Welcome to The Horse's Equine Innovators podcast. I'm your host, Stephanie Church, editor-in-chief at The Horse. Every day, researchers at universities and other institutions around the world are investigating new ways to care for and understand our horses and the horse industry. In this podcast series we talk to those innovators to learn more about their work.

First today, a message from our sponsor.

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And now for today’s conversation.

Since 1971, the Bureau of Land Management has overseen managing, protecting, and controlling the population of wild horses and burros under the authority of the Wild Free Roaming Horses and Burros Act.

The BLM has reported that horses and burros roaming rangelands in the Western United States exceed what the land can sustain. One approach the organization prefers for managing population size is private adoptions, but how many American horse owners are willing to adopt wild horses and what type of animal are they likely to select?

Today I'll be talking with Dr. Jill Stowe, a full professor in agricultural economics at the University of Kentucky here in Lexington. Dr. Stowe and her colleagues recently explored the demand for wild horses in two research studies.

Welcome Dr. Stowe, thank you for joining us today.

Dr. Jill Stowe
Thank you for having me. I’m glad to be here.
different than some of the studies you’ve done in the past. I believe.

Could you tell me how you ended up pursuing these studies, please?

Dr. Jill Stowe
Sure, so it’s kind of interesting with Kentucky and especially Central Kentucky being the epicenter of Thoroughbred breeding, and we have all the large auctions here. I have really enjoyed using the tools that I’ve been trained with to study to Thoroughbred auctions. I noticed that the wild horses are often offered for adoption through online auctions, so a similar type of market mechanism, but a very different type of horse.

I grew up in New Mexico and, so, I’m very familiar with the terrain out there and, after moving to Kentucky and understanding the very significant difference in managing horses in a place like Kentucky versus a place like the Western United States, where these herds of wild horses live, I was really interested in learning more about the issue and applying the tools that I have to help in whatever way possible.

Stephanie Church
Okay, thank you. The first study was estimating demand for wild horses using data from those internet adoptions. In a nutshell, what did this study involve?

Dr. Jill Stowe
So, this was the first study that we did, and this was joint work with a colleague named Katie Bender. She was in grad school at the time at Ohio State when we first started on it.

And this was a study where we were looking to see if we could use data from decisions that people had actually made to learn more about what types of wild horses are in highest demand, or most likely to get adopted by people.

So, that was the main focus of that study.

Stephanie Church
Okay, and, so, what did you learn from the results?

Dr. Jill Stowe
So, we went online and collected two years’ worth of auction data from the Bureau of Land Management online adoptions, and their websites are really fascinating. And I like watching these online auctions. You can get data on the age, the sex, the height, the color, how much handling a wild horse has had, whether it was born in captivity or not, the number of bids that it had placed on it, what the winning bid was. And as an economist, we can use all those tools to tease out some information about what characteristics of horses make them most likely, or less likely to be adopted, and what characteristics influence price.

And, so, we found that there were a number of characteristics that would influence the likelihood of a horse being adopted. The younger ones were more likely to be adopted. The horses that we categorized as having more unusual colors, so maybe they were a pinto or a dilute, like a palomino or a buckskin, they were more likely to get adopted. The taller horses were more likely to get adopted.

Those that were born in captivity were less likely to get adopted, as well as those who had spent a longer time in captivity were also less likely to be adopted.

Horses that had received some type of training, whether they were gentled enough that they could be, they could wear a halter, or some of them had even been started under saddle.

Both of those were more likely to be adopted. And then sort of an external factor, the auctions that were held … January through June, horses were more likely to be adopted than later in the year because people don't always want another mouth to feed heading into the winter.

But then the second part of the study we were looking to see what characteristics affected the bid price that people were willing to pay, and there were not as many significant results here. Basically, there were only three characteristics that influenced the amount that people were willing to pay.

They were willing to pay more for Pintos, so they really liked the splashy colors. They were willing to pay more for a horse that had been trained under saddle, had been started under saddle, and they were willing to pay less for horses that had been born in captivity.

Stephanie Church
It’s really interesting. You know, my mother really loves, this is a different population of wild horses, but it’s the Chincoteague wild ponies and the Assateague wild ponies...
in Virginia. And she always has her eye on a pinto, a palomino pinto. That's her dream is to have one of those. It's amazing how people are drawn to those colors.

So, that probably took a lot of time to compile and go through all that data. How long did it take?

Dr. Jill Stowe
Well, I mean, I guess it took two years because I waited for the data to come out from every auction. We had to wait until we had enough data, and I would follow it monthly, and the data didn't stay online all that long. So I had to be aware of when the auctions were being held and, then, when I could pull the information online.

I had some colleagues that helped me enter the data, which, which was helpful, you know, so that the data collection part itself was two years, and then things take varying amount of times for varying reasons, but I really liked this project, and I'm glad that it got published.

Stephanie Church
Yeah, that's really cool. I am envisioning lots and lots of spreadsheets.

Dr. Jill Stowe
Yes.

Stephanie Church
So, in the other study, you looked at people's willingness to adopt wild horses. I know you presented this data earlier this year at the Equine Science Society's Virtual Symposium.

What motivated you to complete this particular study?

Dr. Jill Stowe
Yeah, so as we were finishing up the study that you and I just talked about using the auction data, there was a report that had come out where the acting head of the Bureau of Land Management was discussing how significant the overpopulation of wild horses was and indicated that one of their key areas of focus in controlling the population was increasing private adoptions. And in my mind, it takes a special person to adopt a wild horse. They have to have not only certain facilities, but also expertise in order to safely train a horse. And, so, my thought, my assumption, was that either current or former horse owners would probably be the population of people that could most readily serve as homes for those types of horses.

So, also at the time, I was getting ready to teach a class in equine markets at the University of Kentucky, and I had a student in that class whom I had conversed with previously and I knew that she was interested in this topic. And, so, we actually, well, she worked on this as a class project, and did such a good job with it that we decided to do some more work on the study, expand it, and turn it into something that we could publish in a peer-reviewed journal.

Stephanie Church
So, what did you find out from those responses to the survey? I actually remember filling it out myself.

Dr. Jill Stowe
Yeah, well, it was really interesting because the student, Hannah White, and I, we, she had started developing the survey for her class project, and then we worked on it, and, and just distributed the survey through social media, which there are advantages and disadvantages to doing that. But, this is like the first academic survey I've ever had that basically went viral.

I mean, it, you know, it was getting shares. The number of responses were just blowing up, and so I knew that we had hit a topic that was really important to a lot of people.

And the focus of this one is a little bit different from the last one. So, the one that you and I talked about first, we were looking at which characteristics of horses were most likely to get them adopted, what types of horses were people looking for. In this study we were looking for what types of people are most likely to adopt. So, we were switching from the horses to the people. But, you know, the first result, very simple result that, that blew us out of the water, was that among our over 2,000 respondents, over 90% either had adopted a wild horse, had considered adopting a wild horse, or hadn't considered it but would consider it in the future.

And, you know, I mean, someone like myself, I've always thought about having a wild horse, too. And so, you know, there could be a lot of people like me.

For the people that had adopted, we asked them what their motivation was for adopting a wild horse, and their top two responses were giving, ... providing these wild horses with a better life, and adopting them because they're very hearty animals.
Two of the biggest barriers to the people that had considered adopting, but ultimately did not, were having the appropriate facilities to house a wild horse and then having the time and/or expertise to safely train a wild horse.

We also learned, that I was kind of surprised, that there was not as much familiarity with the process of adopting a wild horse as I anticipated there would be. So, you know, I think that we all spend a lot of time educating, and we can't believe that someone hasn't heard this yet. But there are still a lot of people that don't know.

And then, kind of the last result that I would like to highlight is that at the last part of the study, we were looking at estimating adopters’ willingness, potential adopters’ willingness to pay for a wild horses. And there were three characteristics of the respondents that made them more likely to want to adopt or to pay more for a wild horse.

One is if they had already been a previous adopter. So, I think that people that have worked with wild horses before have, in general, they must have had good experiences with it and really valued that opportunity and would be willing to do it again. A result that probably doesn't come as a huge surprise, but it's still nice to see it empirically, is that the younger respondents in the younger age groups, have a higher demand for these wild horses. And then respondents who don’t have too many horses of their own already. So, if they have less than or equal to five horses at home, they are, they have a little bit of a higher demand for these wild horses.

Stephanie Church
Hmm, that is really interesting. You know, right around here in Kentucky, we have a lot of Thoroughbreds around us, of course and we do have a lot of sport horses and I board at a sport horse facility, or an eventing facility, and even just in that facility, I've come across three women who are all under 25 that have all have experience with specifically Mustangs, all of them. But they have adopted wild horses and one of them, her mom, is actually a pretty well-known, I believe, Mustang trainer.

And they just love these animals and talk about how hardy they are, and how much fun and willing they are to do things. So I have to admit, I've, my interest has been piqued, too. I think finding a wild horse that's tall enough for me probably would be a challenge. I think the same for you, right, Dr. Stowe?

Dr. Jill Stowe
Yes. I think so, we, we certainly need a horse with a big barrel to take up our legs.

Stephanie Church
Yes, both of us are about six feet tall. So, I believe Jill is taller than I am. So, yes. That's so interesting to hear about, about what you found in that particular study. What are the implications of your findings from this study?

Dr. Jill Stowe
So, if we take the results from this study, I had three main takeaways from it, or Hannah and I did. The first is that, as I mentioned a minute ago, you know, we feel like we're always educating people, and I can't believe they haven't heard the message yet, but there's a lot of people that haven't heard the message yet. And just educating horse owners on the process of adopting a wild horse and the possibilities and those sorts of strategies would be helpful just to increase the awareness and the opportunity.

The second, and this is also taken not only from this study that we just did, but the one that I talked about earlier, and a few other studies that other people have done, is that wild horses that have already received some sort of training are really suitable for a much wider audience of adopters. And, so, it is expensive, and it is risky, but I think that that's also a key element to being able to place more of these wild horses in private homes.

And then the final message is that, you know, if these younger age groups are the ones that have the highest demand for these wild horses, then targeting some of the marketing and other opportunities that are provided to those age groups might also help increase private adoptions.

Stephanie Church
Yes, okay, thank you. So, you mentioned in the demand study, how no one has analyzed the effect of programs such as the Extreme Mustang Makeover or the Trainer Incentive Program on demand for wild horses. And one of those women that I spoke about earlier has done one of the Mustang Makeovers, actually. Do you think you'll be able to explore the effects of these programs or is somebody already taking a look?

Dr. Jill Stowe
I don't know of any one that's already investigating this. I would love to pursue a study like this, but a real challenge
is the availability of data. So, what I’m interested in seeing, you know, these high-profile events, like the Extreme Mustang Makeover, one of the reasons that they are held is to showcase the versatility and suitability of these wild horses after they’ve received good training to do so many different things. And, so, the question that I’m interested in is, after one of these events, do we see an increased number of adoptions in the coming months? Is there some way that we can track the willingness of people to adopt based on these high-profile events? The data are very difficult to come by and, so, I’m hoping, maybe one of the listeners will have some ideas on how I can get my hands on some data like that, because I think it would be really interesting to pursue.

**Stephanie Church**
Yeah, so do I. We’ll make sure that we get something in the show notes about how to reach your department, so they can reach out to you about that. Or they can reach us through TheHorse.com too, yes. And I meant to mention earlier that a study that Dr. Stowe most recently described about demand, we actually described it in a story on TheHorse.com this summer and I will put a link to that in our show notes.

So, you’ve said that you might be interested in adopting a wild horse. What is it about the experience that you that entices you?

**Dr. Jill Stowe**
Well, I, from the people that I have talked to that have worked with wild horses, they indicate that once you create a bond or establish a bond with these animals, there’s, there’s none other like it. And, so, I think it would be really wonderful to experience that.

I have seen, I’m primarily a dressage rider, and I have seen a couple of really nice Mustangs in the dressage ring. And, so, you know, I’m a person that I don’t really care what breed a horse is if they have a good brain. Since I’m far over 29 now, that’s what, that’s my biggest, the biggest attribute that I’m looking for—I don’t bounce like I used to, um, you know—a horse that has a good brain that likes to work, that’s suitable for the job and is big enough to take up my long legs. I don’t care what breed it is, so, so, absolutely I would, I would be interested. But, I also think that, you know, I don’t live at a facility where I have fences that are high enough for a horse that’s just been brought in off the range. And although I have 45 years of experience with horses, I don’t know that I have the expertise to safely train a completely wild, unhandled wild horse. And, so, if I were to do that, I would definitely take advantage of some of the really excellent trainers that we have in this area to help me get a good, solid start.

**Stephanie Church**
That sounds good. Yes, I, similar to you, I am intrigued by people saying how, what a bond they have with these particular horses, and I board right now so it’s very impractical, plus I’m one person supporting one horse, and that’s about all I can do right now. But hopefully, in the future, I will get some land, and I think first on my list is I would really like to get a burro as a companion animal, plus that, that species has always been very fascinating to me.

We’ve run some stories on, on what it’s like to work with them. I also, we’ve mentioned how tall we are. I don’t necessarily need a performance horse in a wild horse, but maybe I could do a trail horse. I do really enjoy trail riding and those types of activities. My off-track Thoroughbred puts up with a lot with me. He does all the things, but trail riding is one of the things that I enjoy doing the most. So maybe at some point I can look into working with a wild horse. And I do love positive reinforcement training on the ground, so it’d be something I’d be interested in learning with a local trainer.

So um, gosh, I’ve really enjoyed learning about these studies, and I really hope you are able to do a study on what those incentive programs are doing for this group of horses.

**Dr. Jill Stowe**
Yes, me, too.

**Stephanie Church**
Yes, that would be really great. And then maybe we can have a conversation to wrap up that study, too.

So, we talk to innovators with this podcast. As an innovator in the field of agricultural economics, what direction do you see this research area, whether in horse markets or specifically in the wild horse market, headed?

**Dr. Jill Stowe**
So I’m going to answer this a little bit more generally with equine markets in general, but I kind of identify three major issues that I think are going to be increasingly important in the future.
One, is if you look at the age distribution of participants in the equine industry, the age distribution is getting older and some people are aging out and we don't quite have the number of participants coming in on the younger age groups. And, so, I think a real focus on increasing participation in equine-related activities will be very valuable.

Also, you know, as an economist, when you ask someone how they define economics, you're going to get a lot of different answers, but my favorite definition of economics is it's the study of the allocation of scarce resources. And one of those scarce resources is open spaces and land. And we all know that to do things with horses, we need land, whether it's to keep them or to ride them or to show them. And, so, you know, there's increasing competition for open spaces, in general, whether it's because of development or for other uses. And, so, I think that's going to be a key area in the long-run sustainability of the equine industry.

And then, finally, you know not everyone that rides horses competes. Certainly, I think more than 50% of horse owners are probably recreational riders, but there are a lot of people that do compete. And I hear it more and more that the cost of competitions is making that activity out of reach for many people. And I know that I am one who, the amount that I compete is severely limited by my budget and how much it costs to do it. And, so, that's another area that I think should receive attention in the future.

**Stephanie Church**

Mmmmm, and yes, I am with you there. I, this year, I have focused mainly on education, and I haven't done any competing at all, whereas in the past, I've typically tried to sprinkle at least a few competitions through the spring and the fall. So, yes, thank you for bringing this to light for us today.

Is there anything else you'd like to share with us about these studies and about your work, while we're chatting?

**Dr. Jill Stowe**

Yeah, one of the things that I would like to mention about the second study, where we were looking at the characteristics of people that might be willing to adopt a wild horse, is I thought it would be important to discuss a couple of limitations of that study.

So, the first is that, you know, because we did distribute the survey through Facebook, there's really no way to ensure that you are obtaining a representative study, a population of horse owners. And this is a, we know that this is a very intense issue, and I think that we attracted a lot, if anything, we maybe attracted a lot of people that were already very heavily invested in the issue. And maybe we didn't, I don't know, but when we have 90% that had adopted, had considered it, or would consider it in the future, and maybe that is representative of the US.-horse-owning population, I don't know. But I think it's important to keep that in mind.

The second thing, and this is a little bit different from the first study I talked about, where we had data from just the actual market decisions that people had made, where they actually use their own money to buy these on horses, is that this is what economists call a stated preference study.

Basically, we're asking people to make hypothetical decisions, and I think that we are all better at spending hypothetical money than real money. And, so, we do have to take into account that there may be some bias because of that.

And then the final limitation, which I actually think is probably the biggest one, is we know that, you know, Stephanie, you and I probably have different characteristics that we're looking for when we're adopting a horse, even though we both want a big horse. And, so, in order to be able to conduct the study, we asked each respondent to consider what they would think of as their ideal animal, the ideal horse. And the extent to which that type of a horse actually exists is unknown. There have been some other studies that indicate that a number of these wild horses are lower-quality animals. And, so, the fact that there are a lot of people that would be willing to adopt a horse, we need to put an asterisk by that, that it needs to fit certain criteria. And I, we don't know yet whether the horses that are available actually fit those criteria.

**Stephanie Church**

Okay, thank you for pointing that out. I don't know about you, but I took a spin through the upcoming adoption group, and there were some there are some nice-looking horses in there. Of course, I was spending my hypothetical money also.

**Dr. Jill Stowe**

Well, and I feel that that statement that I make is actually true of all horses, right? There are some there are high-quality horses and lower-quality horses, and you just have to be a wise consumer and find an animal that fits your, your needs and your wants.
Stephanie Church
You do, you do indeed. All right, well, thank you very much, Dr. Stowe for sharing your time and expertise with us today. I really appreciate it!

Dr. Jill Stowe
Thank you for having me. I’ve enjoyed it!

Stephanie Church
I would like to also thank our sponsor, Zoetis.

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