

Theresa Stern: Welcome to Central Bark, a podcast for Guide Dogs for the Blind. I'm Theresa Stern, and I'm your host.

So today we are joined by Jenna Bullis, one of my favorite people at Guide Dogs for the Blind, and she is the manager of breeding. Jenna, welcome to Central Bark. Can you tell us a little bit about the career of one of our breeder dogs, because it really is a career, right? Once they've been placed with their families, what can they expect?

Jenna Bullis: Yeah. So the career path of a breeder dog depends a little bit on the dog themselves. So we are always looking at the individual dog and their health and what's going on with that dog when we're making decisions about their breeding career. So what we would consider a normal career where nothing unusual happens is that for females, they would be in the program. They retire before the age of seven or by the time they have a maximum of five litters of puppies, whichever comes first. And in reality, most of our females are going to have one litter of puppies a year, and they're going to have three or four litters and get retired. So some of the dogs that have the most outstanding qualities, we might want to have one last litter with them. And so they would have a fifth litter when they're in the six, six and a half range. And then they're retired.

Theresa Stern: Right.

Jenna Bullis: For the boys it's a little bit different because the boys can stay in the breeding program as long as they are fertile and producing successfully. So for a male dog, that can happen all the way up to 10, 11, 12 years of age, or that could end at seven years. It depends on the individual dog. We review every dog in our breeding population every quarter to look at their stats and their health traits, what traits they're passing on to their puppies, how successful are their puppies. And we make decisions about who stays in the breeding population and who gets retired. We want to only keep the dogs that are creating the best candidates for guide work long term.

So things that can interrupt that and make those careers shorter could be a fertility issue. Maybe a female doesn't get pregnant, or a male can't get a female pregnant. So those would obviously be reasons a dog might be retired early. If they have any challenges in giving birth or rearing puppies, that could be a reason that we would take into consideration that a longer term career as a breeder isn't appropriate for the individual dog.

So we work closely with our reproductive specialist veterinarian, Dr. Gonzalez, on those cases, and our team of neonatal specialists give us a lot of feedback about how the dogs do when they're having their puppies and rearing their puppies. And we're always looking at the individual dog and their health and wellbeing, while taking into consideration what the needs of the breeding program population is as well.

Theresa Stern: So speaking of the needs of the program, I would think it would be a bit tricky to figure out... You can figure out what you need in terms of traits and things like that are going to really make the unique qualities that a guide dog may need. But then to know how many you might need could be tricky because you're really having to look into the future a couple of years. Right? And how do you work out all that crazy math?

Jenna Bullis: Well, I use a magic eight ball.

Theresa Stern: Do you? Okay.

Jenna Bullis: I'm just kidding. Yeah. That is a conundrum because it is a lot of pre-planning, and we in the breeding department certainly do not do that alone. This is an organizational decision, so there are a lot of groups of us here at Guide Dogs for the Blind that are influenced by how many puppies are born each year.

So for example, the training department, usually what happens each year, beginning of the year, we set our goals for how many puppies we're going to have born in the next year. And those goals are based on how many clients the training department feels that they're going to train two years down the road. And the reason for that is that a female dog gets pregnant, she's pregnant for about two months, and then she gives birth. And those puppies are in our puppy center for the first eight weeks, and then they go out to their raiser homes, and they're raised to become a guide dog for the next 12 to 14 months or so. And when the dogs are around 16 to 18 months old, they come back in for formal guide dog training. And then after they finish their formal guide dog training, then they're ready to go out and be a guide dog. So it's quite a long lead up time-

Theresa Stern: I'll say [inaudible 00:05:10].

Jenna Bullis: To become a guide.

Theresa Stern: Yeah.

Jenna Bullis: Yeah. So we're having to make all these decisions about which dogs are going to be the future guide dogs well in advance of when it's actually going to happen. So there's some guessing about what the client wait list looks like and how many instructors do we have on staff that can provide training, and what space do we have on our campuses to organize classes. And then there's a really important piece of our puppy raising community, and do we have all of the puppy raisers that we need to raise those dogs for well over a year?

Theresa Stern: Absolutely.

Jenna Bullis: Such a commitment. And those volunteers do such an amazing, important role for us that's a huge part of our calculations as well. And then we also need to

look at our staffing on campus. So we have a beautiful state-of-the-art puppy center that is designed and built specifically to meet all the needs of our pregnant moms and our babies. And there are capacity limits on that. And so, we want to not overcrowd that building, so we have to space out how many puppies we have at any one time.

So in general, we get the information about what we need in a given year, and then my job is to go back to the drawing board and space that out more evenly across the year and to take into consideration things like not every girl that we breed gets pregnant successfully. So sometimes there's a conception that misses. I have to know what the average litter size is for our breeds, and knowing that sometimes mother nature gives you more puppies, and sometimes she gives you less puppies. A truth is that not every puppy is born alive, so there's some considerations there.

And then we also have to keep the breeding population going. So every year we retire out between 40 and 60 dogs, and we bring in 40 to 60 new dogs. And so those are dogs that can't go on to be a guide dog. So we have to make sure we breed some extras, so that we have enough to become guides as well as keep the breeding population going.

So all of those factors get taken into consideration. And then we also have to take into consideration breeds and colors as well.

Theresa Stern: Oh, okay.

Jenna Bullis: Yeah. So, our clients have preferences just like everybody. So some of our clients want to work with a particular breed. They might want to work with a cross, or they might want to work with a golden, or maybe they really want to work with a black lab or a yellow lab. So the training department keeps track of, in general, what those preferences tend to be over time. And they tell us in the breeding program, here's what we want. We want 80% of the dogs that we graduate each year are Labradors, and we do about 10% Golden Retrievers, and 10% crosses. And we also know that more people ask for yellow than black dogs. And so we try to make sure that our puppies that are born fall into those categories of a little bit more yellow than black, so that we can serve the clients as best we can with their personal preferences as well.

When I tell people about this part, they ask, "Well, why would somebody care what color the dog is?" And there are some practical considerations for that. Some of it is personal preference. I really like... I have black Portuguese water dogs. I like black dogs. So that would be what I would choose. So some of it's personal preference, but there are some practical considerations also. If you think of somebody who, a client who works in a business setting, and they tend to wear really lovely dark suits, let's say they work at a bank or something, right?

Theresa Stern: Yeah. Yep.

Jenna Bullis: If they've got a yellow dog and they're meeting clients, I'm betting you could spot a mile away that they have a yellow dog if they're wearing a dark suit. Right?

Theresa Stern: Right. Not a fashion accessory you want on your suit, right?

Jenna Bullis: Yeah. Yeah. Maybe interferes a little bit with that professional look that you're trying for. So that might be a consideration for someone. And it might be related to somebody's vision. Theresa, a lot of people might be surprised to know that a lot of our clients have some residual vision, so not all are completely blind. And so, if someone has some residual vision that maybe the contrast of a yellow dog is easier for them to use some of their residual vision, that might be a useful thing that they would like to have in their home or when they're out and about. And that's a perfectly valid reason that somebody would say, "Hey, if you could match me with the right dog who's yellow, that would be great," and we want to try and do that. So there's all kinds of reasons that people have preferences. And we just know over time that we get asked for more, a little bit more yellow than black.

Theresa Stern: Yeah. So tell me a little bit, because I always think it's interesting, and I think it surprises people that don't know a lot about genetics, but about the colors. So I think it's a really interesting and easy way to talk about how genes are spread, dominant and recessive, and how you can get yellow labs and black labs in the same litter, when you might get a chocolate lab popping in there sometime. So if you can walk us through that real quickly, that would be super helpful.

Jenna Bullis: Yeah, absolutely. We did genetic testing on all of the dogs in our breeding population, and those are for health traits as well as color. So the way that traits are inherited, there's quite a bit of variety. So some traits are influenced by many genes, and you would call that a polygenetic trait, and some traits are controlled by a single gene.

So for example, chocolate is a good one in the Labrador retriever. So in order for a dog to be chocolate, they have to have two copies of the gene that tells their hair to be chocolate colored or brown. So the parents, they can carry two copies, one copy, or zero copy. So you could have a black lab who carries a recessive gene for chocolate and breed them to another black lab that carries the gene for chocolate. And if the puppy inherits those two copies of chocolate, then the puppy is going to be chocolate colored.

Theresa Stern: Right.

Jenna Bullis: Some traits are controlled in that manner. So yellow... In our breeds, when you breed a yellow dog to a yellow dog, you're going to only get yellow or potentially chocolate, if both of those dogs carry chocolate.

Theresa Stern: Okay. Yeah.

Jenna Bullis: And if you have a black dog, they can carry the gene for yellow or chocolate. So that's why you can have two black dogs that might have puppies that are black and yellow and chocolate. But when you breed yellow to yellow, you're not going to get any black puppies. So we know those strategies, and that's how we meet those color goals that we're trying to meet each year, is keeping an eye on that when we're picking which dog is the right match for another dog.

Theresa Stern: Super interesting. Yeah. So I know Guide Dogs for the Blind, we have our breeding population that we've selected, but we also play a role internationally with other service dog organizations, in terms of sharing some of our genetics with them. Can you talk a little bit about our role as a leader there?

Jenna Bullis: Yeah. It is one of the many things that I love about my job, is the community, the international community, and the interaction I get to have with colleagues around the world in this regard. There's a big benefit for not only us, but for other schools in working collaboratively in breeding programs. So it's important for us to keep genetic diversity in our program. And we choose to do that through exchanging genetic material with other service dog schools, because those schools are selecting for very similar traits that we are, as opposed to if we went to a local Labrador breeder who was breeding dogs for hunting.

Theresa Stern: Oh yeah.

Jenna Bullis: That's probably not the traits that we would want to include in our population. So we go to like-minded folks. And then, because we are the largest school in North America, we have the largest breeding population, and I like to think we have the best dogs in the world, really, our dogs are in high demand with other schools.

Theresa Stern: Is that right? Wow.

Jenna Bullis: Yeah, absolutely. We definitely like to support other schools, and we think of it as a way that we can help provide service to someone who's visually impaired in some other part of the world. So while we might not be able to serve a client in Europe, we could certainly provide some of our dogs and our genetics to schools in Europe to help build their programs and provide better service for those clients. So not only do we provide donations of adult dogs, puppies, frozen semen for other schools to use in their programs, we also collaborate, exchanging information. We share best practices with other schools. We like to hear what other schools do in their programs. We're always looking for new, innovative ideas of ways that we can improve our program. So when you're open and you share and you work collaboratively with your partners, all of those things happen, and it's a win-win for both parties.

Theresa Stern: Absolutely. Absolutely. So tell me a little bit why we have our own breeding, we have a breeding population, and why internationally that's how things are done, rather than perhaps finding dogs from shelters or pet dogs or things like that to do this type of work, this service work that a guide dog does.

Jenna Bullis: Yeah. Great, great question, Theresa. So when Guide Dogs first started in the '40s, we actually did get dogs from shelters. And there are dogs from shelters that can make good service dogs. And we quickly realized, though, that the traits that we're looking for, that we've talked about earlier, we're looking for dogs that have really exceptional temperamental traits, confidence, and willingness to work with someone, and being out and faced with New York City traffic and that kind of thing.

And then the flip side of that is the health of the dog. We want our dogs to be free from orthopedic disease and any health challenges, so they can have a long working life. It's a huge investment for someone to get paired with a guide dog and go through all the training to work with a dog. You want that working relationship to last as long as possible. And if you have a dog whose career is shortened because they have elbow dysplasia or they develop early arthritis for some reason, then that working career is really cut short. And that's really challenging for a team to have to end that way.

So we realized pretty quickly that finding all of those traits in dogs in shelters is not very successful. And so, we started purposefully breeding dogs that had those qualities and found our success rates going up. And I think that happens with schools around the world. A lot of schools will start out by using shelter dogs or dogs that are donated from private breeders or that kind of thing. And they realize pretty quickly that they're spending a lot of time and effort and energy in training dogs that ultimately aren't suitable to do the work that they want them to do.

Theresa Stern: Right.

Jenna Bullis: And they end up working towards purposely breeding dogs for a job.

Theresa Stern: Right. That would be like training me to be an accountant or something. It just wouldn't work out. It just wouldn't work out.

Jenna Bullis: Exactly.

Theresa Stern: So Jenna, I've known you for a long time, and I've just seen your path here at Guide Dogs for the Blind. And I'm wondering what really inspires you about Guide Dogs for the Blind? What surprises and inspires you?

Jenna Bullis: It's funny, Theresa, because when I first came to Guide Dogs, I came to Guide Dogs because I wanted to be a dog trainer. And I was like, "Oh, I'm going to come work at this place that I can train dogs. And oh yeah, there's some people

involved too." And I realized pretty quickly that it's the people, the clients that we serve, the difference that we make in people's lives is really incredible. And I've had some amazing experiences with clients that I've trained over the years. Those friendships have lasted years and years. It was so special to be a part of somebody's journey when they're getting a guide dog for the first time and getting mobility and independence, and it just changed their life.

And that was just so inspiring. And then the part that also surprised me is our volunteers. Our volunteers have hearts the size of Texas. They're incredible. Incredible. The efforts and the time and the dedication that they put in and how much they believe in our mission as well. We have people that are just incredible. And yes, we have incredible dogs, and I love training dogs, and I do get a lot of satisfaction from that. But ultimately 25 years later, it's the people. And that includes our staff too. Our staff are bighearted people that want to be involved in doing good in the world. And that's a really, really satisfying, wonderful feeling to be part of something good.

Theresa Stern: Well, I have to just brag just real quickly on Jenna a little bit, because I have a huge gratitude to give to her because Jenna actually trained Dario, who was my third guide dog. Sweet, smooshy black Labrador Dario. And then you managed the breeding department when Wills was born. So I always like to think that you made Wills too. So thank you so much, Jenna, because you have definitely changed my life in wonderful and amazing ways.

Jenna Bullis: Thank you, Theresa. It was my pleasure, and I was happy to be part of those dogs' lives and part of your life as well.

Theresa Stern: All right. Well thank you so much for joining us today, Jenna. I think this has been just really a fascinating walkthrough the whole breeding process at Guide Dogs for the Blind and really getting down to the nitty gritty of what makes these amazing animals and these amazing partnerships. Thank you so much for joining us.

Jenna Bullis: Thank you so much for having me, Theresa. I love sharing the amazing work that we do here at Guide Dogs. And thanks for giving me the opportunity to share that.

Theresa Stern: For more information about Guide Dogs for the Blind, please visit [guidedogs.com](http://guidedogs.com).