SUE HULSMANN

Transcript: Deep Noticing, Creative Pollination, and Beekeeping

Sarah Greenman:

Hello, and welcome to Collaborative Alchemy. My name is Sarah Greenman, and I'm a creative alchemist, artist, storyteller writer, and facilitator. I believe that your creativity is a gift meant to be wielded with great love and joy. It is a bone deep tool for justice, healing and regulatory collective liberation. Collaborative Alchemy is a series of conversations with artists, thought leaders, activists, farmers, educators, creatives and other polymaths where we tell our stories, expand our histories and hold space for new ways of being.

My guest today is Sue Hulsmann, an enthusiastic beekeeper who hails from the central coast of California. Her love of everything outdoors is absolutely contagious. A self-proclaimed lifelong college student, Sue holds several degrees, including a bachelor of science in ornamental horticulture from Cal Poly State University in San Luis Obispo. She's an accomplished master pruner and grafter and grows an overabundance of food and flowers for her family and neighbors. And Sue is the owner of a honeybee relocation company called Suzy and The Queen Team. She is an expert in observing and grading wild colonies and their queens, and I'm so excited to be speaking with her today. Well, I would love for you to tell us about your work and what brought you to it.

Sue Hulsmann:

I was always a gardener flower child. My parents always had a garden and a fruit orchard. And so, I grew up eating food out of the garden and appreciating flowers. But it wasn't after multiple college degrees that I ended up at Cal Poly studying ornamental horticulture, and I graduated and grew cut flowers. And I was stung by bees all the time. I knew which flowers to cut in the morning and which could be cut a little bit later, but I did not appreciate bees the way I do now. What happened was, I moved to Paso Robles, planted a glorious orchard and had no pollinators. And so, I thought, "I should get some bees." and that started it off.

Sarah Greenman:

So, when you got your first bees, they were for the orchard for pollination purposes.

Sue Hulsmann:

They were.

Sarah Greenman:

So, when you got your first hive, how did that experience go?

Sue Hulsmann:

I'm a master pruner/grafter. So, I pruned my trees in the spring, thought everything looked lovely. The bees pollinated every single blossom, and I had to thin fruit, and I had to change my pruning methods drastically because the bees were really crazy. My garden was nuts that year. And so, I really started watching the bees in the garden. The foragers forage the cucumber blossoms early in the morning, but not in the afternoon. So, I started noticing nectar flow in certain flowers occurred at certain times of the day and the bees knew it. And so, I was just fascinated with my feet in the garden, watching the flowers. But then, once I got my head into the hive, everything changed because I could see bees bringing in beautiful colored pollen in a variety of different colors. And it just really, my relationship with the bees really sealed my relationship with the garden and the orchard. I felt like I was really witnessing all that.

Sarah Greenman:

One of the things that we're working on in the Creative Alchemy Cycle, this program that I offer to folks is a sense of deep noticing, especially with our natural surroundings. I don't know if everybody would notice what you noticed. Talk to us about your practice of deep noticing, because if you're seeing things like differently hued pollen come in at different times of days, you're really watching.

Sue Hulsmann:

Oh girl. And the foragers bounce from flower-to-flower-to- flower, but they stay within the same species. Foragers are species specific. So, the ones that keep coming back to the cucumber every morning are all cucumber oriented. And only when the cucumber nectar dries up a little bit later in the morning, because the nectar is only operated a certain time in the day. Then, once a cucumber is not a producing nectar in the flowers in the morning, those bees go to other related plants, cucurbits, other squashes and melons and flowers with a similar shape. And so, it's really interesting that foragers are good at certain flowers shapes and will follow those flower shapes wherever they are in the environment.

Sarah Greenman:

They're specialists.

Sue Hulsmann:

They are really specialists. They are, it's beautiful. And once they're done foraging nectar or pollen, they take off headed to home in pretty much a straight line. So, I love to see where they're going. Where are they going? Where is home?

Sarah Greenman:

So, did you keep a journal as you processed their patterns and cataloged your own noticing?

Sue Hulsmann:

I took a lot of photographs, and we have children and they were in the garden with me. So, I showed them. And so, we were all looking at the same bees. And it got so bad, Sarah, that I devised a little unit to mark bees, to capture bees that were foraging on certain plants with a little bit of honey and then to mark them with a certain color so we could time their return to the same plant. And it was so much fun with the kids that I sent the little plan and some photographs to the American Beekeepers Journal, and they published it in the letter to the editor.

Sarah Greenman:

How fabulous.

Sue Hulsmann:

It was so much fun because we knew the same bees were returning to the same flowers, but it took a little time to develop a system to mark them in order to really see. And so, it worked really well and the kids loved it.

Sarah Greenman:

I bet. Oh my gosh. As a kid, I would have totally eaten that up. That would've been such fun.

Sue Hulsmann:

And there was no chance... The bee climbed into a little contraption with honey in it. And so, when we were in the garden and there was a bee in there on the borage plant, then we would mark it with a little purple mark because borage flowers are purple. And then, we would release it from this little cage. So, there was no chance you could get stung marking the bee. And so, the kids were marking bees like crazy. I was going to rent their little services to someone. But it was fun to see the purple bees on some other plant later in the day.

Sarah Greenman:

So when you started this process of really noticing their patterns and pollinating your own orchard and getting your kids involved, was there a moment when you thought, "I want this to be what I do now."

Sue Hulsmann:

Yes. The kids, at some point, started spending less time in the garden. I'd say, "Let's go pick tomatoes." and they would say, "Oh mom." So, pretty soon, I was out in the garden by myself a lot and it was nice because it was quiet and I loved being with all the plants and gathering and harvesting and planting and getting my hands dirty. But at some point, I realized I needed a career that was really going to bring in some money. The kids were going to school.

I thought about selling produce and fruit, and I was already doing that. But my husband told me, "Picture your perfect job and then go get it." So, my perfect job was handling queen bees, that was my perfect job. I could find queens very easily. I could gauge their production and their temperament. And I was very good at looking at a colony and understanding its overall health. And so, I wanted to spend all my time looking at queens. So, I built a business and that's what I do all day. I remove bees from structures with a crew and a general contractor. We remove bees from structures, commercial, residential, garden sheds, wine barrels, you name it. And that's what I get to do all day long is, I get to find the queen, look her over and that is a lot of fun for me.

Sarah Greenman:

I love that it's the queen specifically? I have this theory. Walk with me for a moment here, I have this theory. There's this idea that we have the maiden, mother and crone, right? These three parts of a feminine life or a female life. Maid in your early years, mother in your childbearing years and then we jump right to crone. And I feel like that's a big jump, and I think there's a fourth one in there, which is queen that you finally come of age. You know what you know. You are master of all you survey. You've really earned a place in society. You're a wise woman, but you're not a crone yet. You're not the old haggedy-raggedy lady at the edge of the sea, shouting at the gods. You're a queen. And so, I love that it's the queen that drew you. Talk to me about what it means to be queen bee.

Sue Hulsmann:

The queens are different just like women are. Some are a little cranky. Some are very gentle and sweet. Some are a little bedraggled and not doing so well. Some are fresh and spunky and will hop right off of the comb. So, grading queens is very much like meeting a new woman. Someone comes into your life and she's cheerful and wonderful, but her children are brats, that kind of thing. I love looking at queens. And the queen in the bee world lays all of those eggs. All of those workers in that colony are her daughters from many different fathers. And so, the temperament, the productivity, the hygienic clean qualities of the colony, all stem from the mother, and I love to watch her. I love to watch the queens in the colony surrounded by the other bees. The bees all face her in a little circle. It's called a retinue, just like a Monarch has retinue. And she has a retinue, and if her retinue is only four or five bees, that's not so good. But if her retinue is 20 or 25, I jump up and down.

Sarah Greenman:

So, is that a marker of a healthy colony if she has a retinue?

Sue Hulsmann:

Yes.

Sarah Greenman:

Okay.

Sue Hulsmann:

Yes. Yes.

Sarah Greenman:

So, she is the mother of all the bees. Talk to me about the daughters. Talk to me about their job and what their place in the bee's society is

Sue Hulsmann:

What is so beautiful is, as a bee ages, a female worker bee ages, her jobs within the colony change. And it's just like human children, it is exactly like human children. When they're little, they won't pick up their toys and put them in the toy box, you know? And that is exactly, when an adult bee emerges from metamorphosis, it pupates, it emerges as an adult bee. Its very first job is to clean the cell that it emerged from.

Sarah Greenman:

If only I could get my children to clean the cell that they emerge from.

Sue Hulsmann:

It's the truth and they just come out and do it. It's instinctual. Our children have that instinct, we just have to coax them a little.

Sarah Greenman:

I think they do. I think I ruined it in them.

Sue Hulsmann:

But as she ages, and she cleans more and more, her next job is to feed the older larva. And that job is fairly easy. They are fat little caterpillars in their cell, they're hungry. That job is not too difficult. And as the bee works at that job, they learn to feed smaller and smaller and younger larva. So, feeding a toddler is real easy, you hand them a little cracker or something, but feeding an infant is much more difficult. So, the bee ages and it finally feeds the younger larva. At some point, it becomes a wax builder and it exudes wax from underneath its stomach area, its abdomen and begins building wax. And the architecture of bees building wax is a beautiful thing. They build everything plumb and level.

Sarah Greenman:

Wow. How do they know?

Sue Hulsmann:

They hang in little chains of bees, just like somebody would hang a string to mark. And as they age a little more, they are the receivers who receive the groceries that come in the front door.

Sarah Greenman:

That's the point that my child is at. We're at the receive the grocery stage in our development at 13 years.

Sue Hulsmann:

I'm right there with you. My kids are really good at the receive, the groceries. And the bees receive the groceries and they put them away in the hive, wherever it's needed, whether it's needed near the larva or whether it's needed in the pantry. Then, finally the bees, the older bees become foragers and they go out and get the groceries. And none of our kids have driver's licenses, so they're not there yet.

Sarah Greenman:

It's going to happen soon, but not right now.

Sue Hulsmann:

Not yet.

Sarah Greenman:

So talk to me too about, what does care of the queen look like? You mentioned this retinue, that if it's a larger group, that it's a healthier colony. But what does caring for the queen mean?

Sue Hulsmann:

The queen does not leave the hive once she's mated. So, as a virgin, she flies away from her hive, mates in midair with multiple drones, comes back mated and never leaves the colony again.

Sarah Greenman:

Ever.

Sue Hulsmann:

No. Well, there are several reasons and I'll talk about that. She can leave, but she's huge. She cannot fly. Once she returns to the colony mated, the bees feed her. She does not feed herself. The bees groom her constantly. She is getting massaged 24/7. And if she poops, the bees immediately take it out of the hive and they clean her more. So, she is just loved and adored. They touch her with their legs and with their antennas, and it's a beautiful thing to behold because she must like it.

Sarah Greenman:

It's an evolutionary thing, I'm sure too, to be constantly stroked and loved and like "We're here for you. You can do it."

Sue Hulsmann:

Yes. Okay. So, that is pheromone driven. The queen has this beautiful pheromone, combination of pheromones. The bees love that. By touching her and grooming her and then touching other bees and walking about the colony, they spread her pheromone throughout. So, her presence is smelled by the bees with their antennas. They don't have a nose. They know smell with their antennas. So, her beautiful footprints leave pheromones on the comb and her body emits pheromones that the bees just love. So as a queen ages, her pheromones wear down, they wear off.

Sarah Greenman:

She goes through queen menopause.

Sue Hulsmann:

She does, she does. And so, fewer attendants, she has fewer attendants and her retinue is smaller to the point where one day, not too long ago, I found a beautiful swarm cluster in a shrub. And it had a queen inside that was beautiful and fat and fuzzy and looked fairly new. And below that beautiful cluster on a little branch, was a queen with one attendant. There were two queens and they had booted the old queen. She was kicked out. And I captured her and put her in a little cage and she looked old, her wings were tattered and she was very, very skinny. The bees had not been feeding her.

Sarah Greenman:

So when they are released, if the queen is outed, then, of course, she'll die because... Wow. There's no one to tend to her. Oh my goodness.

Sue Hulsmann:

So, I tried to give her attendants. I tried to give her attendants. I was trying. They would not have her. And the queen that was ruling was beautiful so the bees knew. They knew better.

Sarah Greenman:

Wow. Completely fascinating. I received a beautiful piece of jewelry that was built and made by you, I believe, from one of the creative alchemists that I work with, and it is a gorgeous pendant with one 12th of a tablespoon or a teaspoon of honey in it. And can you tell me about your idea to make jewelry and what it is and just share with us that process?

Sue Hulsmann:

I have been making jewelry for a very long time, since maybe I was 17 or 18. I do sterling, I bead and I do copper. I have lots of different metals. And I wanted to show people how much honey, one bee produces in a lifetime, because it's not very much. The foraging force is about a third of the colony, a third of the population of a colony and they work themselves to death. They actually die in the field working. They don't die inside the hive. They die of old age in the field working. And one forager's lifetime worth of honey production is only one 12th of a teaspoon, and it's such a small amount that I really needed a visual to show people.

Sarah Greenman:

One teaspoon is 12 bee's lifetime of work. And it goes down the gullet in a hot second.

Sue Hulsmann:

Yeah. But it's such a beautiful visual because it really illustrates how many bees it takes to fill a jar of honey, and that cooperative work is really something.

Sarah Greenman:

It's astonishing. There's so many metaphors that, as a writer and as a creative, that I want to pull out of that about how what we create together as being so much more potent and powerful than what we could ever accomplish alone.

Sue Hulsmann:

Yes. Yes.

Sarah Greenman:

Beautiful. The necklace is gorgeous. Tell me about your creative process with jewelry-making.

Sue Hulsmann:

I keep a journal. And because my business and I talk to a lot of people on the phone and I have kids schedules, I've always kept a journal. I write everything down and I try and keep track. I draw jewelry.

Sarah Greenman:

You map it out first in your journal.

Sue Hulsmann:

I think of something on the fly, and if I don't write it down, I won't remember it. Sometimes it's a piece of jewelry that I'm inspired by someone else wearing. Sometimes it's just something that I come up with. I actually, I like leather, and so, a lot of my jewelry right now is involving leather with bees or bee embellishments in metal. And I really like floral jewelry. I am a flower freak at heart, and so, a lot of the jewelry that I wear and make has some sort of a flower involved in it.

Sarah Greenman:

The necklace that I have with the honey does have a little copper coin with a little bee stamped into it, and it's just such a beautiful expression of not only a lifetime of creative work, but also the natural beauty of what they create. This sort of Amber colored sugar is just its own jewel to me.

Sue Hulsmann:

It is. And when I make the necklaces, I often make them in batches, larger numbers of necklaces and I hang them in the window as I'm working because the color is so beautiful. The honey through the glass in the window, I really enjoy looking at it.

Sarah Greenman:

How long have you, you been beekeeping as a profession? How many years?

Sue Hulsmann:

Eight years, I guess.

Sarah Greenman:

And in that time, can you tell us about a surprising moment or event that you had with a colony or a queen or a bee, something that really spoke to you deeply?

Sue Hulsmann:

Right now, in California and all over the world, honeybees are having a real problem with Varroa mites. These are like fleas on your dog, but they're on the honeybees, and they vector viruses and they make the bees sick. They feed on larva. They are just a big nuisance, Varroa destructor. Many commercial keepers have the bees on a treatment schedule to treat for these mites to try and keep the mites away from the bees. And many backyard hobbyists are doing the same thing. They test for mites, they want to see if their bees have mites. And I am especially happy to look at wild colonies. These are colonies and a house that have been there five years that have not been treated by a beekeeper or fed by a beekeeper. These are wild colonies that are at nature's best. And when I can see a colony that has not been treated for Varroa mites and that has special qualities, no Varroa mites, it makes me do a little happy dance because it means these that colony has the genetics that it takes to not have Varroa mites and be treatment free.

And I think with everyone treating for Varroa, and I get to see these colonies that have not been treated and are really doing well. Now, not every single one, some are riddled with Varroa and need help. But when I see a beautiful wild colony with a fantastic queen, really looking textbook perfect that doesn't have a single Varroa mite, I have a spiritual experience because I'm seeing something like a $5 million race horse. Let's put this baby in the race. Draft daughters from this queen and put them in the race.

Sarah Greenman:

The mites. I've been hearing a lot about these mites. I think we should be calling them murder mites instead of the murder hornets that we heard so much about it.

Sue Hulsmann:

Yeah. They're horrible. And they're so tiny that new beekeepers can't see them and it's tough.

Sarah Greenman:

What are some of the other challenges facing the honeybee?

Sue Hulsmann:

The drought, weather. California has not had a great spring rainfall.

Sarah Greenman:

And Oregon's already under a drought watch, already in April

Sue Hulsmann:

I wish we had more rainfall. It would make it so much easier on the bees. Already, I see things drying up here and they're working hard. And spring is a time when they should be putting on lots of honey. And I'm not thinking this is going to be a fantastic year for that.

Sarah Greenman:

when you have these cycles of extreme drought and then fires. And then, in the winters we see extreme cold and flooding. What does that do to a colony? I know that in terms of drought, it makes it more difficult for foragers to find what they need and to put on honey in the spring. But what are some of the other implications of this extreme weather cycle that we keep seeing?

Sue Hulsmann:

There are different races of apis mellifera. So, there are different types of honeybees. Here in California, the two most popular are Italian, which are very yellow and pretty orange, bright yellow. And then, there are Carniolans, which are a darker color. The Italian colonies go gangbusters. They wake up early in the spring, they produce lots of honey. But when the nectar flow dries up and things get dry in California, they don't shut down. The queen continues to lay lots and lots of eggs. The colony still has lots and lots of larvae to feed, but there's no forage outside. And it takes the Italian colonies a while to shut down in June, July, August, when it gets really dry here. And that means they eat up all their honey stores. Now the carnies, the Carniolans are slower to build up in the spring, but they're more thrifty.

Anytime there's a little shutdown in the nectar flow, the queen immediately slows down her egg laying and the colony is more aware of the dirth, the lack of nectar. And so, the carnies will shut down and build up and shut down and build up depending on what nectar flow is going on here. So, different races and different combinations of those races, and those aren't the only two races here in California, have a very different way of handling the nectar flow or the lack of nectar flow. And I love to watch that, because the bees know it's happening before I see the flowers drying up. It's amazing. They're very aware of the seasons and the nectar and pollen sources that are available.

Sarah Greenman:

I think about bee societies, of course, being so connected to weather patterns and available natural resources. But I think humans were the same exact way, we just don't have a system for alerting ourselves that we are in a moment of lack or a moment of resource restriction. And we don't modify our actions based on resources and available resources. I think we could learn so much from bee colonies.

Sue Hulsmann:

Oh my gosh. That is so funny, because with COVID and all the shortages, that is something I hadn't even thought of. The bees know when a shortage is coming.

Sarah Greenman:

And we do too if we're honest. We're not dumb. We continue to consume at a level that was at high resource consumption. And I am so curious about ways in which human society and communities can mimic bee societies in terms of resource use and also protecting each other and our children.

Sue Hulsmann:

Yes. I do see some colonies that are pollen hoarders. They hoard pollen, and some people like to eat pollen. And so, those colonies are really good at hoarding pollen, and it would be easy to steal a little away from them for consumption. But I see these bees very regularly, and some of my beekeeper friends and I are going to keep a watch on them. But I think it's so funny. I don't consider honey hoarders. All bees hoard honey, right

Sarah Greenman:

That's their job, right.

Sue Hulsmann:

But I do see some hoarding pollen, and I think that's true of me. I like to do canning and dehydrating with my garden, and I always feel more secure when there's a lot in the pantry.

Sarah Greenman:

Absolutely. Yeah. I love to think of these pollen hoarders as the folks that are buying eight different Costco packs of toilet paper. What other lessons learned have come from your interactions with bee colonies and your intimacy with them?

Sue Hulsmann:

One big lesson is patience. The bees do everything in their own time. My little schedule and the journal really doesn't have anything to do with it. The bees do everything in their own time. And I, by nature, like to see immediate results with my jewelry, with my gardening, with my pruning and my fruit trees. But with bees, the results aren't immediate. You have to sit and wait to see how productive they are, how gentle they are, how much pollen they store, how easy they are to work with.

And I need to still myself to observe what's going on. The bees don't hold up a little flag and say, "We're queen-less, Sue. Take a look in here." It's up to me to lift the lid and hear the sound, the queen-less roar and know before the lid even comes off, what's going on inside. And it's because I quiet myself when I go to the bees, so that I can be observant and listen to what they're telling me. And I am a good listener of people as well, but listening to nature is a little bit harder. It's a little more quiet, a little more subtle.

Sarah Greenman:

That's beautiful, Sue. There's so many moments out here. I live in far Eastern Oregon at the base of the Wallowa-Whitman mountain range, and we're surrounded by natural beauty of all kinds. And I feel so frequently called to stop and just get still. And so, I love that that is a practice that you have before approaching a colony and that their health depends on it. Their health depends on your silence and your stillness.

Sue Hulsmann:

It does.

Sarah Greenman:

Does it ever feel sacred?

Sue Hulsmann:

Very much, every single time.

Sarah Greenman:

Wow. Sue, thank you so much for your time today. This has been such a delightful conversation and you've got my head buzzing about all the different ways that I can incorporate food, flowers and bees and pollen into my work this season.

Sue Hulsmann:

Oh good!

Sarah Greenman:

Thank you all for listening. The Collaborative Alchemy podcast is made possible with micro donations from my community through patrion.com and you can find me, Sarah Greenman at patrion.com backslash Sarah Greenman or Sarahgreenman.com. Have a beautiful day.