a minimum of 30% within 3 days of coming out of the field. They're eating food that's 80% deficient. Now I would be willing to bet you that you can't go out, buy a brand new 2019 apricot colored Lamborghini, take it to the local Shell station, put 87 octane in it and expect it to work and yet we're doing that to our bodies. We're doing it to our children. They're all sick. We can change that strictly by focusing on the microbiology that's in the soil and remineralizing the soil which no home gardener does this because people just don't know about it. You know native peoples used to inhabit areas around active volcanoes for a reason despite the danger and that reason was that the soil was extremely fertile. If you had the salt or carbonatite or azomite to use in your soil you're going to really increase the nutritional quality of your food. I guarantee you that I can improve every single thing that you do if I just change your food. And you can do it yourself. It's not that hard. You know people went to the Bionutrient Food Association grew all that and watched some of the podcasts and webinars that are on there and learn a little bit about that or come and take some of our garden classes. Just come see and we'll show you how to do it and we will really change your gardening. We do not realize the potential of plants in this garden. And I ask people all the time, do you grow tomatoes? Well yes, I do. And how big do your tomatoes get? Well they get 4-1/2, 5' tall. Okay. And how many pounds of tomatoes do

you get off of one plant? Well I probably get 15-20 pounds. But do you know what the potential is? The potential is 22' tall, 300 pounds one plant.

JUDITH: Wow, for just one tomato plant?!?! Wow.

CRAIG: Yeah one tomato plant. There are a lot of factors in that you know. People plant tomato plants too close together. We plant ours 60" on center. We put 4 basil plants around each tomato plant because basil and tomatoes are buddies in marinara sauce. They also happen to be buddies in the soil. And then we'll intersperse borage and comfrey in our tomato row and that really attracts the pollinators. And in our garden, we have a hedgerow that is made specifically to attract pollinators. We do have six beehives on the farm. But honeybees are kind of like, well I don't want to say they're like teenagers, but they are a little lazy until there's competition. So, if you've got a group of teenagers and you throw a basketball in or a football everything changes. And the honeybees are the same way. When you have competition from native pollinators it pushes the honeybees to put out three times more honey which means they have to visit three times more of my plants and my production goes up.

JUDITH: Hmm, isn't that interesting? Little known facts that most of us are not aware of. I appreciate the detail that you're giving us because I've seen gigantic plants, but I was under the misperception that they were so overfed that they produced gigantic crops and that's not necessarily natural either. So, what you're saying is if the plant potential is 22' with 300 tomatoes than our 6' plants are not only falling short but they're not always that healthy either. So, there's something we have to look at with the soil and what we're doing.

CRAIG: And you probably started your tomato off wrong to begin with. The first thing is that most people probably bought that tomato plant in their nursery or farm garden center and they were under the misconception that they want to get the biggest plant possible so that they're going to pick a tomato plant that's 2' tall. The tomato plant has already made her decision when she was 4" tall of what her potential is going to be. She made a conscientious decision. Plants are living, breathing, thinking, deducting and intelligent beings that communicate. They just don't have an old ugly face. And when you start treating them differently, and I know I'm out there, but I'll tell you what, I'll compare my production with anybody. When you start treating plants as human beings. What I mean by that in many ways is every

single seed that you are going to put into your garden you must inoculate it. And you can get that inoculation, it's called BioCoat Gold and it comes from Advancing Eco-Agriculture, and by the way John Kemp is the Amish man that owns that company. If you really want to learn from stuff that's really out there but really beneficial look at his different webinars that he has. It's unbelievable what he can do. I mean you garden. Did you test your water?

JUDITH: No, I haven't. Not recently.

CRAIG: So, you don't know what the hardness of your water is. Water should not be over 70 parts per million in hardness, which means that if it's above that – up to 150 parts per million, 70% of the amendments you put on your soil you're throwing away.

JUDITH: What about when you take water from roofs. We have rain barrels and you know 2 years ago we had quite a drought, so we used all the water from the rain barrels.

CRAIG: That's a good way to do it. Exactly. Use the rain barrels. You know we did some experimenting this year with 30% hydrogen peroxide which most people can't buy. What that did is it really put oxygen into the soil and it did make a difference. But yes, rain water. I mean if you have a garden that is of the size that you can do that. And understand that the old adage used to be 1" of water a week. Now, that's not true. The garden needs to be watered every day. Now that doesn't mean that you have to water every day, because if it rains God already did it for you. But the garden needs to be watered every single day and the other big mistake that people make is, I just had a lady this morning that came to talk about gardening and I said, "What do you have growing in your garden right now?" and she said nothing. Well so what's going to happen is in springtime you're going to put all those plants in the garden and you're not going to get the boost that you should have because you're not feeding those microbes in there. You're not providing photosynthesis to the garden. That should be year-round, especially in the wintertime. And also, wintertime is when the most amount of decomposition actually occurs. So, gardening does not stop. Gardening is not May-Sept. Garden is 365 and if you do it that way and you always have something growing in your garden it will make a huge difference, just simple stuff like weeding. I had a newcomer and she told me that she was a Master Gardener and I said oh that's great. She said what would you like me to do. I said I need you to go over there

and weed that row. So, she went to the row that I pointed out and she started pulling the weeds out and I said woops, wait, stop. Why are you pulling them out? You told me to weed it. Yeah but, that's not how we weed. We weed by cutting it off at the soil and leaving the roots in.

JUDITH: Right. And that's a practice that I've been adapting lately is to just do a very light...we have a nice electric mower, and just go right over the tops of the grasses and leave all the root structure there so it connects...they're all connected under the beds anyway, so to me it feels like it's healthier by doing that. But that's a misperception again. It's also the lack of education and I find folks like yourself who are deeply passionate and committed to working in a sustainable way, you have such great recommendations for all of us. You really do.

CRAIG: Well you know the other thing about gardening is, I as I tell people all the time, do you like to garden? Yep. Why? Well I like to grow the biggest zucchini. Nope that's not why you like to do it. The reason you like to do it is this and I'll explain it in this fashion.

A couple of years ago a young man walked into my garden. I was the only one there. And our garden by the way is 11,800 sq feet plantable. It's inside a 30,000 sq feet fenced in area. And the gentleman walked in and I could tell he was either military or a police officer or something. He said to me, do you mind if I walk around? I said of course not brother, go ahead and walk around. Just don't step on my beds. And so, he's walking around, and he had come to a tour group and I had to go talk to the tour group. So I started making a presentation to this group of a dozen or so people and the first guy comes up to me and he says Mr. Floyd I'm sorry I have to interrupt you. I said sure brother what do you need? He said I just came back from my third tour in Afghanistan. I said I was in Viet Nam brother, I get it. And he says but there's something that I don't understand. I said what's that? He said I haven't felt this calm in years. I said it's the bacteria in the soil brother. What's happening is you are disturbing the bacteria in the soil. That bacteria in the soil is generating the production and releasing serotonin into your brain. You're wasted and you just don't know it. You need to farm brother. I will give you piglets. I have piglets. I will give you piglets. Long story short, I gave him the piglets. He's farming. He's doing well. God bless him.

JUDITH: Wow that's a great story because I've also read...they actually have a name for it, geosmin is what they call it that gets into our brain. It affects our serotonin level. When we look at some of the research out there where children are not allowed any more to just go outside and play in a sandbox or play in the dirt, they're missing some of those microbes that we need to feed our biology because we're more microbe than we are human flesh, you know? We just can't see it, so we have a hard time connecting the dots in that way.

CRAIG: Yeah, those numbers are 95 and 5 and the 5% is human cells and the 95 is bacteria cells. That's why your microbiome is so important and that's why our microbiome is the same thing as Mother Nature's microbiome with all that bacteria and stuff that's in there. But our garden attracts a lot of people with special needs that come from different organizations. I will relate that we have a local school that has children that cannot be in a normal classroom because of anger issues. And when they first came to my garden, each child had two adults to maintain control of them and I told them, I said, once these kids have been here about 10 minutes, I don't need the rest of you because they're going to be normal children. And so, they found out that the old guy knew what he was talking about and now those children come and there'll be just one or two adults for the entire group of kids. We have young adults that come that can't be... they have social issues. There would be no eye-to-eye contact, no communication. They could not complete a task and they've been with me now for over 2 years. They talk to me. They want to shake my hand. We have beard competitions. They can do something, and I can say I need you to go screen compost and they know exactly what to do and they go do it. And you know hearing from the directors of these different organizations the change that we have made in them is just astronomical. The garden really does heal. That's why they call Mother Nature, mother for a reason.

JUDITH: Yeah, I hear you. That's another great reminder. Your stories are wonderful to get the children to calm down. I just heard a story of a young man who was really unmanageable, and I think nature is part of the solution for it. Nature has the answers. We've just forgotten to listen and to pay attention.

CRAIG: That's true and you know one of the young ladies that came one time...she still does actually, but when she first came here, I walked up to her and took off my hat. You know a gentleman takes his hat off for a lady.

Stuck out my hand and shook her hand. And the mentor said, how'd you do that? And I said how did I do what? He said how'd you shake her hand? I said I walked up to her, took my hat off and shook her hand. He said I've never seen that. Normally when somebody walks up to her space, she's going to put a fist in your nose and put you right on the ground. He said I don't understand how you did that. I said, it's the microbes brother. It's the microbes in the soil that are doing that. It heals everybody.

JUDITH: Yeah, yeah and to see gardens go into schools and to see good gardens go into schools, not just poorly maintained gardens but to see real creative efforts with gardening in schools and in hospitals I think would change our whole healthcare system.

CRAIG: It can. We work with a number of different schools with gardens. The Eastern Connecticut Community Garden Association, they help about 20 different gardens in southeastern Connecticut. They've been a huge help with us. And these gardens are all over New London County, but in particular in schools. We've got some stuff going on with the Mohegan tribe now. We're putting in some gardens for them. They're very concerned about that kind of stuff, so we are making a difference. And I want to tell people, how do you know if your garden soil is any good? Put a shovel in the ground, flip it over, if you can't count 10 worms in one shovelful you need help.

JUDITH: Wow, that's a good practical tip, you know? Ten worms per shovelful. That's something I can do. I can go out there. I can turn the soil over and count the worms so that I can get a sense if I'm working in the right direction, correct?

CRAIG: Correct. And we use a lot of worm castings. I've got 1800 hundred thousand worm castings. If you don't know what worm castings is – it's worm manure that we put on every single bedding, every time we flip the bed, so when we take one crop out and we put another crop in we're adding a worm casting and seaweed. We use, last year I hauled 54 truckloads of seaweed. We put it on the garden. We use a lot of woodchips but only in the walkways and never ever in the soil. And again, that's to help the native pollinators that come and actually hide in the woodchips. So, we use an awful lot of stuff that Mother Nature gives us. Why do people rake their leaves and then burn them or put them in a pile in the woods? They have a garden and they're not using the leaves on the garden. What? I

don't understand it. So, we're here to teach people and if your garden isn't really putting out a lot of vegetables 1) I can show you how to test it so you know what the nutritional value is of your food, you know? It's called a refractometer and you use that, and you check the plant sap and you can do a Brix reading which is nutrition. You should be at a 12 or higher. So, there's a lot you can do. But if you don't want to use all that fancy stuff, I can give you tips that will just blow your freakish production out of the water. And nobody likes to weed, and weeds have to do with the success of your soil. I mean we could talk for days about this stuff. There's an awful lot of information out there but listen, I do make myself available to people. That's what we're here for. We have got to save the planet!

JUDITH: I hear you Craig. I really do. Well before we go, you gave us one tip to sort of get some kind of an idea of the health of the soil – 10 worms per shovelful. Do you have a couple of other tips for us?

CRAIG: Yeah. You've got to do a **good soil test** and I mean a good soil test and there's a number of different kinds of tests. Use Logan Labs, they're in Ohio. It's going to cost you about twenty-five bucks. I'm not going to tell you not to go to a local college but just trust me, go to Logan Labs and get a base test. Now the base test is going to tell you what's in your soil. That doesn't mean that's what's available to the plant.

JUDITH: Right.

CRAIG: But it's a start, it's a start. A saturated paste test will tell you what is available to the plant. Just because it's in the soil doesn't mean a plant can get it. Then you can do a plant sap analysis and tell right now what that plant has. What she's storing. What she doesn't have enough of exactly. It's like taking a blood test of a plant. Logan Labs is a way to start and if you don't understand how to read a soil test, if you look for Dan Kittredge 9-part series, Dan Kittredge 9 part series and you watch that you will see how to read a soil test. It's really, really, simple and he'll give you some good information on that. And the other one which I said earlier was **to inoculate every single seed**. What's the first thing a human mother gives a baby when it's born? It's bacteria and you need to give that same bacteria to those seeds, every single one. And then you've got to water every day. But by the way, did you take a soil test, I mean water test brother? Do you know what's in your water? What's the ph of your water? How hard is it? What's in there? Do you even know that? And then you need to start adding

minerals. Like I said carbonatite, basalt, azomite, put those minerals in the soil.

JUDITH: Yes, and I know I'm a new member this year of the Bionutrient Food Association, the BFA. I've had Kris McCue on the podcast to talk about soil. And I can only tell my listeners how invaluable their information is. Because their mission statement is to not just regenerate soil but to create food that's really healthy for us and food that's packed with nutrients. And the only way we're going to get there is if we look at our soil.

CRAIG: That's very true and God bless Kris. I love her. She's fantastic. I've known her for awhile and we do work together. The Bionutrient Food Association, or BFA, is coming out with a new device. In fact, it's already out and it will morph eventually into an app on your phone which will allow the consumer to go to the local grocery store. And they're looking for swiss chard, as an example, and they can shoot a beam of light at the swiss chard and tell instantaneously what the nutritional quality is of that swiss chard. So if there's 10 bunches there and 8 of those bunches show that there's not the right nutritional value but two of them do, the consumer is going to buy those two bunches of swiss chard, which is going to change agriculture forever because the store manager is going say, Mr. Conventional Grower, your stuff is not selling because you have no nutritional value in your food but I can sell it from a regenerative farm and that's what people want to buy. You better change what you're farming. You've got to quit putting the plow into your soil and you've got to stop creating genocide and killing all that microbiology that's in the soil. You need to learn the right way to do it.

JUDITH: Yeah, I agree. It's a mindset that we have to change and that's not always easy. But, if each of us does our part, then the sum of our parts is going to make a big difference in the long run and that's where my hopes and dreams fall, especially with doing this kind of a podcast is to connect the dots for people and inspire people along the way, to take action now. It's not about next week; it's about now. What can you do today? How can you prepare your garden for today? How can you make a difference today? That's what this is all about.

CRAIG: That's true and again by contacting us and going to our website www.DPNC.org you can see all the things that we offer, and we have before school programs, after school programs, summer camps, etc. Also, if you're on Facebook, and I know a lot of people don't like Facebook and I get that,

we have a closed group that's called *Giving Garden*. You have to ask to join and then you can then get a lot of our secrets, a lot of our tips but you can also go to our website, contact me personally, call me at the nature center, that's what we're here for. It's all about learning how to take care of nature and how to share it with others, especially the children.

JUDITH: That's wonderful. Well we have to close and thank you for your tips, your information. They're very practical. I hope people will, the gardeners among my listeners, I hope they will take your words to heart and if they're not doing certain things that they perhaps look at Logan Labs and get a more comprehensive soil testing. We're always telling people to get a soil test but a more comprehensive one will really make a big difference. So, thank you Craig for your time and your expertise. I really appreciate it.

CRAIG: Thank you so much and God bless.

JUDITH: Alright everybody this is Judith Dreyer. I'm the author of "At The Garden's Gate", book and blog. My book is available through my website which is www.judithdreyer.com as well as several distribution arms such as Amazon, Nook, Goodreads and more. I'd like to remind all of you that a transcript is available for each podcast. And please like and share these podcasts. Let's get the word out and support each other.

And remember, NOW is the time for practical action and profound inner change so we value our world again.

Enjoy your day.