

Spectacular Spiders! – S2E10

Sandra Rideout-Hanzak [00:00:08] Hello. Welcome to A Talk on the Wild Side, your biweekly tour of all things wild in Texas. I'm your host. I'm Sandra Rideout-Hanzak.

Andrew Lowery [00:00:16] And I'm Andrew Lowery. Howdy. Howdy.

Sandra Rideout-Hanzak [00:00:18] Hey, Andrew, what's going on in your world?

Andrew Lowery [00:00:22] Not too horribly much. I've been working on some home projects, trying to get my back porch refinished. You know, all sorts of fun stuff,

Sandra Rideout-Hanzak [00:00:30] All the stuff.

Andrew Lowery [00:00:30] Right? Yeah. It's finally cooled off. I can finally get outside and work a little bit, so I'm trying to get it done before it gets too cold to work outside.

Sandra Rideout-Hanzak [00:00:37] Right. You don't need a canteen just to go across your back yard anymore. Yeah, that's good. Well, do you have anything new for us today?

Andrew Lowery [00:00:46] I do. And our news today actually comes from outside of Texas. Okay. Way outside of Texas. First, let's go back in time for just a second. The year is 1881, and one of the most dangerous and complex engineering feats ever attempted has begun the digging of the Panama Canal, the cutting of a country in two, to connect the Atlantic and the Pacific Ocean. It was completed in 1914 and the canal was U.S. controlled. Now, in 1964, there were several water control plants throughout the Panama Canal, and they began placing manatees in these waters. And as time went on, these manatees made their escape.

Sandra Rideout-Hanzak [00:01:23] Really? Manatees. I can't even, I mean how would you move a manatee, for one thing. But that's pretty crazy.

Andrew Lowery [00:01:30] It's super crazy. And what's really interesting is, like, the guys didn't really think this one through at all. What I know. Right? So they were in, you know, kind of the Amazon already being in Panama. So they brought up some of them were Amazonian manatees. But then at some point, I guess they got creative and started to take American manatees or the *West Indian manatee and bring them as well. And wouldn't you know it, they can hybridize. Yeah, I know. Crazy thing to think about. Right. And they did hybridize which is what the current population that's there now is, but they're technically considered to be invasive.

Sandra Rideout-Hanzak [00:02:11] Mm hmm. And so. So these hybridized manatees, they're just. Are they? Where are they now?

Andrew Lowery [00:02:22] So they're technically still like in the Panama Canal around the areas where these water control plants were.

Sandra Rideout-Hanzak [00:02:27] Yeah.

Andrew Lowery [00:02:27] But for all we know, there's been ingress and egress into the Pacific Ocean throughout the years that these guys haven't been monitored. They actually found one of them out going into the Pacific Ocean and I believe it was stopped. But it's an

ongoing issue for biologists in that area because there aren't manatees in the Pacific Ocean.

Sandra Rideout-Hanzak [00:02:45] Yeah. Yeah. Well, you know, every once in a while in Texas, we'll have one of the guys from Florida just, you know, come over and say hi. So it makes me wonder if they could come all the way up from Panama to get to these Florida manatees and start hybridizing there.

Andrew Lowery [00:03:05] You really never know. Nature's a crazy thing.

Sandra Rideout-Hanzak [00:03:07] Hmm. I think it's crazy that they could be in the Panama Canal. I've been there. I've seen the thing. It's huge. And when I was there, there was just a line, you know, of barges and these big ships waiting to get through. I would think that would be sort of a tricky place for them to live. I don't know.

Andrew Lowery [00:03:28] Insert manatee pun here.

Sandra Rideout-Hanzak [00:03:29] Yeah, yeah. All right. I don't have a good pun man.

Andrew Lowery [00:03:32] Me either. I tried, but they're just.

Sandra Rideout-Hanzak [00:03:34] We need a Sea Cow pun or something like that.

Andrew Lowery [00:03:36] The water's dry on that one.

Sandra Rideout-Hanzak [00:03:37] Yeah, well, that's interesting. And again, another potentially invasive species, I guess, because we decided to take something somewhere.

Andrew Lowery [00:03:49] We're great at that.

Sandra Rideout-Hanzak [00:03:49] okay, well, we are going to go a little spooky today for October, and we're going to talk about spiders with a very interesting young scientist. Her name is Ashley Wahlberg. So why don't we get started on that? So we're here with Ashley Wahlberg today, and I'm very excited because she's going to be talking to us about some spider work that she does. So welcome to our show.

Ashley Wahlberg [00:04:18] Hi. Thanks for having me. So my name is Ashley Wahlberg. I grew up in Houston. I lived there throughout high school. I went to college, West Texas A&M up in the Panhandle. I got my master's and my undergraduate there, both in wildlife biology and whenever I graduated, I was doing education outreach with reptiles. I've been a middle school teacher and now I teach biology at the college level.

Sandra Rideout-Hanzak [00:04:45] Wow, that's fun. You sound like a jack of all trades, that can do lots of things. That's neat. So you're also working on a, is it a master's degree or a Ph.D. that you're working on?

Ashley Wahlberg [00:05:00] A Ph.D.

Sandra Rideout-Hanzak [00:05:01] Okay. And tell us about your research there.

Ashley Wahlberg [00:05:06] So I work with spiders. And my main overarching goal is to use the brown widow as a study subject and look at how it got to be all around the world,

because it's originally native to either South America or Africa. People aren't too sure, but it's now found everywhere. And so I'm looking at like the mechanisms as to how it travels around and any impacts it may or may not have on the ecosystems that it gets to. So I'm looking at like micro habitat and the reproductive rates and parasitoid that kind of take over their sex. So I've got a lot of different mechanisms I'm looking at with that.

Sandra Rideout-Hanzak [00:05:49] Well, that's neat. I had no idea that they had made it all around the world, so. Oh, yeah, that's. That's interesting. Then when do you think you might finish up or. You know, I know that's a question we're not supposed to ask PhD students, but.

Ashley Wahlberg [00:06:03] Yeah, I just started a new job last week or last month. Sorry. And so I'm kind of taking a break while I get situated in this new job. I've done two years of the PhD so far, and while working full time, it's probably going to be another three or four whenever I start back up again.

Sandra Rideout-Hanzak [00:06:22] All right. And, your Ph.D. would be in entomology?

Ashley Wahlberg [00:06:26] I was doing it at Stephen F Austin. And so that had it in forestry. But really, it should be like an ecology/biology. But forestry is the only option they had.

Sandra Rideout-Hanzak [00:06:37] Doesn't really matter what your degree says, it'll be what you did your dissertation on. Okay, cool.

Ashley Wahlberg [00:06:44] Yeah.

Andrew Lowery [00:06:45] Hey there. So I'd like to ask you, what kind of spiders are native to Texas and which of them have you studied?

Ashley Wahlberg [00:06:52] Well, spiders native to Texas, tons and tons, of course, the ones that people tend to be more familiar with, like your orb weavers that have the real typical pretty webs like you think of whenever you think of spider webs, people are usually pretty familiar with wolf spiders. They usually know what widows are. Everyone thinks everything is a brown recluse, but I promise they're not as common as people make them out to be. As far as what I've studied, it's mostly widows and then the spiders that you'll find alongside widows. So some of your house spiders, seller spiders, just any of the species that it's called the Cobweb Weaving Guild. So species that make webs similar to widow webs because you're going to find those in the same areas. So that's what I'm comparing widows to.

Andrew Lowery [00:07:44] Oh, wow, that's really cool. So what role do spiders play in the ecosystem?

Ashley Wahlberg [00:07:51] So many. So the most obvious one that people think of is that, you know, they're eating a lot of things that we consider pests, especially mosquitoes, but they're also food for a lot of other organisms. There's this one snake. It's called a spider tailed viper. It's over in the Middle East, Iraq and Iran, I believe. And instead of a rattle at the end of its tail like we're used to with rattlesnakes, it has these modified scales that it has a big bowl and then it has really elongated skills that look like legs. So the end of its tail looks like a spider and it just sits there motionless and it like twitches its tail

around like a spider moving. And then a bird will come to eat what it thinks is a spider. And then the snake gets its meal. So it's trying to act like a spider to help it.

Sandra Rideout-Hanzak [00:08:40] That's interesting. I've never heard of that kind of adaptation on a snake that's pretty cool.

Ashley Wahlberg [00:08:48] Pretty recently discovered. I think it was like the early 2000. They haven't been known for a while.

Sandra Rideout-Hanzak [00:08:55] So you mentioned this web building, this web building guild. Where do those guys live? Where would we find them besides, you know...

Ashley Wahlberg [00:09:05] like within their webs.

Sandra Rideout-Hanzak [00:09:06] Are they in the forest or are they in grasslands?

Ashley Wahlberg [00:09:12] Most of it is going to be associated with people. You'll find a lot of them in your garages. The house spiders are named house spiders because they're very common in people's houses. You really don't find them too much. Like out in the forests. They're pretty urban as far as habitat types go.

Sandra Rideout-Hanzak [00:09:32] Really. That's neat. So they must have adapted a long, long time ago to living with people.

Ashley Wahlberg [00:09:39] Probably so, yeah.

Sandra Rideout-Hanzak [00:09:41] That's cool. Okay. So you've mentioned widows as well. I think most people are familiar with black widows, but you've also talked about this brown widow that's showing up everywhere that it doesn't belong. So what does a brown widow look like? How would we know? So if we are looking at a brown widow.

Ashley Wahlberg [00:10:06] That's a much more complex question than it would seem. So, first of all, start out with there's about 34 species of widows all around the world. Many of them have the name Black Widow, but that can apply to lots of different species. But there's also red widows, white widows and then brown widows. The problem with brown widows is they're the most variable of all of the species. And so whenever you're looking at a widow and you want an idea, most people look at the abdomen like the color in the powder on the abdomen. For brown widows, you can't look at that because it's so variable. Sometimes they're almost solid black. Sometimes they're like a tarnished color with some like stripes in there or some spot. So the only things that really hold true are their hourglass is going to be more orange instead of red, which unless you've seen a lot of them, it's kind of hard to differentiate between the two. The hourglass is also a little like sticker in the middle where it's normally like where it pinches. They have a little fatter of an hourglass and then spinnerets. Those are going to be at the very back of the abdomen. That's where their webbing comes out of. Brown widows have little yellow bars on their spinnerets and the other species of widows don't. Most of these characteristics aren't going to be real obvious to the layperson, but if they have, if it's an adult female and they have egg sacs, that's going to be the easiest way. So our black widows, they have really smooth egg sacs and then brown widows, they have spiky egg sacks ever since COVID became a thing. Now, even like scientific articles described, their egg sac is looking like the Corona 19 virus. Are you serious? That's exactly what it looks like.

Sandra Rideout-Hanzak [00:11:54] That is interesting. Now, other than the way that they look how are brown widows different than black widows? Do they have different roles in the ecosystems, eat different things? How are they different?

Ashley Wahlberg [00:12:09] So that's part of what I'm working on figuring out. Anecdotally, it seems that whenever brown widows get to a place over time, you kind of stop seeing black widows there. And so people are theorizing that these brown widows are outcompeting the black widows. But again, that's all anecdotal. There's a couple of us working on that exact question right now. You'll find them in the same habitats. But as a general rule, brown widows tend to be more urban and you tend to not find them in rural areas, whereas black widows you'll find them kind of both. I cannot tell you how many times I'm just like walking through a shopping center. There's black widows everywhere. People don't know they're there. I know they're there because I look for them, but people walk past them all the time and they're not hurting anything. People just only freak out about them when they know that they're there.

Andrew Lowery [00:13:04] So why is it important to understand the impacts of the Brown Widow Spider moving into Texas? Like why should we as the general population care about that topic?

Ashley Wahlberg [00:13:15] So the majority of why I'm looking at this, yes, I love spiders and yes, I enjoy working with them. But the spider aspect of my project is not the important part. It's the whole ecological question as to this non-native species getting into an already established environment and just messing up the whole hierarchy of how everything is working. So, you know, I'm looking at that with the spider as an example. You know, a lot of people will do it with a mammal or a birds or plants, but everything like the whole ecosystem can be disturbed differently depending on what the incoming non-native species is. So it's good to look at all different taxa in that sense.

Andrew Lowery [00:14:02] 100% agree. It's always good to have a good diversity of knowledge with what you're studying or looking at.

Ashley Wahlberg [00:14:08] Oh yeah.

Andrew Lowery [00:14:09] So spiders and spider webs, we often see them associated with Halloween and in many areas of Texas, it does kind of seem like the spider webs are all over the place in fall. What kind of spiders are creating these webs that we kind of see this time of year? And why are the webs so common during the fall?

Ashley Wahlberg [00:14:25] Okay, so for most spiders, they're going to live about a year and the cycles for them, their life cycles all match up pretty well. So for those ones that do live about a year, eggs are laid, you know, in the fall, a spider, things will emerge from the egg sex in the spring. And so they're going to be very tiny. And so you're probably having just as many spiders in the spring as you do in the fall. But they're so small that you just really don't know they're there. But all spring and all summer, they're growing and getting bigger. So them being bigger means. Bigger prey, which means bigger webs. So you're starting to notice these things more simply because they're getting bigger. And then, you know, by the time fall comes around, the spiders are adults and they're ready to mate. So they're all like full sized. And males are moving around trying to find females. Females have webs up everywhere, trying to get a bunch of food so they can lay more eggs to have more babies. And then the whole cycle just repeats itself. As far as web type. So the best ways I can describe them. So the ones that you're more likely to run like face first into,

those are orb weavers ones that there are some orb weavers that they'll only build their web at night, they'll keep it up all night and then they take it down in the morning. And whenever they take it down, they eat it. That way they can regain some of that energy that they extended to make the web, and then they do it again the next night. It really only takes them maybe 20, 30 minutes to make their webs. It's not as long as people think if there's a morning where it's really humid, there's a lot to do in the grass and you see all those tiny little webs just all over the grass. They look like little bowls. A lot of those belong to sheet weavers. The bowl and doily spiders, the most common they have like a bowl and then a flat portion over it. So they're called bowl and doily. If you see those spider webs where it looks like a big, thick dryer sheet and it kind of just comes to a tunnel at the at one point, those are your grass spiders. They look really similar to wolf spiders. They're really common throughout Texas. A lot of people call them wolf spiders. Wolf spiders don't make webs. They're active hunters. They can make webbing for their egg sacks, but that's why they carry their eggs with them. It's because they don't have like a home base. They just travel around looking for stuff to eat all the time.

Sandra Rideout-Hanzak [00:16:58] I didn't know that. I knew that a lot of spiders would take down their web every day and put it back up. I always wondered how that happened. Like if it's on a reel in there and they just roll it back in or...

Ashley Wahlberg [00:17:12] They just like eat it.

Sandra Rideout-Hanzak [00:17:15] I don't know. I'm not an entomologist, okay? I've had no formal training. So it's not our it's not our imagination then that the webs anyway are more common in the fall.

Ashley Wahlberg [00:17:31] That's. It's a real thing.

Sandra Rideout-Hanzak [00:17:33] It's a real thing. All right, really interesting. So, do you have some spiders you can show us?

Ashley Wahlberg [00:17:39] I sure do. This is my Brazilian black tarantula. He's like my pride and joy. Yeah, he's very well mannered. Oh, he's the one that if people want to, you know, get an experience with the tarantula, it's him. This is a Mexican fire leg. I am not going to take her out. She's not a she's a Mexican farmer like so from Mexico. All these species that I'm showing you here, they don't have very strong venom, but they do have urticating hairs.

Sandra Rideout-Hanzak [00:18:21] Hey there. Just a quick note. A definition of urticating hairs for you. "Urticating" means causing a stinging or prickling sensation like that given by a nettle. And these urticating hairs are a primary defense by almost all of the new world tarantulas.

Ashley Wahlberg [00:18:38] So her whenever I like, whenever I was getting her in her container earlier, she started rubbing her back legs up against her abdomen. And it's like flicking off those little hairs, really. And it's like fiberglass and it gets on you and it is so incredibly itchy. Wow. It's very obnoxious.

Sandra Rideout-Hanzak [00:18:57] I had no idea. And then how do you get that off?

Andrew Lowery [00:18:59] God forbid you get it in your eye or nasal like, oh, my gosh.

Ashley Wahlberg [00:19:03] Oh, I inhaled it before! I thought I was dying!

Sandra Rideout-Hanzak [00:19:06] Are you serious?

Ashley Wahlberg [00:19:07] Like, trying to, like, scratch my esophagus? Yeah, that. Oh, that doesn't work.

Sandra Rideout-Hanzak [00:19:12] So do you, like, use duct tape to get those hairs off of you or what.

Ashley Wahlberg [00:19:19] The easiest seems to be just to shower for a while.

Sandra Rideout-Hanzak [00:19:24] Oh, yeah.

Ashley Wahlberg [00:19:25] This one; I don't know how well you can see her. This is a Texas brown, so this is the one that most people see in Texas.

Sandra Rideout-Hanzak [00:19:37] You know, what did you call the one we have here in Texas? Common brown, is that what you said?

Ashley Wahlberg [00:19:46] Texas Brown. And the taxonomy of spiders is a little muddled. They're all in the same genus. Some people have now split what's in Texas instead of one species like it used to be, it's now like 11 or 12 species, but they're really hard to tell apart. It's kind of a messy.

Sandra Rideout-Hanzak [00:20:08] Yeah. Can they tell each other apart or do they interbreed?

Ashley Wahlberg [00:20:13] That's not something I can answer. I don't.

Sandra Rideout-Hanzak [00:20:17] Okay.

Ashley Wahlberg [00:20:18] I feel they can tell each other apart. Well, I think a lot of it is also depending on what people are defining a species as. Because it depends on if you're trying to separate them by looks or by range or by genetics or whatever. You know how people like to lump and split

Sandra Rideout-Hanzak [00:20:39] Yeah. Yeah. Now the Texas one. Tell us where it lives and what kind of web, if any, and what it eats and what eats it.

Ashley Wahlberg [00:20:54] Okay. So they're common throughout, you know, probably the western two thirds of the state. We do have them here in East Texas, too, but they're not very common. But pretty much throughout the whole state, you can find tarantulas. This is getting to be the time of year when people start seeing a lot of them because males, whenever they mature, they mature around four or five years old. Their sole purpose in life at that point is to breed because they're probably going to live maybe a year more and then they're going to die, whereas the females can live more than 20 years, so females will have a burrow. It's really hard to find burrows, so they don't really make like anything above ground that you'll see unless you just happen to see them out. But the females will have burrows and males are just constantly walking around trying to find like pick up on ceremony trails of females. So this time of year, whenever you see them all crossing the roads and everything, they're almost all males that are doing that and they're

just trying to find a lady friend before winter comes and they possibly die. As far as eating, though, I mean, anything they can fit into their mouths, they're not picky. Really? Yeah. Whenever, like. So snakes, I feed them frozen, thawed mice. And whenever a snake doesn't want to eat, I'll just take the mice and give it to one of the tarantulas. If you get bit by one of our tarantulas here in Texas, it's not like a serious medical concern or anything like it's going to hurt because the things are big, but the venom is very weak. It's okay. It's real. Not much to worry about.

Sandra Rideout-Hanzak [00:22:34] I'm glad you brought that up, because I was thinking about asking you about that. And what about the Black Widow? If a if a widow bites you, is it just like a bee sting kind of thing or what?

Ashley Wahlberg [00:22:44] So the last person that we know of that died from a black widow by it was in like 1983. Like, you always hear, oh, my God, it's so deadly. Blah, blah, blah. That's just not the case. Sure. You don't want to be bitten by one? I do have a friend who's a toxicologist in Houston, and he said, of all the bites he treats, that black widows appear to be the most painful. Really. But if you. Yeah, if you go to a hospital, they can give you pain management. But antivenom for widows isn't made very regularly, so it's not really accessible to people. So that's not really something you get there, just managing your pain. Personally, I don't want to pay a couple thousand dollars for that, so I wouldn't go to the hospital if I got bit by one, but I would never tell someone else. Like, Don't go if you're concerned, of course go. But sure, I know enough about it to be okay with not going.

Sandra Rideout-Hanzak [00:23:43] Sure. And how long does that really intense pain last?

Ashley Wahlberg [00:23:49] You know, I don't know.

Sandra Rideout-Hanzak [00:23:51] I guess it varies from person to person, how much venom you got, etc.

Ashley Wahlberg [00:23:55] But yeah. And probably where you got bit at. That's not something I've really read up on a whole lot. I do a lot more with ecology.

Sandra Rideout-Hanzak [00:24:06] Have you been bitten by a lot of your spiders?

Ashley Wahlberg [00:24:14] No. None. People seem to think that they've got it out for you or something. That's I mean, I'm fully confident I could put dozens on my arm, let them crawl all over me. They're not going to bite just because they're on the like. They don't know that. That's me. They're just walking on something. They're more prone to biting, if you like, lean up against them or you sit on them or most of it. It's when you don't know they're there and then you end up inadvertently squishing them.

Sandra Rideout-Hanzak [00:24:41] Right. Okay. Well, let's get to know. That's very good to know. So, Ashley, how did you become so interested in spiders?

Ashley Wahlberg [00:24:52] So whenever I was doing my masters, I got a chance to take in a technology course. And I like kind of I was interested in snakes already at that point. So kind of already in the field of creepy crawlies that no one else likes sort of thing. So I was like, Oh, spiders, that sounds cool. And so I started taking the class and just learning about all the different types of arachnids and, you know, all the different mechanisms that they have that they've adapted over the years, whether it be for hunting or camouflage or,

you know, parental care, whatever it is. Like, I just find them super fascinating. And it's not like, you know, you walk outside, you see a mammal, you can go pick up a book, figure out what that mammal is. You can't do that with a lot of invertebrates. There's way too many of them. We don't know a lot about them. A lot of them aren't even described as a specific species. There's just a lot more to learn. And they're so variable. And I just I kind of went down a rabbit hole once I started learning about them. The whole phrase like knowledge is power. Like, I fully believe that after this class. Mm hmm. I think a lot of people would be a lot less scared of spiders and snakes if they would just learn about them. It's just because people don't know anything about them.

Sandra Rideout-Hanzak [00:26:10] I think you're right about that. That's very true, especially I mean, if they could find out that there that they aren't out to get you. Yeah, that would be interesting to know. Well, what sort of career opportunities are there in entomology? And what advice would you have, you know, for somebody who's really interested in insects or spiders or what have you, and they might want to make a career out of that.

Ashley Wahlberg [00:26:40] So a lot of the jobs are going to be like working with museum or university collections, whether it be identifying species, because a lot of what's been collected, you know, people will know it's at least part of this family. But past that, we just know that it's not one of the other species that we know of. So we know it's different, but no one one's taken the time to describe it. Okay. Well, multiply that by like. You know, millions. And that wow. That's there's a lot out there that just aren't described. We don't know enough about them because there's so many. The USDA also employs a lot of like entomologists, mostly working with species that are detrimental to crops or timber or something else that we humans rely on a lot. And so a lot of it is with, you know. A single species or a handful of species that cause a lot of problems. The thing that the job that I really feel like I missed out on in life because I just kind of became aware of it in the past couple of years, would have been my dream job as a forensic entomologist. So, you know, dead bodies and the bugs that get to them. You can tell a lot about a body based on, you know, what bugs are their stage of life. Like, you know that, you know, if there's eggs already, they have to have been there for this amount of time. And, you know, if this specific beetle is there, that tells you something. I think all that would be fascinating.

Sandra Rideout-Hanzak [00:28:18] What are the are your chances of finding a job? Are they good? Are they slim? How abundant are these jobs?

Ashley Wahlberg [00:28:30] So if you concentrate on entomology, whether you have an entomology degree or not, the USDA, they usually are looking for people that have, you know, so many hours worth of college credit in entomology related classes. So most people going through just a regular maybe biology degree. You take one or two entomology classes maybe, but that wouldn't qualify you for a lot of those USDA jobs. So if you're wanting to go that route, it's really only four or five classes that would help you meet the minimum requirement. So it wouldn't require a lot if you want to go that route with it. It's not I would recommend, you know, you can always specialize in whatever you want, but keep your degree kind of more general like biology. Biology is very applicable to everything. And then, you know, if you want to be really into invertebrates or really into birds, then sure, like do that too. But I wouldn't necessarily do it my whole degree.

Sandra Rideout-Hanzak [00:29:36] That's good advice. That's good advice. Sort of make yourself versatile because you might have to take something first just to get a job and pay the bills.

Ashley Wahlberg [00:29:47] Yeah, I was a waitress for two years. I didn't want to do that, but it paid the bills.

Andrew Lowery [00:29:53] So our favorite question is to ask about Biology Blunders where something didn't go exactly as planned and you ended up with a funny story. Do you have any funny biology blunders you'd be willing to share with us today?

Ashley Wahlberg [00:30:05] I do. And they pretty much all have to do with COVID, too. So, you know, I have, you know, a whole colony of widows, like thousands and thousands, and they're kept in my office. Well, whenever COVID first happened and they told us we couldn't go up to the schools anymore. That obviously became a problem trying to take care of thousands of spiders. So I had gotten a deal where I could go up there once a week to feed and take care of everything, and then they'd be good for the next week. Well, a lot of things can happen during that week that I'm not going up there. So, for instance, some egg sacks ended up not having a lid put on all the way. So one time I came back and there's just babies all over my office. One time I would feed my tarantulas too while I was there and, you know, not coming back for a week. And so whenever I came back the following week and I walked into my office, the first thing I'd see is one of the tarantula enclosures just wide open. And I just looked at them like, Oh, no, but I didn't close it after I fed him. And of course, he wasn't in there. There happened to be one other girl at school who liked spiders, too. So I went and got her and we just started rummaging around through my office and we did end up finding him. He was behind some books. I didn't tell my boss about that. No one else was up there. And then. Also during COVID when no one else is there for all the little baby spiders because they're super tiny. I would feed fruit flies. Well, the fruit flies, they're wingless, but they can gain those wings back after a certain amount of generations. It just happens sometimes. So one of the containers of fruit flies, I went to open it to dump fruit flies into a bowl, which then I feed them from there. Well, they had apparently gained wings and I opened the lid and it was like a cloud of fruit flies. Like so many fruit flies just flew out in my face. And before I could really do anything about like get the lid closed, there were so many and they just like stayed in the cloud and just like left my office and went into the hallway and I just kind of like, looked around. I was like, Well, it's COVID. No one's here. There's just fruit flies around the building now. It's okay. It's like, well, the two years ago. Yeah.

Sandra Rideout-Hanzak [00:32:38] Is there anything else that you'd like to share with us about spiders or entomology or what you do?

Ashley Wahlberg [00:32:45] Yeah, there's just a little bit I'd like to give about spiders and some good they do for people because I know people like to hate on them. But the venom that spiders have know venom is just a lot of different proteins built together. So those proteins are used for so many different medicines that we rely on. So some of the lists of medicines that they're currently being used for, they have the. All right, so pain medications, multiple sclerosis, various types of cancers, high blood pressure, Alzheimer's. There's lists and list and lists of different medications that we need their venom for to make. And snake venom they use that for. So they do have a purpose, you know, even outside of the ecosystem. They do have a purpose for us, too.

Sandra Rideout-Hanzak [00:33:38] Sure.

Ashley Wahlberg [00:33:40] So, hopefully, people will appreciate them a little bit more.

Sandra Rideout-Hanzak [00:33:43] Yeah, definitely. I knew about snake venom, you know, being used for several different things. I think Copperhead Venom might be used for a breast cancer drug.

Ashley Wahlberg [00:33:52] Yep, that's a big one.

Sandra Rideout-Hanzak [00:33:54] Yeah, yeah, yeah.

Ashley Wahlberg [00:33:54] But same thing.

Sandra Rideout-Hanzak [00:33:56] Okay, well, that's really neat. Are the spiders, you know, dumb question here--Are they milked? Or what?

Ashley Wahlberg [00:34:04] Yeah, it can be done pretty much the same way as snakes. You're just not getting very much from each spider. So it takes a lot of spiders. Yeah, interesting.

Sandra Rideout-Hanzak [00:34:15] I just picture somebody milking a thousand spiders a day or something like that.

Ashley Wahlberg [00:34:19] Oh, man. Yeah, that doesn't sound like a very fun job.

Sandra Rideout-Hanzak [00:34:24] Somebody's got to do it, I guess.

Ashley Wahlberg [00:34:27] Yeah.

Sandra Rideout-Hanzak [00:34:28] Well, actually, thank you so much. I really enjoyed learning about your spiders and what you do. This was really interesting. I appreciate it.

Ashley Wahlberg [00:34:37] Thanks for having me. It's fun. I'm always happy to, you know, hopefully help people appreciate them a little bit more.

Sandra Rideout-Hanzak [00:34:44] Yeah. Thank you. Remember, you better not feed the wildlife attack. Talk on the Wild Side is a production of the Caesar Kleberg Wildlife Research Institute of Texas A&M University-Kingsville. Funding for this project is provided by the Harvey Weil Sportsman Conservationist Award by the Rotary Club of Corpus Christi. Podcast artwork is created by the talented Gaby Olivas. Tre' Kendall contributes with his creative talent as well, and editing is conducted by Andrew Lowery. For you hardcore fans. We're now putting bloopers at the end. So hang on.

Sandra Rideout-Hanzak I found an otter site on Facebook and I'm like, "heck yeah! I'm gonna follow that!"

Andrew Lowery [00:35:25] top fan badge unlocked!.

Sandra Rideout-Hanzak [00:35:27] Right, right.