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Proem

The only time I felt I could draw was when my Oma was dying. I sketched the outside of her. I had recently read "Drawing on the Right Side of the Brain" by Betty Edwards, which revolutionized art instruction by teaching readers to perceive edges, spaces, and relationships—core skills for realistic drawing. It features exercises in contour and blind contour drawing, emphasizing the importance of drawing what you actually see, not what you think you see. Now, when I'm curious, I want to know the backstory to fill out the edges.

My antennae stirred when reading 'YOUR LOCAL EPIDEMIOLOGIST' about Bird Flu. The Paramedic and Emergency Nurse personas in me feel anxious. No reports are coming out of the CDC, the aggregation of State infection data has been discontinued, and the administration is comfortable with days-long reaction times to disasters, having defunded and staffed mitigation work. So, look out farther to the edges of bird flu –the front line of people managing flocks of birds. Bird flu is nothing new, but the usual 10- to 15-year interval between epidemics has changed. Bird flu isn't dying out or going dormant anymore. The CDC is reporting incidents of infection jumping from birds to people. Our federal



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government seems unprepared - danger, danger, danger. I know so little, and I'm scared. Not a healthy mix

Podcast intro

Welcome to Health Hats, the Podcast. I'm Danny van Leeuwen, a two-legged cisgender old white man of privilege who knows a little bit about a lot of healthcare and a lot about very little. We will listen and learn about what it takes to adjust to life's realities in the awesome circus of healthcare. Let's make some sense of all of this.

Introducing Shannon Hayes

Fortunately, I have a dear friend, Shannon Hayes, owner and CEO of Sap Bush Hollow Farm in Upstate

New York - West Fulton. Shannon and I met 25 years ago when my wife and I were buying lamb, chicken, turkey, and eggs from her parents. Shannon podcasts, too. Warm, humorous, informative: <u>The Hearth of Sap Bush Hollow Podcast & The Radical Homemaker Blog.</u> I recommend them.

This conversation with Shannon took place in February of 2025. Shannon is informed, humble, and eager to share. I'll cut in a couple of times. Not because Shannon's tale needs a drop of translation or background. But I've learned more from these words each time I've touched them in production. I needed a second to digest what I just heard. I'll do that aloud with you. Appropriately, we jumped right in talking about shit, bird shit.

Shannon: Men are allowed to use that term without any problem, but women are looked at as being foul if they use it. However, I'm now 51 years old and I couldn't give a shit. That's so funny because that is the language. That we use. You don't say there's fecal matter. You don't leave there's manure. It's fast, it's effective. It's what it is.

Health Hats: Is a cow shit called something different than chicken shit?

Shannon: No, shit is shit. We identify species, then shit.

Health Hats: Okay. All right. That's good to know.

Shannon: Hi, Danny. How are you? Good. I'm glad to see your saxophone.

Health Hats: I was thinking about how we met. I met your mom first. Because we were customers, we met you on the farm? Because we did. I thought you were in school or something.

Shannon: I've been with Sap Bush Hollow since 1979, when we moved there. But I went away to college. I met you when I was still in grad school. So, I used to help when college was out for the season, then for the summer. And then, when I started grad school at Cornell, my mom was handling all the sales



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through the farm kitchen. Then I came home every time there was a sale. I also came home every weekend. And, helped on the farm. So yes, it was a big event. She would've had to be back there in time to help. Big event with the chicken pickups. Oh yeah. Yeah. And lamb. Yep. A lot of lamb.

Health Hats: A lot of lamb.

Shannon: That's still the centerpiece at Sap Bush Hollow. We do lamb better than anybody else. Our lamb is the best.

Health Hats: Shannon, please introduce yourself.

Shannon: I'm Shannon Hayes, and I'm now the CEO of SAP Bush Hollow Farm, which my parents founded in 1979.

Health Hats: You're located in upstate New York.

Shannon: We are located in West Fulton, New York. Anyone from West Fulton is very proud to tag that onto our name because nobody else knows where it is. But it's in West Fulton, New York, which is in Schoharie County. That's about 45 minutes west of Albany.

Bird Flu: Context and History

Health Hats: The reason is that you and I have been talking. I was particularly interested in your blog post about bird flu. The reason for my interest was that there's often a lot of abstract talk about bird flu, and there's a lack of epidemiological information about it. I appreciated your discussion of the topic on your blog. Oh, and what's your blog called?

Shannon: It's https://theradicalhomemaker.net. You can also find it at https://sapbushfarmstore.com.

Health Hats: Okay, thank you. Anyway, I found the concept of having protocols for safety to be intriguing. So, can you explain what that means in terms of establishing protocols for safety against bird flu? Because obviously you have a flock.

Shannon: I'm going to give you a little bit of a historical context first. You came into the circle of Sap Bush Hollow at a time when farmers were really trying to reach out and connect very deeply with the public. And you were one of the leaders in the farm-to-table movement. As far as I can tell, you were one of the original people who decided it was worth connecting directly with farmers. That was a time,



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and the expectation of small, local sustainable farmers is that our lives, we were all told, had to become an open book.

We needed to be very transparent in what we did and invite the public in to see what. We were all about it, so they could learn to trust us, because everyone thought that if you wanted safe food, you had to go to a grocery store. They had to learn to trust the farmer, as well as trust us as people. And you were one of the leaders in moving forward and saying, 'Let's break this barrier.' Let's get to know the farmer directly. And that's how you started stepping foot on SAP Bush Hollow Farm.

Health Hats: I wasn't a pioneer. I was a back-to-the-land hippie living in rural West Virginia in an intentional community (commune), more rural than West Fulton. We kept chickens, bees, and, for a brief period, goats and a horse. We were used to getting our meat locally. We were excited to discover Sap Bush Hollow in upstate NY.

An Ecosystem for Biosecurity

Shannon: However, before that time, my dad, who was a professor of agriculture, used to always talk to us about biosecurity and closing the farm loop. We always have to think about biosecurity in terms of if you bring an animal on, you don't want to bring disease onto your farm.

So, for example, we don't bring other people's boars onto the farm. We artificially inseminate the pigs. You try to, we call it keeping the loop closed. You try to keep the farm as an ecosystem. This era in American history, in which small farmers opened up their land and welcomed people onto it, marked a departure from the closed-loop system. But it was great. It was a way to connect with customers and build relationships. But I'm gonna say the dirty word that we're not supposed to say anymore. Climate change and diseases were real issues. When COVID-19 emerged, biosecurity was ingrained in our nature because we had always had to consider this before many of the COVID-19 protocols for farmers, who had been in farming long before we understood what this meant in terms of maintaining their ecosystem and living within it. And I've been noticing, as I've been hearing about avian flu in the news. The farmer is conspicuously absent from the conversation, and I think there's a real danger in that because the farmer is conspicuously absent from the conversation. We, farmers, aren't talking about how we're going to protect our flock.

Health Hats: Similar to patients at the table for healthcare decision-making systems.

Shannon: And the fact is, it's all for one, one for all. If bird flu is found on a nearby farm, we all go into lockdown. Therefore, the only way we farmers can protect our flocks and our livelihoods is by protecting our ecosystems and then protecting one another. I want that conversation to enter the public dialogue.



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Still, I also believe it's essential for the public to understand what we're going through to maintain a resilient and safe food supply.

But also. It's a little bit insulting when you hear people say, There are no eggs in the grocery store. And I'm sitting on 20 dozen at my little farm store because I have them available. And people seem to think these little farmers are invisible. Still, there are little farmers like me all across the country who are taking measures to keep it safe, engaging in biosecurity protocols, and who would like to sell a dozen eggs to people who can appreciate what we put into this effort.

Protocols for Biosecurity

Health Hats: So, first of all, how did you come up with the protocols? What was your process, either Shannon's or your team's, and where did you get your information? How did you develop your safety protocols?

Shannon: Well, an essential tradition on our farm is that we participate in a program called New York State Grown and Certified requests that we open our farm to a state veterinarian. And many farmers are afraid that Big Brother may not like the idea of that, but we happen to have. I don't want to use the term 'awesome' freely because I feel it should be reserved for truly exceptional things. And we happen to have an awesome state veterinarian. And he comes onto the farm, and he inspects the pigs. He looks at the sheep. He talks, and we go over all the different things we're doing. We compile our lists of questions over a year, incorporating observations we've made. And he's on the farm once or twice a year. We make a big pot of coffee, and all of us gather round. He's coming, let's sit beside the fire and talk. But my daughters, they're 18 and 21, they come loaded with questions.

My father comes loaded with questions. My husband and I go. He has built a real relationship of trust with this man. His name is Dr. Robert Scrafford. And we come, we count on him to find out where things are going and what's happening. And Dr. Scrafford has been working with us for years, largely due to bird flu.

We think it's hot this year. I'm sorry, but they believe the 1918 flu pandemic was the Spanish flu? I think that might have come from bird flu as well. It's been around for a long time. This is not new. But as Dr. Scrafford has been educating us over the years, it is cyclical, but the cycles are getting shorter and shorter.



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Call to action

I now have one URL for all things Health Hats. https://linktr.ee/healthhats. You can subscribe for free or with a contribution through Patreon. You can access show notes, search the archive of over 600 episodes, and find links to my social media channels. Your engagement, through listening, sharing, liking, and commenting, makes a significant impact. Thank you.

Changing Protocols – Our Boots

That's where my information comes from. And what he taught me back in 2022. So, Danny, as my parents aged, we decided not to have on-farm sale days like you used to come to anymore. We opened up a cafe, two and a half miles down the road, to meet people.

And that became particularly important during the pandemic, as it helped keep our social life going. It kept our business going, but it also protected my parents, who were still living on the farm. We would always offer farm tours. And still let people come. However, after talking, what happened was the last big outbreak that I can remember, or the first big outbreak that I recall being active on Sap Bush Hollow, which occurred in 2015.

And at that time, it was, I would say, a 15- to 20-year cycle before avian flu became a problem again. And that's when my mom would say to me. You don't leave your shit on anyone else's farm. And she started changing protocols and teaching us about what we need to do to protect ourselves. And back in those days, it was like you had farm boots. Those are boots that stay on the farm. And that was how Mom thought of it. And you don't wear farm boots to visit another farm. You don't wear farm boots to go to town. So you keep those for there. You show up on the farm, you change into those.

And that is where the meaning you don't leave your shit on anyone else's farm came from. However, in 2015, we began to learn this. I thought I wouldn't see avian flu for another 15 to 20 years. That's not what happened. It reared its head again in 2022. And Dr. Scrafford said to me, 'You know what's happening, though?'

He said, it's not dying out the same way. So it should die down, and it does. People can expect some relief when the weather starts to get hot, but when Dr. Scrafford said, 'We're starting to see the cycles get shorter and shorter,'

Changing Protocols – Chicks, Eggs, and Chicken

I began to realize that to protect my farm and maintain a stable market supply, I needed to change how I marketed to my customers. I needed to change how. Our policy regarding our level of openness to the public. And so, I started instituting some macro changes back in 2022. The first one is that my customers



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always expected to be able to order fresh chicken beginning in May. And what I started realizing is that if somebody gets shut down due to bird flu, even if it's in the middle of the country, they get the first claim on the eggs.

Okay, so we gotta get them back up and running again. The other thing I realized is that if Bird flu hits my supplier for chicks. Then they can't move either; they're in lockdown. Even though they have chicks coming, and even though they don't have bird flu, they're not allowed to sell me chicks. New York State and many states have different protocols depending on the state you're in. However, New York State will not let anything cross the line if it thinks another state has bird flu anywhere near. I started changing my marketing strategy, realizing that if I don't bring live birds onto the farm until summer is really in gear and it's hot, then I have a better likelihood of keeping my supply chain going.

So I stopped selling fresh chickens in May. I stopped selling fresh chickens in June. I don't get birds on the farm until starting around Memorial Day weekend. So that was one protocol. The following protocol I started influencing in introducing was shutting down farm tours. Our family still believes that we need to maintain this connection with the public, but to protect us, we must not let the public onto the farm.

Ducks, Geese, Overflying Birds

Because we used to think it didn't matter. It was other farmers who presented the risk. It's not the case. It's dabbling ducks. It's wild waterfowl. So, geese and ducks. So, if people like to visit parks, streams, or anywhere else, they could pick it up and bring it back to my farm in 2020.

Health Hats: So, meaning like, when we take a walk along the Mystic River near us. Exactly. There's bird poop everywhere. Yep. And so that's what you're talking about. Yes. Like walking in the park, and there's Yep. Bird shit. And that's so I get it on my shoe, and I come to your farm. And I bring it.

Shannon: Precisely, you could bring it. Wow. I had to; I made that choice in 2022 to stop allowing farm tours. However, we still meet people at the cafe and the farm store, which is two and a half miles down the road. We're not wearing our barn boots there. Okay. And so, we started that protocol. The cycle went from 15 to 20 years, down to about seven years, but now, here we are, in 2025, and it's rearing its head again. Years. However, what people may have noticed is that we still had outbreaks in 2023 and 2024. Oh, okay. They weren't as severe as they could have been, but they were still happening.

So, it hasn't gone away. It dies down and gets better in the summer. However, we're not experiencing these significant cycles. It is just here now, and we have to understand how to work with it. And before I wrote that piece, we sat down with Dr. Scrafford, and we said, okay, this is what we're doing at this point. We're worried still. And he said, yeah, okay. So let's talk about this. The story you saw on my blog



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about protecting our farm from Avian flu originated from an hour-long conversation with Dr. Scrafford, during which we began developing some protocols. However, Dr. Scrafford doesn't have to go through a chore cycle.

So, he started, and then we had to make improvements from there. He said, again, you gotta be careful—Canada geese, beautiful ducks on the streams. If there are beautiful ducks on ponds, you have to be very mindful of that. So when it came down to the shoes I wear for hiking never touched the farm. That's still true. But then he said,

Health Hats: What about flying over?

Shannon: So that's the next issue, because you think he says, yeah, he points to the sky, a flock of Canadian geese flies over, and they poop. They shit. And that's on the driveway in the pasture. One of the things that we try to be is an integrated system.

Training our Coyotes

We don't shoot coyotes. We try to have good fencing to train coyotes. Coyotes are a real threat to my sheep flock. And boy, do they linger. At night, you hear them singing, Oh my God, please stay on the other side of the fence. What we try to do is maintain a healthy habitat on the farm, and you might think you'd want to eliminate the coyotes.

Interesting fact about coyotes. The more you shoot them, the more they breed. So, you just have to learn to live with them as neighbors. And that neighborly relationship is tied into bird flu for us because we have maintained good hedgerows on the farm that are rich in things that feed coyotes, mice, squirrels, and similar animals.

And then we try to maintain excellent electric fences to teach the coyotes. You can have the mice and the squirrels. You cannot have the sheep. And you cannot have our lambs. So that means we have coyotes surrounding the valley floor of the farm. And what we started to piece together is that we don't see many wild birds on the farm.

We don't see 'em on the farm ponds, and we don't see them in the creeks or anything. The coyotes are buffering us. We ensure they have a suitable habitat. It looks like they're helping knock on wood. They do seem to be helping to keep those wild fowl on the other side of where we are raising our farm fowl.



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And they do seem to be helping us right now. But they can still fly overhead. So yes, there's still a risk there. What we do is show up on the farm. The good thing about avian flu is that it is easy to kill. Many of the protocols we use for COVID will carry over to Avian Flu.

More about Shoes and Boots

We just have to think about it in terms of what's on our feet and not what's on our faces. And because unless you're eating shit, Danny, then you have to think about that. And if you're eating shit and kissing chickens, then you gotta think about it. But if you're not doing that. You really have to think about your shoes first.

Health Hats: Living with Predators: Kill versus Coexist. Similar to biological pest control, it helps avoid the use of pesticides. Encourage natural predators, such as ladybugs, lacewings, birds, or bats, in your garden to help keep insect populations in check.

Shannon: And what we do is with Dr. Scrafford, we discussed the power of soap and water, but. What he taught has taught us many times over the years. He doesn't show up on the farm without giving us a lecture about how to properly wash boots, because a veterinarian should not show up on your farm without doing a boot wash either, as farm vets often visit multiple farms.

So a proper boot wash needs to happen every time chores start. And a proper boot wash means soap and water in the bucket. However, you need a scrub brush, but it can never touch your clean soap and water. If you're in healthcare, you're probably more familiar with this than even I am. But we've always thought about farmers, we wear our shit military stripes and medals, right?

We're used to working with the salt of the earth here, but no, we have to be pretty clean about this. We have the scrub brush, soapy water, and a scoop. And the scoop lifts the soapy water. It goes onto the boot and the scrub brush. And the scrub brush never touches the clean, soapy water.

So we're constantly approaching the boots with clean, soapy water, you can't contaminate that soapy water. That's how you properly scrub a boot. Then we walk out from the farmhouse. The first thing we do is go to the chickens. While we strive to be as clean as possible. These are the laying hens. Currently, I don't have meat birds on the farm.

Again, they won't come until after May 31st. I have layers, though. Currently, I have approximately 150 layers on the farm, and during the winter, we need to keep them indoors. They dislike being outdoors in the winter. And then we are at the threshold of the chicken pen, the chicken coop. At that point, we washed again because maybe a bird shit in the driveway as we were walking out. And perhaps we stepped in it. So, we stop there, and at that point, we have a crop like an orchard sprayer that you might



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use for applying insecticides or similar products. We have it loaded with a vinegar sanitizing solution, consisting of just vinegar and water. At that point, we take the sprayer and spray down again with the vinegar solution.

Gap Found at a Farm Meeting

And that was Dr. Stratford's protocol. I brought this protocol to a farm meeting, and we have one farm worker. And then it's the rest of us as family. And we all sat around one morning, and we discussed this, and they're looking at me, and I'm feeling like, oh, I know what I'm about. Listen to me. I'm an authority. And I'm the boss now. And they're hearing me and they're looking at me and they're going, yeah, buckets. What do you mean by 'buckets'? Mom? Buckets.

We set the buckets down in the driveway and carry them out to the pigs. Then we come back and we fill the buckets for the chickens. And like buckets are going everywhere. Oh my God, we can't; we've got to watch the buckets. So they figured out we have to label specific buckets. Therefore, the buckets must be placed with the chicken feed so that they don't come into contact with the ground.

And then they figured out we have to keep a pallet outside where the chickens are. The pallet lies down on the ground, goes up so no one can touch it, and so nobody can poop on it. And then we lay the pallet down outside the threshold. All buckets are then hung on the pump to get filled with water, and they're walked to the pallet, filled with feed, and then walked back to the pallet.

They cannot be set down. They must go straight to the pallet. Then the crop sprayer sits on the pallet, and then we spray down the boots. Wow. But there's another problem, Danny. Oh, bird flu is at its worst in the winter. I didn't realize how badly these little sprayers freeze up in the wintertime. Oh. We've had to deal with numerous problems. We're working with spray bottles, we're changing the solutions.

Practice, Not Perfect

We're always dealing with what I've had to say to the whole crew, in medicine, we call it a medical practice. In veterinary science, if you're a vet, it's a veterinary practice, and you have to use its, a practice. It's not perfect; you have to dedicate yourself to a practice because it's so easy to become frightened and paralyzed.

And I think a lot of us experience this during COVID. I'm wearing my mask, but then I wash my hands, and I can talk, but I can't talk. It is all that all over again. And what COVID taught me is that it's the practice that matters more. It's not perfect. So, we are always trying to work on the protocol, improve it, and discuss our thoughts with each other. Then, you must approach it with forgiveness.



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It's crucial because the fact is, it can still happen. We can still have an outbreak, and it's gonna really hurt us. This. There was, I'm not sure if it will continue, indemnity available for farmers who are affected by this, but it will not compensate for the lost sales. It will not add to the heartache. My daughters have chickens that are their pets, and sometimes, when people stop keeping chickens, they give us their pets to adopt. We love our chickens and the farmer's farm because they love animals, not because they like to kill them. If it hits our flock, it doesn't matter.

Health Hats: Another insight. It's the practice that's important, not the perfection. We still might get infected. No guarantees, but less likely. As a person with chronic conditions, it's essential to incorporate exercises for the eyes and balance, stretching, squats, upper body strengthening, and a balanced diet. I embrace practice over perfection. I may still experience exacerbations—the same with podcasting—practice, not perfection.

Shannon: If we call the state vets to come dispatch, they'll be dead within 48 hours. Everybody will be dead. We have geese on the farm that are just there because we love them. There's so much there. That's about love, wanting to protect them like they're your family members. The reality is that it can happen.

The reality is that if it does happen, I'll be heartbroken, as will the rest of us. But you can't stop living. You can't stop trying. And you can't become paralyzed by that. So it's a practice. You do your best, you exercise the best judgment that you can. You take the best steps. You acknowledge that there is still a risk, and it could still occur.

Thank you. This is great. I appreciate it. Thank you.

Health Hats: This is really helpful. I truly appreciate your time and your excellent work, and I enjoy seeing you.

Yeah. All right. Take care.

Reflection

In June, we spent two nights in Schoharie County and had breakfast at the Sap Bush Hollow Café. Later, Shannon, Tom, and Jim Hayes also joined us to celebrate our 50th anniversary. My favorite part of this story is when Shannon, full of herself, hears her daughters says, 'What about the buckets?' After listening to Shannon, I will learn about bird flu in a different way than before. I'll also have a different perspective on other potential pandemics, such as COVID-19 and measles. Stories like these inform good policy, practice, and products. Hopefully, they're contagious—the stories, not the flu. Prevention



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requires granular work. It's a continuous experiment filled with humility. I'm grateful for kids and grandkids who give me opportunities to practice humility.

Podcast Outro

I host, write, and produce Health Hats the Podcast with assistance from Kayla Nelson and Leon and Oscar van Leeuwen. Music from Joey van Leeuwen. I play baritone sax on some episodes alone or with the Lechuga Fresca Latin Band.

I'm grateful to you who have the critical roles as listeners, readers, and watchers. Subscribe and contribute. If you like it, share it. See you around the block.

