

## **mix\_10-19-2020\_123349**

[00:00:00] **Hannah:** [00:00:00] So, Ayoka, um, you're pretty passionate about herding and herding training and herding dogs. And I know you have a lot about it to say about it, but I'm really interested in what you love so much about herding. Why is it so exciting for you?

[00:00:19] **Ayoka:** [00:00:19] Herding is exciting for me. Um, really, because you get to see.

[00:00:28] Well, for me, actually, what drew me to in the very beginning, after my very first experience was seeing my dog act and behave in ways that he had no training in, but were so naturally obvious to him. You know, like when you go do something and your dog is already good at something that you don't know how to do, um, that's just.

[00:00:54] Amazing. Um, and I think, you know, in today's society, we don't [00:01:00] really get to see our dogs use their natural instincts in those kinds of ways. And, um, The thing I love about training in general is watching dogs discover and learn things. And you know, that aha moment that dogs have when, you know, you're training something and they do it, but you forget to click and they look at you like, 'Hey Lady, I just, I just did the thing!'

[00:01:23] And that discovery process with the dog is my favorite part of other training and herding kind of combines them. Those two things into just a mind, Um, melting combination for me. I could watch herding all day. I have, I do. Um, but yeah, those two things coming together are what makes me so passionate about it.

[00:01:49] **Hannah:** [00:01:49] Yeah, that is, I mean, that is a really cool thing. It's interesting. That kind of is the way that we live with dogs right now is often very different from, [00:02:00] I guess, the conditions that we were breeding dogs for. When, when, when you would read were first emerging, you know, most of our, most of our modern breeds were, were not living in apartment complexes and they weren't living, um, in suburbs.

[00:02:18] **Ayoka:** [00:02:18] I mean, even if you think about like 50 years ago, Hannah or dogs when I was little, which isn't 50 years ago, but you know, even in my lifetime, you know, dogs are living completely differently than how they might've been. I mean, we had a dog that was never leashed, never collared, never fenced in. We lived in a small community.

[00:02:38] She survived somehow. She spent most of her days outside with the kids or doing her doggy things and dogs don't live that way anymore. I think, you know, population density probably has more to do with that than anything.

[00:02:53] **Hannah:** [00:02:53] Yeah. It's getting smaller. Yeah,

[00:02:54] **Ayoka:** [00:02:54] yeah, yeah,

[00:02:57] **Hannah:** [00:02:57] yeah. It is. And it is. I find that in the even trying to figure out how to talk about it, I guess, but yeah, so many of the behavior problems that we perceive in dogs, or not even always behavior problems, but the behaviors that we see come from that. Those roots.

[00:03:17] **Ayoka:** [00:03:17] They are absolutely. Yeah.

[00:03:19] **Hannah:** [00:03:19] What we've selected them, like the essence of dogness, which goes all the way until, you know, wild canids and being predators.

[00:03:26] And then we've selected for certain, certain yeah. Behaviors and emphasize some behaviors in some breeds and others in other breeds. And then we take those dogs out of that environment and we put them in a home as pets.

[00:03:42] Um, and most of them do just fine. But then a lot of times it seems like where we do sometimes run into trouble is when we have those behaviors occurring out of context, um, a border Collie herding cars, which is not something I ever think about at all every day. But, um, yeah. Yeah. And I think one of the things that I've always enjoyed watching sports like herding or, um, watching beagles hunt, um, You know, you pick the breed is when you see those behaviors in context, I get a lot better understanding for what I'm seeing in the family dog in a different context. Like you can see how it maps.

[00:04:27] **Ayoka:** [00:04:27] That's that's a fabulous point Hannah and I often wish, Um, I don't wish, I encourage it, you know, dog trainers too, whether you're teaching performance, sport type stuff or family, dog type stuff to go and see some of these events because you do gain a better appreciation of what dogness looks like in different contexts.

[00:04:49] And I always say, I wish also our, um, our conformation judges would come out and see some of these breeds doing their natural job in the field, because maybe what they think is, [00:05:00] is appropriate for the breed, they would have a different view of and appreciation for if you know, they could see, um, what the dog does naturally, you know, a lot of things make sense when you put the dog in their natural sort of, um, context.

[00:05:18] **Hannah:** [00:05:18] Yeah. That's a good point form follows function or, you know, hopefully

[00:05:21] **Ayoka:** [00:05:21] it should in theory.

[00:05:23] **Hannah:** [00:05:23] Yeah,

[00:05:24] **Ayoka:** [00:05:24] yeah, yeah.

[00:05:26] **Hannah:** [00:05:26] Yeah. I mean, that makes sense then, um, in originally, if we were selecting for, the function for the job, In theory, we were pulling dogs that did the thing well, and then their body types and shapes and confirmation with where we're again, in theory, what, what made them better at that job or allowed them to do their job more,

[00:05:53] **Ayoka:** [00:05:53] or allow them to do their job for longer, right? The best herding dog of the universe. Um, isn't very helpful [00:06:00] if it only lives for two years and then has, you know, some sort of orthopedic program, uh, problem. Right. So, um, you know, I think our ancestral dog owners, um, whether they did it on purpose or not, we're really good at sort of ensuring our gene pool had functional [00:06:21] Dogs in it. Yeah. But you know,

the biggest example or the most clearest example for me has been watching German shepherds do their traditional and German Shepherd's traditional work is moving sheep down, along the roads, but their job... So in Germany, There'll be roads and then perhaps sometimes fences, sometimes not, blocking, uh, fields of crops.

[00:06:48] So where German shepherds were used was to act as a living fence, either between the sheep and vehicles on the road or carriages or whatever. [00:07:00] Or a living fence on the far side, keeping sheep on the graze patches that were sort of in between the road and corn and wheat and oat fields. So that dog had to move straight, you know, a pretty long straightaway independently for maybe.

[00:07:18] A hundred yards, 200 yards all the way down, all the way back, all the way down, all the way back. And the only time they would have to come in off of that line would be if a sheep. Um, started getting ideas about moving into that, um, wheat field, then they could, you know, a good dog could probably just do it with their eyes and your mother.

[00:07:40] So you know about the use of EYE, right. Your daughter is doing something there's probably a look that you can give that, um, will cause her to reconsider what's going on. Or maybe even just stop. if you're a daughter, you know, this look

[00:07:56] **Hannah:** [00:07:56] I do. I do know that I certainly know it from the, um, I don't even know, not sure if I give it as much, but I certainly remember it receiving eye and I absolutely, I associate, I call it, um, the bitch, eye, uh, my dog, because my, the, my major who no longer, no longer is with us, she's passed on, but she could control any teenage boy, dog in the room

[00:08:18] **Ayoka:** [00:08:18] without getting up. And that is, that is such a wonderful thing, but that comes from, that comes from herding, you know, and you know, so some of those dogs could use eye.

[00:08:29] They could turn it on, or they could use their whole body if they had a particularly, um, uncooperative sheep, but those long stretches of downs and backs. If you have a dog that needs to do that, you need a dog with a really long stride. Right? That can hold it together. So that is why shepherds have the angulation that they do.

[00:08:49] Now. Some could argue that it's too much. Now we've gone into a caricature of the breed, blah, blah, blah. But if you want to, go see German shepherd doing that work. Then that makes total sense. And it also kind of makes you wonder then why do we, why do we show those dogs in 30 by 50 foot rings, you know, cause I think the German shepherd, I'm not a German shepherd expert by any means, but to me, the German shepherd and even the Rottweiler are best shown when they've got some space to move in.

[00:09:18] Um, because that's their natural work and that's where you see them either settle in and be able to continue doing that work or. Um, you know, maybe after a hundred feet, they kind of get tired and can't move their bodies as well. So, um, the German shepherd that form and function, that's one real good example of, of why, um, some breeds might be the way that they are.

[00:09:41] And now that they're not living that way as much, we've kind of lost sight of it, I guess.

[00:09:46] **Hannah:** [00:09:46] Hmm. Yeah. Yeah. That's interesting. So, okay. So you mentioned something there that I wanted to make sure that we talked about. So yeah. Um, German shepherds in the name right there, are shepherds, um, in my [00:10:00] house, I have a Belgian Tervuren.

[00:10:04] I have, um, a border Collie and I know that they are herding dogs because the AKC tells me. So, um, they in

[00:10:13] **Ayoka:** [00:10:13] without the AKC here, what would we do. they're there. Yes they are.

[00:10:21] **Hannah:** [00:10:21] But I also know that one, Groups are completely arbitrary

[00:10:27] **Ayoka:** [00:10:27] They are a construct. They are.

[00:10:31] **Hannah:** [00:10:31] And you do, your herding with a totally different kind of dog.

[00:10:35] **Ayoka:** [00:10:35] I do Rottweilers. Um, well, the thing about our sort of dog owners and breeders of, yore, if you want to call it, that is that, um, most of your average farmers didn't have money for a dog for each job, right?

[00:10:59] He didn't have a [00:11:00] dog like, so using Rottweilers, for example, Might not have had a dog, you know, not one dog to guard the home and the farm one dog to take the sheep into market or the cows into market, one dog to protect the home and family. You know, they, they can't they'll have the money to afford that many dogs and were actually able to produce a breed that.

[00:11:24] That could do all of those jobs. So, you know, the Rottweiler absolutely has, um, uh, herding heritage, but they've got a whole bunch of other jobs that they performed for their owners, um, historically and still, um, you know, to present day. So there, there are a lot of breeds that maybe don't appear in the herding group, but are.

[00:11:47] Certainly capable of herding and do have herding in their heritage. Um, one organization, the American herding breed association calls those dogs of multipurpose [00:12:00] heritage and includes them in herding. So I actually went through here's, there's some really interesting breeds in their list. They're multipurpose, dog breed, uh, list, um, Dobermans, Boxers, Poodles, Schipperkes, Kerry Blue Terriers.

[00:12:16] German Pinchers. I don't know if I said Wheaten Terriers. So all dogs that in their heritage, you know, had some, some utility, um, as a herding dog. Um, but maybe that isn't their, their sole purpose. So the American herding breed, they do allow all breeds. To participate, but for their herding capability tests, they limit it to herding dogs and they consider a Rottweiler herding dog, herding dogs and dogs that have multipurpose heritage.

[00:12:47] So the Boerboel is also considered a herding dog.

[00:12:51] **Hannah:** [00:12:51] Interesting.

[00:12:52] **Ayoka:** [00:12:52] Yeah. Has that fascinating.

[00:12:54] **Hannah:** [00:12:54] I was very surprised to hear several

[00:12:58] **Ayoka:** [00:12:58] terriers. [00:13:00] Pop

[00:13:00] **Hannah:** [00:13:00] up in that list, or I suppose breeds that we have labeled as terriers. And I guess that's one of the challenges with labels. Um, My my terror. So, so just in my house and I'm gonna talk about my son, but so in my house I have rights.

[00:13:15] I've got the terms, I've got the border Collie, and then I've got the terrier and I've also got poultry. And I have occasionally on purpose, more frequently, not on purpose, gotten to observe each of these individuals be instinctive behavior, untrained behavior in the presence of the poultry. And, and it's pretty.

[00:13:36] Like, um, it was very consistent. Right? So yeah, the terms are going to, they'll typically, there's a little bit of chasing some with some individual dogs more than others, but for the most part, they really like to circle them and just like run around some barking, barking, and running around them. Um, my border Collie, his like number one thing that he wants to do is get right in front of them and stare whichever direction they move.

[00:13:59] He [00:14:00] immediately goes the opposite and stares, right at them.

[00:14:03] **Ayoka:** [00:14:03] It's classic. Everything.

[00:14:06] **Hannah:** [00:14:06] The natural response is to grab them, get on top of them and start ripping feathers off. And I find that to be the least helpful. Um, in poultry management

[00:14:17] **Ayoka:** [00:14:17] from your perspective, I'm sure incredibly helpful,

[00:14:23] **Hannah:** [00:14:23] but I could certainly see, can we call them terriers ? That's that's the label that we've given. So I'm going to, I don't know anything really. I know w uh, countries of origin for like Wheaten Terriers and Kerry Blues but, um, They definitely look different than, mine do

[00:14:42] **Hannah:** [00:14:42] They're taller. Um, and I'm wondering, I don't know. And I want to go out and find some and observe their behavior around stock.

[00:14:50] **Ayoka:** [00:14:50] Yeah. Um, you know, I think. I'm not super well versed in terriers. I have lots of friends that are in terriers. My [00:15:00] understanding is, um, some terriers just like herding dogs, terriers are developed for different query.

[00:15:07] Right? You've got terriers that are hunting rats. You've got terriers that hunt Badgers, but we put them in the hound group. We've got terriers that, um, you know, hunt hare, some that are really bred for foxes, you know, bolting foxes. So my guess is with the more upright terriers is they did some of that.

[00:15:28] But they also help their owners move livestock around the farm. So maybe they would have less. Um, if we were to call the quality terrier than maybe a Parson Russell or a border terrier and more herding. But they still have both of those qualities, um, within, um, and I've seen, I've seen both Wheatens and Kerry Blues work.

[00:15:53] And, um, it's absolutely evident to me that, um, that they have, um, herding [00:16:00] instinct like a hundred percent. And that's the other part that just fascinates me. I could watch herding instinct tests for years because every dog is different. Every breed is different. We get to see, you know, it's amazing to me that we can see so many.

[00:16:14] Similar and even identical behaviors in different versions of dog. Right? So, um, yeah, the, the terriers, absolutely. Um, uh, the Wheaton, the Rottweiler, the Boxer, the Boerboel are actually considered a breed allowed to participate in herding trials with the AKC. And I believe the way the AKC works is breed clubs sort of have to show that in the heritage of that dog, there is some herding and the AKC will say, yay or nay. I'm in Canada.

[00:16:48] Our CKC program is an all breed program. So, um, I have seen a Papillon earn a herding started title on ducks. [00:17:00] I have seen not cattle. No. Although, you know, if there was a way to set that up and do it safely, I'd love to see what happens. Cause I'm like at heart I'm like that experimenter, that crazy training scientists, of course, you know, safety is, is the most important and you know, cattle for any dog, any size present.

[00:17:22] Quite a bit of risk. Um, I've also seen, um, I'm trying to think. I've seen a Rhodesian Ridgeback at an instinct test do quite well. Um, I've seen poodles do really well too. Um, So would you, would we call their style of work? Um, typical herding, like we would expect, you know, most people's think herding and they think about what the border Collie does.

[00:17:54] Um, that's like that's herding, but really that's only one kind of herding [00:18:00] and, um, You know, they absolutely are herding. Maybe not like a border Collie does, but they could get a job done and move stock from A to B. And that's all herding is moving your livestock from this plant. And to, I don't know, out to the field in the morning and back out of the field in the evening, sometimes moving them out in the spring and back in the fall, depending on what your livestock and what your farm is like.

[00:18:26] Um, and our sports reflect those different styles, but, um, we see it. We absolutely see it in different breeds.

[00:18:35] **Hannah:** [00:18:35] I want it let's I want to circle back and let's dig in a little bit more into this idea of herding instinct. Um, do we have a, do you have a definition for that or can you describe it?

[00:18:44] **Ayoka:** [00:18:44] Um, my favorite definition, um, is Virgil S Holland has a book called, um, Oh, I can't, it doesn't come to mind.

[00:18:56] Last name is Holland Virgil, V E R G [00:19:00] E L. I believe it's very different. Um, okay, so says the girl named Ayoka. Uh, he calls it herding instinct is, um, the behavior of a

dog that wants to do something to control livestock. And I love it. It's like a classic old, old timer, farm stock, hand explanation. The dog wants to do something with the livestock.

[00:19:27] Some people will call that the dog wants to control, um, livestock, which I like, because that, that, um, pulls out control from just chasing right. And, um, so the dog wanting to do something with the livestock is, is the very basics of what herding is. And that's something, um, there's four or five different behaviors that we would sort of hope to see in a dog that likes to control their [00:20:00] livestock.

[00:20:00] Um, but at a very, very basic, it's a dog that wants to control. Livestock sheep, cattle, ducks,

[00:20:08] **Hannah:** [00:20:08] geese.

[00:20:10] **Ayoka:** [00:20:10] Okay.

[00:20:11] **Hannah:** [00:20:11] And farm animals.

[00:20:13] **Ayoka:** [00:20:13] Turkeys.

[00:20:17] Yeah.

[00:20:18] **Hannah:** [00:20:18] Okay. So let's, um, Let's keep going with that. So you said there's some specific behaviors. So what does that,

[00:20:24] **Hannah:** [00:20:24] what does that look like if I were watching a dog and looking for.

[00:20:27] **Ayoka:** [00:20:27] Um, I'm trying to think. I don't have it right here at my fingertips. Um, what we look to see is, um, How a dog uses their eyes to control livestock.

[00:20:42] Some use a lot of eye, some don't, a Border Collie is your classic hard, strong eyed dog that stares. They use a lot, all dogs use their eyes to control livestock, but some are sort of more stylistic in how they do that. Um, how closely a dog likes to work to their [00:21:00] livestock, how closely a dog can get to the livestock before the livestock.

[00:21:04] I mean, essentially what we're using is their fear of, of, uh, of, uh, a, Predator looking animal in their flight zone. Um, what we're hoping to do with herding is just work on the outside bubble of that flight zone. And that bubble depends greatly on the livestock, the sheep, the weather, 101 things that change daily, hourly minute wise, but some dogs, um, And in my experience, it seems to be the upright dogs are able to get a lot closer to livestock and work them calmly than say that Border Collie with the hard eyes.

[00:21:44] They do better working farther out how far out they work, um, whether they use their voice or not to move livestock, whether they're willing to use their teeth to move, um, livestock, um, And not instinct so much, but we [00:22:00] would also have a look at, you know, it's more, a gauge of the instinct is, you know, It's a dog willing to take direction when it's trying to control livestock, a dog that, um, maybe is going up and trying to circle livestock closely.

[00:22:18] If you ask them to stop, can they stop? If you ask them to circle counterclockwise instead of clockwise, can they do that or do they just want to come right in. And, you know, have a wool snack. Sorry. Okay. Those are some of the things that we look for and there there's a continuum on all of those behaviors that we would an experienced, um, herding person might put together into a picture of, yes.

[00:22:44] I think this dog has some potential, given what I see today, and that actually essentially describes the herding instinct test. Um, you know, what kinds of behaviors am I seeing and how do these relate to instinct? And what I say this dog has, um, is [00:23:00] demonstrating herding instinct today. Some take multiple exposures to show that some, show it right out the gate.

[00:23:08] Okay.

[00:23:08] **Hannah:** [00:23:08] So would it be accurate to say, or let me see if I can, I'm trying to. Frame this, um, like if we look at that whole spectrum of canine predatory behavior, which all dogs have to some degree minimized in some breeds and maximize and others. And if we kind of run with the premise that.

[00:23:37] Most of our working breeds were selected to, to emphasize a piece of that, but for the most part, with the exception probably of terriers, we don't want to see that whole progression play out as part of their job. Like we want, we don't necessarily want the sniffing hunting, chasing, grabbing eviscerating consuming. Um, like that's we definitely don't want to see the second half, the last half of that in a [00:24:00] herding dog.

[00:24:01] **Ayoka:** [00:24:01] Or a hunting dog, you know, like a bird dog, truly, because it's catching for you, not for them.

[00:24:11] **Hannah:** [00:24:11] So if we're selecting like a section of that spectrum, then I, would it be accurate to say that when you are looking for herding instinct, you're trying to identify that window so that, um, and such that a dog on.

[00:24:27] The outside, like one outside of that window would be chasing, grabbing, pulling down. Couldn't hear you. Couldn't respond to known cues and the presence of the stock, um, you know, blood everywhere. Um, that would, that would be like one outside. And then the other outside might be the dog is in the arena wandering around sniffing and eating sheep poop and not really looking up.

[00:24:50] Um,

[00:24:51] **Ayoka:** [00:24:51] yes. In, in theory, Okay. That's what you would want. Um, I, I have seen [00:25:00] dogs that are on the outside of that spectrum that you describe have done some serious damage to livestock is that once they have some training under their belts become amazing herding dogs. Um, but for that dog, perhaps the reward become, and what we do is we transfer the ultimate reward of capturing and pulling down that animal.

[00:25:24] Right. They transfer it from that to You know what, I'm going to let you control these animals. You know, you're not allowed to eat them cause they're fine. You know, and a



herding animal is, you know, alive, a life. Okay. The animal has value either as somebody's income or as an animal that's useful for teaching dogs.

[00:25:43] Right? Like they're not, they are living beings.

[00:25:47] **Hannah:** [00:25:47] We should acknowledge that they are, it's important to acknowledge that they are

[00:25:50] **Ayoka:** [00:25:50] animals. Absolutely.

[00:25:52] **Hannah:** [00:25:52] They have their own value. Yeah.

[00:25:54] **Ayoka:** [00:25:54] Yeah. And, and herding, um, you know, whether you're using it, um, on your farm. [00:26:00] Or as a sport, the ultimate thing is calm movement of stock from A to B because calm stock don't run away, they don't break through fences.

[00:26:10] They aren't so nervous that they burn off all of the feed that you have spent money to put into that. Um, You know, um, because, um, heavier, healthier animals, um, get a better price at market. You're doing livestock sale auctions, animals that are cooperative and herding. Um, get to stay around a bit.

[00:26:32] Yeah. Cause they're cooperative. But if they have a huge, um, incident with the dog, that's not pleasant. Um, you can train your sheep to fighting other dogs if they're pushed too far. So we're always very careful, um, about livestock and those animals and making it as stress free for them as possible. So you can bring a dog.

[00:26:53] Um, I would say into the center from that very far end of the spectrum. [00:27:00] Um, but it takes some training and some time and not, everybody's willing to put that training in that time into a dog, especially if they've got other dogs that are maybe further towards the center. Now, the dog is absolutely not initially interested.

[00:27:14] I've also seen that dog, um, moving towards the center, given multiple exposures. So, um, I always. What I've learned from good friends of mine and watching them with younger dogs and bringing up, um, younger dogs is that, um, You almost never, if your dog's first exposure to livestock isn't necessarily positive or what you would hope to see in a herding dog, you don't write them off.

[00:27:43] After that first exposure, she gives them some time and some maturity and a little bit of training and then see what you have. Um, so, you know, I always tell people that because, you know, if you go to a herding instinct test and your dog is like, Hey, Not too interested in the sheep, I'd rather [00:28:00] eat poop or, you know, look at wool on the ground.

[00:28:03] That doesn't mean your dog. Isn't a herding dog or could never be a good herding dog. It could be that, that, I don't know. They've never been to a farm before. And that's just like, I don't know what you would call out. That would be like for some dogs, probably like a theme park for it, you know? And sometimes a theme park is overwhelming before you even get on the rides.

[00:28:27] Yeah. Yeah. If you've lived in a high rise apartment, your whole life, like you, I mean, you know, human smells are, are, are, you know, they're useful to that, but the livestock, that's a whole new ball game for them. So, um, yeah. Sorry. I went down a little bit of a rabbit hole there, but yeah. Yeah. Instinct. It is a continuum I would say.

[00:28:47] Yeah. Wanting to kill and consume is on one end. I'm not being interested at all in the livestock is on the other, some dogs we can bring in from those, you know, some dogs that are outliers we can bring in. I would say we [00:29:00] probably can't bring all of them just because of who they are as dogs, but, um, try long enough, sometimes

[00:29:07] first exposure isn't necessarily a good gauge of what their, um, full potential is.

[00:29:14] **Hannah:** [00:29:14] So that's really interesting. So do you think. Is there. Well, I guess there's two pieces of this question. Is there a way to draw the line between in the instinct and the learned behavior and, and then the other half of that question is on

[00:29:34] for practical purposes, does it matter?

[00:29:42] **Ayoka:** [00:29:42] Oh, that's a really good question. What I see is with those dogs. Um, and I would, I would put Epic kind of in that category. She has plenty of instinct. However, um, the.

[00:30:00] The complexity that is Epic is that her instinct is highly modified by how she feels about a situation. So if she feels too much pressure for me or lack of clarity, um, she might not really care to work those sheep, Um, if she's confused or concerned about something. But with her when I can be very clear and, um, help her to feel confident in a situation about what I want, Um, then she's, you know, to use a crude term, she's balls to the wall, she, she will absolutely do that. So I think, I think with those dogs what we are doing is uncovering instinct as opposed to creating it.

[00:30:49] Right. Cause if it's not there at all, you can't, it's not, which is completely a construct. And you know, you know, this is, they have to have that little kernel of wanting to [00:31:00] control the livestock. So with a dog like her, I really am just trying to. Um, if it's a little coal it's burning, I'm trying to fan air and, um, give that little coal some fuel.

[00:31:13] **Hannah:** [00:31:13] Yeah. So it sounds like it sounds a lot like we're cultivating reinforcers, um, is one way to interpret it. If they're the easier it is to access the reinforcement quality of, um, or I guess, you know, We like Rhea. So we used to, I used to think of that. The reinforcer is what comes innate dog, but now I know through personal experience that there's a lot we can do absolutely to cultivate or squash reinforcement value.

[00:31:46] And since we're never in a vacuum, there's always, we're always, there's always competing reinforcers. So I is you're describing like your dog who works. The stock really hot in one context and maybe doesn't in another and I'm thinking, well, if I were to take that out of a herding context and interpret that, I might say that like the reinforcer of moving the animals or the animals movement or whatever it is, I don't, I don't know I don't know the

answer to this, whatever it is that is, that is the reinforcement that maintains that behavior is getting trumped by that kind of negative reinforcement contingency. Of the trainer.

[00:32:26] **Ayoka:** [00:32:26] Absolutely. 100%. Yeah. And then biddability. I mean, when you have, you know, one of the things I love about the Rottweiler is, you know, we talk about genetics and innate behaviors. I think we breed biddability into our rottweilers, maybe more, uh, you know, because they're a working dog and they're bred to work with people, you know, there's that fine balance of a dog that wants to please and likes to please and likes clarity versus Saga. I was telling you earlier, She could do it incorrectly, you know, she could do not what I like or I could be not clear with her a thousand times and on the 1001<sup>st</sup> try, she would probably have the same amount of enthusiasm as she did on the first try because, you know, my, my opinions are not necessarily, um, aversives, you know, and that lack of clarity isn't necessarily negative reinforcement hHowever, you know, we choose to. What we choose to use or refer to, um, it, doesn't Trump it in her case at all, as much as it does with, um, with Epic. So, um, yeah, it's the thing that I'm just now starting to look at from more of a theoretical perspective. I've probably spent the past, uh, four years just immersing myself in the practical and learning from anybody that I can learn from. And now, um, You know, a relatively good sense of what I need to do practically. I can take that step back and think, okay, what's reinforcing. How do I change? This was the behavior I'm getting that I don't like, what do I want? And then create those steps. Um, yeah, so that's actually going to be my winter project.

[00:34:13] This winter is figuring some of these things out and, um, The thing I love about when we use positive reinforcement for lots of these things, is if you make a mistake, you still have that enthusiastic dog. Right. You know, if I, if I release her to go collect sheep a bit too early, well, darn she's just, she's gonna enjoy going to like collect sheep. And that's not a bad thing. You know, the wrong thing with the dog still gets reinforced and it's at least. Clear to her, if I've, you know, like it's clear to her what I'm reinforcing. So, um, that's kind of where I'm moving in my, my herding journey because I would consider myself a very, um, Like I'd be a baby in the herding world.

[00:34:59] Um, [00:35:00] you know, so I would never say I know a lot, but I've had the advantage of coming to herding with, um, a really good training and theoretical background. So, you know, I'm, I'm trying to, you know, if we talk, if you're of a certain age, you understand the term worlds colliding from Seinfeld. And I feel like my, my regular dog, you know, my positive reinforcement dog training world is really. Colliding, but more merging with my herding world because I'm learning so much and I'm able to integrate that into what I do.

[00:35:33] **Hannah:** [00:35:33] Yeah. That's, I'm thinking about. It does. What you're talking about is, is Ring. We very much the, the, the instinctive sport that I have the most experience with personally is, is in the,

[00:35:48] **Ayoka:** [00:35:48] Oh my God, there's another rabbit hole we could, yeah.

[00:35:51] I know.

[00:35:53] **Hannah:** [00:35:53] Keep this tied in, on purpose, but what you're, what I'm thinking of is like, well, In that [00:36:00] world, you know, same kind of thing. I want a strong enough dog where the reinforcement of interacting with the helper, the decoy is strong that I don't have to do a whole lot to make that. And then I can just refine the behaviors.

[00:36:12] Like if you really like feeling of biting things, then I can, I can create the path so that the behaviors that allow you to access that are the ones that are they're beneficial. Yeah. Um, for my outcome, but yeah, you're looking at like, what is the, what is the raw material dog that I'm most like the dream dog is the one that has that balance of reinforcers that the, the, the reinforcer of, of interacting with the helper is balanced by the reinforcement of interacting with me.

[00:36:44] And I've been in the situation with different dogs where. We walk out there and I'm not even on the same, like the dogs on a planet with me anymore. I no longer exist and that's not a lot of fun. And I've also walked out with a dog that just was not interested in the helper. And that also wasn't a lot of fun.

[00:37:01] And when I'm on the field, Doug, that I have at least a little bit of both, and now I have that balance. Yeah. And, and I'm, I'm thinking about like bounds of reinforcement in general. Because that's what I look for in a, in a well rounded dog training outcome. Um, can you say switch between food and toys? Can you switch between this toy and that toy?

[00:37:22] Can you switch between reinforcers from me and reinforcers from the environment and vice versa? And so that's what I'm constantly training for. In all of my training and that it seems like it makes a lot of sense to, to translate that into the herding context where I want you to be interested in the stock moving and also be able to hear me when the stocker moving.

[00:37:43] So I need to. Well, we need a little bit of teamwork here. Um, I mean, am I, my, and I'm not even a baby, I'm like a, I'm like a feat. This I'm a zygote and herding at vast have tinkered. Yeah. Um, but I've tinkered with all of my dogs at different times and in different styles of herding, [00:38:00] um, because they do find it fascinating, really enjoy behavior.

[00:38:04] Um, And where was I going with that?

[00:38:07] **Ayoka:** [00:38:07] Oh, you were just talking about, you were comparing, um, your, your experience with, uh, protection sports. Yeah. And I think, I think that's a very valid, um, comparison and wanting the balance between reinforcers so that you have, you know, the ideal. Teammate or what sort of partner,

[00:38:26] **Hannah:** [00:38:26] terrible teammate and herding is where I was going with that. Cause I don't want to be at home doing okay. So I'm always standing in the wrong place and I step on the ducks or the sheep run me over. But, but, um, let's go back to the productive conversation of comparing the belts of reinforcers. So continue what you were saying.

[00:38:43] **Ayoka:** [00:38:43] Um, I find it's it's, it's almost identical.

[00:38:48] We're working with different instincts and protection than we are in herding, but we're working them. Exactly the same way. And I think that, like, that is probably what has lit the, um, the fire and the interest in protection sports for me, because I just started with, um, Saga, um, this summer. Cause we have a Ring Decoy retty close, um, to us and, um, Every time I go, I'm like, it's, this is just like herding.

[00:39:19] Like everything makes sense to me because the way that they're working with their reinforcers and they're working that fine line between, you know, a dog that's really excited to get that bite on that sleeve and a dog that's out of its mind, inviting whatever comes close to it. Um, we're working those fine lines of arousal and of reinforcers and it's, um, The people that are really good at it are really subtle.

[00:39:44] Um, and they can see those lines and they can make it very clear to the dogs doing this gets you the bite, you know? Hmm. Really are really good at that. So, um, that's. That's the piece about herding that I like and the piece that I'm okay loving about, um, and sports. So now I have to get my protections for people to come out and try herding, because I think it's going to absolutely blow their minds.

[00:40:09] And I think they will truly be starting farther ahead than your average. Um, dog sport competitor, because they already understand, um, the concepts of working with instinct because it's pretty much 99.9% Premack. Right? Like it really is. Um, You know, if you hang on three seconds, I'll let you go bite the decoy.

If you bark at the decoy, he comes closer and then you can bite the sleeve. If you sit down now, right here in front of the sheep, as soon as you sit down, I'm going to send you out to collect your sheep and you'll get them back. If you push the sheep away, which I know you really don't like to do Epic. Um, if you do it for 10 feet, Then I'm going to release you to collect them back, which is what I know you really want to do, because I spent a lot of time reinforcing that.

So we've gotta be really creative about our reinforcers and be really clear when we use them. But yeah, it's, it's, it's it's think sports, you know, and when I talk to people that do barn hunt and people that do tracking, you know, there is a lot of overlap there as well.

[00:41:23] **Hannah:** [00:41:23] Yeah, I think, I mean, I was thinking there's not, it's probably not a coincidence that the breeds we've listed for herding and the breeds we might list that also will show up in any given protection sport. There's there's a lot of overlap there as well. Well, I would guess my, my, my sense is a dog that could Excel at one could Excel at the other because we would want this, the very same types of qualities and balance and temperament and, and reinforcers.

[00:41:55] **Ayoka:** [00:41:55] Particularly if we're looking at those multipurpose working farm dogs that had a kind of larger repertoire. Yeah. And even in, in, in Belgium, you know, I mean the melanoma is the quintessential ring breed of course. Right. And you know, they need to have, you know, they need to be able to work at a really high level of arousal. They need to have their cues on stimulus control. You know, when they're told out that means out they run it, that decoy, I think they're getting a bite and get called off instead.

[00:42:32] Um, You know, there is, there's nothing, um, like. Like in herding, we would want the same things. We'd want the same level of stimulus control and the same level of intensity in the work. So, you know, again, if a person had all the time in the universe to train these two things, I bet you could, you could train, uh, you know, A Mondio or French ring, three dog, um, to a herding championship, um, quite easily assuming you, the human had the time and the money to dedicate in time to Both of those.

[00:43:04] **Hannah:** [00:43:04] Yeah. That's. Yeah, I there's so many things we could do with our dogs if they lived long enough and we had the time and the money running into all three of them.

[00:43:14] **Ayoka:** [00:43:14] Right. What the heck? I know. So we've, we've got to choose priorities for sure. But, um,

[00:43:20] **Hannah:** [00:43:20] so yeah. So would you say then, like, like that when you're starting working with your herding dog is a lot of what you're initially doing. Sorta establishing those reinforcers, like, like you were talking about, um, I can't remember, we're talking about Epic or Saga that, that you would then cue her to go around and collect the sheep, which I think we yeah. Go to the other side and bring them

[00:43:45] **Ayoka:** [00:43:45] To you. You got it. Yeah.

[00:43:46] **Hannah:** [00:43:46] Okay. So you would then need to yeah. Really to back chain that you would need to start off with that. Uh, collecting behavior on cue.

[00:43:58] **Ayoka:** [00:43:58] theoretically, um, that collecting behavior is instinct. So I don't have to teach that. That is it's not,

[00:44:06] **Hannah:** [00:44:06] but yeah, unless already not in Epic. Correct. Especially when he got for free, that does free behaviors with all dogs.

[00:44:17] **Ayoka:** [00:44:17] Yeah. So that is something that, um, when Epic was 12 weeks old, um, and we put her onto ducks, she went out. She drove them to a certain point. And when they got stuck in a corner, she pulled them out and brought them back. So, um, you know, I think for her controlling, the livestock in that way is, is, is a reinforcing behavior.

[00:44:42] So I didn't have to build it. Um, what's less reinforcing is moving them away. So, um, if you had a dog that preferred to move them away, Then, so say, Oh, this is actually really good. So training wise, Epic. I'm what I'm moving them away is what we call driving.  
[00:45:00] So, um, it feels weird to dogs who naturally want to bring livestock back to their humans to take them away.

[00:45:06] Cause that dog, what we say in their minds, their greatest fear is by moving the livestock away. They're going to kind of lose control and the livestock are going to run away. But if we teach them a little bit at a time, they learn that they can control the livestock when they're moving them away. By coming out to the side, maybe not all the way to the front, because sheep have a pretty, almost a 360 field of vision.

[00:45:29] Um, I think it's like. 300, two 7,300 sort of degree field on either side. Um, so for a dog that preferred to move sheep away, what I would do is allow them to move them away, um, ask them to bring them back, which is the hard work, hard work, hard work. Stop them. And then allow them to move them away again. So we just use whatever the dog prefers, I guess. Sure.

[00:45:57] **Hannah:** [00:45:57] We'll take whichever version of herding [00:46:00] is the easiest to access

[00:46:01] **Ayoka:** [00:46:01] For that dog. Absolutely.

[00:46:03] **Hannah:** [00:46:03] But you still need to get some queue control on that. You went to use it.

[00:46:08] **Ayoka:** [00:46:08] Yep, absolutely. Yep. You would need a stop. Mmm. I'm not some people really like to specifically have sits and downs, you know, on cue and good stimulus control and lots of environments.

[00:46:22] That's not going to hurt you whatsoever. Um, the Rottweiler is a heavier dog and they don't tend to down like a border Collie Does. You have a border Collie? Right for the Border Collie the lie down is like, it's practically free.

[00:46:35] **Hannah:** [00:46:35] actually attached to his body. So he just like.

[00:46:37] **Ayoka:** [00:46:37] Yeah. Like it's, it's like they just fold up like a doggy transformer instantly.

[00:46:42] And you're like, how did that happen? So in rottweilers that's not as free or easy to get. Um, and, and part of it, I think is because they don't use their eyes as much. So it's more difficult to control livestock in that down. And. Um, they use more of their size and their bodies to control livestock and [00:47:00] they're heavier.

[00:47:01] So if you have to do that a hundred times, yeah, yeah, exactly. You wouldn't want to have to do that a hundred times because that means they're probably not reading their livestock and pushing in too far. If I'm asking them to lie down and take some pressure off the livestock, but I'm in a Rottweiler. I like a stop.

[00:47:19] Um, you know, to have a good stop or a wait on stimulus control stand, still stand still. Um, and not only that is, it stands still, it stands still and sort of pull your power back. So you're not putting a lot of pressure on the sheep and we talk about power as the dog's ability to influence livestock.

[00:47:40] And they can do that from a stand still. They don't have to be moving. Um, yeah. You know, we, I hate to use, like, when I say power, I feel like I'm using those mystical terms, like energy, and we all know, well, you know, that's not very clear, but there is something about, you know, we can turn them to, we can teach our dogs to turn that off and on.

[00:48:02] And we absolutely do start that with little baby puppies is walk up to your livestock, just settle down. Hmm. And what we'll do with baby puppies, um, that I learned

from Jerry Rowe, who's an old, old timer from, um, the Australian shepherd, um, community is he'll have puppies and dogs on a long line, like maybe a 25 foot line.

[00:48:22] Walk them up to the livestock just until the livestock start to move, um, ask and wait for a sit or a down and then wait until the livestock stop moving. Cause when the livestock stop moving. And I mean, like they're not running away, but maybe they're circling. Cause that's one of their first indications that they're uncomfortable is they'll start milling around.

[00:48:45] Yeah. So when the livestock stop milling around. Then we have two options. We can call the dog off and then reset them, you know, call the dog off, turn them around, bring them back up to the livestock [00:49:00] and play that whole little game again. Or we can allow the dog to get up and start, maybe push the livestock one step.

[00:49:08] Ask for a lie down, wait for them. So that's how we teach them to turn that we can teach them to turn that off and on is teeny tiny itty bitty little baby puppies, livestock aren't, right running around, um, a field and crash, hang off fences because we're working on, we're also teaching our dogs to read that flight zone.

[00:49:26] Yeah. As puppies. So, um, it's not as hard as you would think it would be because in a job with lots of instinct, they really want to control those sheep and get them moving, you know? So I'm teaching them to use a term. The off switch is, is, is hard, but it's not difficult once they understand that once they turn it off, they get to flick it back on again.

[00:49:49] **Hannah:** [00:49:49] Yeah. That's and that's, that's fascinating. Cause I definitely know. Again, I've seen it in action. And so I'm thinking like this is probably would break [00:50:00] down into like fairly small changes in weight shift and

[00:50:03] **Ayoka:** [00:50:03] posture. Yeah. Yeah. Breathing, eye contact.

[00:50:09] **Hannah:** [00:50:09] Yeah. Yeah. Which are all behaviors

[00:50:12] **Ayoka:** [00:50:12] they absolutely are.

[00:50:13] And we probably, you know, herding people probably aren't, you know, sitting there and marking them. We use a lot. A lot of how we know the dog's behavior is changing. If we can't observe it is to watch our livestock. Yes. Um, you know, there's a saying your sheep will never lie.

[00:50:30] **Hannah:** [00:50:30] I was gonna say, there's, there's instinctive behaviors on both sides of this equation that we are counting on

[00:50:37] **Ayoka:** [00:50:37] and what would be an 'On' behavior for one dog might need to be amplified by a thousand and another dog to be in on behavior. So you can't even say, okay, takes a deep breath puffs. His chest out is, is a good on cue because in one dog that may make the sheep run to the other side of the arena. And in another dog, the sheep may just continue grazing as if nothing's going on.



[00:50:58] So we always use, um, the sheep as our barometer, and that's probably the number one thing that. That, um, once you learn as, um, a handler or when you're learning, herding, once you're, you're experienced enough and relatively calm enough to not worry so much about what your dog is doing. If you watch what your sheep are doing, you'll know what's going on with your dog.

[00:51:25] Even if, if your back is turned and you literally can't see them, or if you're watching them and the behavior is so subtle that you're unable to perceive it.

[00:51:34] **Hannah:** [00:51:34] Yeah. Yeah. I mean, there's a lot of places in the dog sport world where what we are trying to train as something we can't really perceive. And so we have to, if you can't see the wind, but you can see the trees moving and we have to find observable things to make our criteria. I'm thinking about scent work is another example. There, I cannot smell what my dog is smelling, and we have a lot of ways that we explore that and try to try to perceive it or come up with models that let us make a good guess.

[00:52:02] **Ayoka:** [00:52:02] Yeah. But the heart, the difference in herding is you don't have to.

[00:52:06] You don't necessarily like your scent, a it's a thing, you know, in agility, in your A-frame is a thing to be, I'm relatively competent at herding. You have to learn a whole other species or three.

[00:52:21] **Hannah:** [00:52:21] I was gonna say my track has never gotten up and run me over.

[00:52:25] **Ayoka:** [00:52:25] No, and you know, I mean, your track can change based on temperature....

[00:52:30] **Hannah:** [00:52:30] Moysters can't come and eat all the trees.

[00:52:33] Yeah.

[00:52:34] **Ayoka:** [00:52:34] Live animals. Your variables increase by orders of magnitude. Yeah. And not, um, not, but I sort of, you know, by the tens, like they're, they're hugely, you know, I've got seven sheep out there. That means there's eight brains in that arena. You know, the 7, mine and the dogs and I've as the leader of the team, um, and the keeper of the sheep, I've [00:53:00] got to keep Everybody doing what they should be, but also keep my sheep safe. So

[00:53:04] **Hannah:** [00:53:04] keep everybody safe.

[00:53:05] **Ayoka:** [00:53:05] Yeah. Yeah. Learning how to read, um, livestock and spending time with livestock is, um, you know, we, we think, okay, if I want to do herding, I need to learn how to train my dog. But, uh, one of the biggest parts of herding is understanding livestock and stockmanship and where I've spent the most time learning that is, um, Working back in those pens at clinics and trials, it's just experience there's no, there's no, um, online webinar you can take there's no course at university that you can take to learn just like with dogs, right?

[00:53:40] Like you learn a lot of what. Um, what changes sheep behavior by observing them in real life? And I've with all of my dogs, um, have spent time with different types of species, moving them in and out of the pens, watching them when doing chores. If I visit someone that has livestock, you know, going out with them to do [00:54:00] feeding and watering and that kind of thing, because that's where you see livestock in their natural, you know, they're a bit stressed in the herding arena, but usually when you're doing your normal day to day chores, that's a lower stress type of behavior for them.

[00:54:12] **Hannah:** [00:54:12] Sure. Yeah. Yeah. That's just their home.

[00:54:15] **Ayoka:** [00:54:15] Right. Learning how to ride a horse, because I understand you have horses without understanding anything about horse behavior. Like there's a reason they start you with grooming horses, right? When you're at your first riding lesson. Cause that's when you spend time and learn about how, how horses behave and they may spend time pointing out certain things to you if you're completely a beginner. But, um, if they, if, if you don't spend time learning about the animals that you're working with, um, you can't be really effective in what you want to do.

[00:54:44] **Hannah:** [00:54:44] That's a good place to start and let's let's um, in fact, let's kind of wrap it up there.

[00:54:48] If you, if someone's listening and you've gotten them really interested in herding, what would you suggest as like a next step?

[00:55:00] [00:54:59] **Ayoka:** [00:54:59] Um, if you're interested in herding next step, um, Sort of the logical first step for most people in herding is something called a herding instinct test. That's where an experienced person will take you and your dog into a small arena to see if your dog shows evidence of, um, herding instinct behavior.

[00:55:21] Um, and then from there, depending on what happens, you might choose to talk to them about lessons or maybe, um, If you're not ready for lessons, maybe volunteering at trials, or I know some, um, some places that do a lot of herding lessons, they'll have, um, working days where, you know, today's the day that we have to get all our vaccines and hoof trimming done.

[00:55:45] And they'll invite people from the community that are interested in learning about livestock to come in and help with those things. Um, so cool. You know, you need to learn about livestock and not all of us can own livestock. Okay. So, um, you know, those. [00:56:00] Those opportunities would be the absolute, um, best opportunity for someone, um, in real life that would be interested in learning about herding. Um, I have on the heart equine Academy, alphabet album. Um, I do have a it's about a 90 minute webinar on herding instinct tests that goes through kind of some specifics of what is a herding instinct test. What is herding instinct? What do people look for? What do you need to know? You know, before you go to your herding instinct, um, and I've given you the link for that. So, um, that's an incredibly affordable \$24.99 for 90 minutes. Um, And that would give you a little bit of information before you even go to your herding instinct test. I think

[00:56:44] **Hannah:** [00:56:44] having watched that webinar, I can say that it's not a little bit of information.

[00:56:47] Yeah. That is pretty packed with everything you're going to need to know. So that's that's cool. Would you say, um, if I'm someone who doesn't have my own sheep, cause I just live in a neighborhood, but I do have a dog that. I'd like to pursue herding with for whatever reason. Is there a point in doing that? If you can only go to like a once a week or every other week kind of lessened, is that still something you can make progress with?

[00:57:13] **Ayoka:** [00:57:13] Absolutely. Hannah, I have a Herding Intermediate and Stock Dog intermediate title on Epic and started titles in Stock Dog and Herding with Saga and I don't own sheep.

[00:57:29] Until Last year, Um, I was going on a weekly basis, um, to, uh, training lessons. I would go to clinics. Those are great opportunities, just like we have seminars in obedience or agility. Um, a herding clinic is a weekend kind of intensive. Um, if you don't have stock, you know, you're only traveling once for lots of opportunities to work on stock.

[00:57:48] Um, so no, you don't need to have, um, livestock. And now finally, um, I actually kind of rent stock in the winter and I actually, um, board them at a horse [00:58:00] arena so that I can work them. And I'm only working a couple of times through the week because it's not at my home. It's, it's out in the, in the country on a farm, so no stock are not necessary to, to move forward and learn, but I will say that the more frequently you can, um, get out and experience stock with your dog, the more quickly you will progress. It just means that's once a week, then you're going to progress slower than if that's twice a week or four times a week or daily. Progress will still happen just on a different, um, at a different speed.

[00:58:32] **Hannah:** [00:58:32] Good. That's good to know then I think that there's no reason not to, um, see if we can pursue that.

[00:58:39] **Ayoka:** [00:58:39] I think you should. I just, I know you would love it. I know anyone would love it, but that's, you know, me and my enthusiasm for this. Yeah. This type of work. Um, It's fascinating, you know, time consuming and can be expensive because of course, when you're taking lessons, not only are you paying for instruction. Yeah. But you're paying for the use of somebody's animals. And the farm you

[00:59:02] **Hannah:** [00:59:02] And the farm. You are, you are describing dog sports time consuming and expensive is

[00:59:08] **Ayoka:** [00:59:08] I would put herding and bite work on, on sort of on the continuum, they would be the. High effort, high expense, um, you know, where maybe obedience and rally and nose work would be on the low expense, still effort, but, but lower expense you could do in your own backyard kind of thing. Um, but I think it's money well invested, um, to give your dogs an opportunity to be dogs, as you know, they were kind of, um, uh, engineered and bred to be.

[00:59:41] **Hannah:** [00:59:41] Yeah. Yeah. And if you're true behavior and training nerd, then it's an interesting experiment that I think gives you a lot of fascinating experience to digest.

[00:59:54] **Ayoka:** [00:59:54] Yeah. And I would say, you know, try it once or twice go to an instinct test because you may go to an instinct test and [01:00:00] learn a lot and decide that, you know, maybe the whole trialing thing isn't for you. But I think as trainers and behaviorists, you would get. A ton out of just that little stepping your foot into the pool so to speak, um, and have a different appreciation for some of the things our dogs do.

[01:00:17] **Hannah:** [01:00:17] Um, yeah.

[01:00:18] **Ayoka:** [01:00:18] In life. Cool.

[01:00:20] **Hannah:** [01:00:20] Well, thank you very much. We'll make sure to link to that webinar. Cause I know a lot of folks will be interested in checking it out. Um, I've watched it. It's very cool. Um, I took a lot of notes. It was a lot of stuff in there. Um, everything you ever wanted to know about herding, but were afraid to ask, um, In that, in that webinar.

[01:00:40] **Ayoka:** [01:00:40] Yeah. And right now it's on demand. So you can watch it whenever you like the question and answer session, um, from the live presentation is recorded there, but my contact information is included in that webinar. If you do have, um, questions, if you're watching it on demand, I love to talk about herding and answer questions and. Sort of like, there is never a bad time to talk about herding. That's one thing I make lots of time for. So if you do take that webinar and your questions, aren't completely answered, Absolutely contact me.

[01:01:14] **Hannah:** [01:01:14] Cool. Awesome. Well, thank you very much for hanging out with me today.

[01:01:17] **Ayoka:** [01:01:17] Thanks Hannah.