

Sidedoor Podcast S2 Ep. 21 A Crane with a Crush Transcription

[INTRO MUSIC]

Tony Cohn: This is Sidedoor, a podcast from the Smithsonian with support from PRX. I'm Tony Cohn.

Tony Cohn: A few weeks ago, Sidedoor Producer, Rachel Aronoff, and I hopped in a grungy, little Hyundai rental to drive 70 miles outside of Washington, D.C. Our destination? The Smithsonian Conservation Biology Institute, also known as SCBI. It's a guarded compound in Front Royal, Virginia that the public doesn't normally get to see.

[Laughter]

Tony Cohn: Do you think people in Front Royal and this area, know what goes on here?

Chris Crowe: I hope not.

[Laughter]

Chris Crowe: No, I don't think they have any idea.

Tony Cohn: That's our guide, Chris Crowe.

Tony Cohn: Beyond the gated entrance lies the SCBI campus. There are some offices, staff housing, a cafeteria. And, it's surrounded by hundreds of acres of rolling hills and forests. It reminds me of a small college campus in the middle of nowhere, except there are no students or people wandering around. It's actually a little eerie, but we later learned that the real action was happening just out of view.

Tony Cohn: In addition to knowing his way around SCBI, Chris Crowe is a bird keeper here. And yes, Crowe really is his last name. He met us by the parking lot and brought us into his world.

Chris Crowe: Hello there.

Tony Cohn: Oh my gosh.

Chris Crowe: This is Guam rail.

Tony Cohn: Guam Rail: a brown bird native to Guam. He's about the size of a pigeon, but unlike a pigeon, he's flightless.

Chris Crowe: And you can pet him too.

Rachel Aronoff: Really?

Tony Cohn: Here, you go, Rachel.

Rachel Aronoff: Okay.

Tony Cohn: You live your best bird life.

[MUSIC]

Tony Cohn: SCBI is a part of the Smithsonian's National Zoo, but it's out of the public eye. Here, scientists study and breed more than 20 species of animals. Animals you might not have even heard of before, like the Scimitar-horned Oryx, the Maned Wolf, and the Dama Gazelle. And there's a reason for that; a lot of the animals at SCBI, including the Guam Rail, are endangered.

Chris Crowe: Um, they were almost wiped out when, during World War II. They accidentally brought brown tree snakes, a non-native species to Guam. And, it was wiping out all of the bird species.

Tony Cohn: At one point, the Guam Rail was actually extinct in the wild, as in completely wiped out. But, breeding centers like SCBI helped revive the wild population.

Tony Cohn: Seeing animals that have bounced back from the edge of extinction made me feel like I was at Jurassic Park, except with smaller and less-scary animals. But there was someone at SCBI that I was a little intimidated to meet.

Chris Crowe: She's beautiful. She's intelligent. She's very graceful. She's a great dancer, great singer.

Tony Cohn: Who is this amazing creature? Shakira? Beyoncé? Close!

[Crane Call]

[MUSIC]

Tony Cohn: This time on Sidedoor, we meet Walnut: a famous white-naped crane who's helping to secure the very future of her species. Though, she doesn't do it alone. Some of the credit should go to bird keeper, Chris Crowe.

Tony Cohn: We'll meet this odd couple, right after a quick break.

[MUSIC]

Tony Cohn: It isn't every day that you meet someone who completely embodies their last name, but Chris Crowe definitely does.

Chris Crowe: Most of my hobbies involve animals in some way. I draw, I birdwatch, I hike, I take nature photography; things like that.

Tony Cohn: Chris is all about birds, especially the birds that he takes care of at SCBI, which includes 3 species of cranes: hooded, white-naped, and red-crowned.

Tony Cohn: Most of Chris's time is spent making sure that the cranes are safe and happy.

Chris Crowe: I mean, a happy crane is a productive crane. Uh, I don't think they're going to breed, if they're not comfortable.

[Car Door Slams]

Tony Cohn: Chris showed us around the crane complex in his truck and, you know that classic moment when a dad, beaming with pride, pulls out his wallet and flips through pictures of his kids with someone he's just met? Seeing all of Chris's cranes felt a bit like that. He even named many of them himself.

Chris Crowe: This is Brenda and Eddie. This is a pair. They're already nesting. They had two eggs this week. And these are the three amigos. These are three chicks we got, uh, from last year.

Tony Cohn: And then we pulled up to Walnut's enclosure. It was this grassy space, maybe 100 feet long, surrounded by a tall chain-link fence to keep her from flying out.

Tony Cohn: Remind me. Which one Walnut is?

Chris Crowe: Uh, this one, right here.

Tony Cohn: Walnut is a white-naped crane.

Chris Crowe: So, her head and the back of her neck, are white. The rest of her body is gray. She has bare red skin around the eyes.

Tony Cohn: And she's not just one shade of gray. Walnut's feathers look water-colored. They vary from what the paint store calls "deep space;" a dark, charcoal gray to "cascade white," a light gray-blue color.

Tony Cohn: Walnut's about 5-feet tall. She sports a sharp bill, a long elegant neck, legs that go for miles, and like so many other SCBI residents, she's endangered.

Chris Crowe: Cranes are one of the most endangered bird families in the world. 11 of the 15 species are endangered cuz of habitat loss. They're losing the wetland habitat they need for feeding and nesting.

Tony Cohn: What does it mean for a species to be endangered?

Chris Crowe: Endangered means there are so few of them, they're likely to go extinct. With cranes, they continue to lose habitat. They continue to be shot. They continue to be disturbed. Um, so the populations are continuing to go down and at some point, they won't be able to recover, unless we change the way we're dealing with the habitat and the wildlife.

Tony Cohn: The white-naped crane is the fourth rarest crane in the world. It's estimated that there are only about 5,000 left in the wild.

Chris Crowe: Their breeding range covers China, Mongolia, and Russia. Uh, they migrated in the fall to south eastern China, the demilitarized zone between north and south Korea and Japan.

Tony Cohn: Is it, I mean, that's crazy that they're in the demilitarized zone. Have they always been there?

Chris Crowe: They've always wintered in the Korean peninsula, but that's about all the habitats that, that's left for them now, um, cause people can't go in there to disturb them. The habitat can't be destroyed and the crane's don't weigh enough to set off the landmines.

Tony Cohn: Basically, white-naped cranes can get along anywhere that people aren't destroying their habitat, or shooting at them.

Chris Crowe: They're just a very ancient, very successful, uh, species of bird until people came along and started ruining everything.

[Laughter]

Tony Cohn: But not to get too down on us, about 30 years ago, we did notice that many species, not just white-naped cranes, were suffering. So, zoos and research centers banded together to create the, "Species Survival Plan." That network of scientists and keepers knew they couldn't stop hunting and habitat-loss by themselves, so, they decided to focus on breeding captive populations of threatened or endangered species at different sites across the U.S.

[MUSIC]

Chris Crowe: And it's basically an insurance population, in case the wild population is lost. For some species, depending on where they're from, they can also be a source for reintroduction into the wild.

Sidedoor Podcast S2 Ep. 21 A Crane with a Crush Transcription

Tony Cohn: Today, there are over 500 Species Survival Plan programs, including one for white-naped cranes. The goal of the white-naped crane program is maintaining a captive population that's as healthy and genetically diverse as possible. But breeding the cranes for the program, like they do at SCBI, is tricky.

Chris Crowe: There's a number of cranes in captivity that can't reproduce naturally because of physical problems or behavioral problems. Uh, the main thing we see if a behavioral problem, where cranes were hand raised in the early 80s, before people really thought it out, and they're imprinted on people.

Tony Cohn: Basically, cranes will imprint, or bond with, and then follow whatever big thing is raising them. So, if a crane is raised by people, it's going to follow people around, and eventually, it's going to have some trouble acting, and breeding, like a crane. But the keepers can't let that fly.

Tony Cohn: It comes down to genetics. You can't breed cranes too closely related to one another, or you'd risk having an unhealthy population. It's better to have a large pool of genes to choose from. But in the case of white-naped cranes, there aren't a lot of them to pair. The only way to increase that pool is to add new genes to it from cranes who haven't yet had chicks, which means that keepers often need to help the reluctant reproducers. And Chris knows that all too well.

Tony Cohn: Okay, heads up to parents. We're about to discuss the cranes and the bees in detail, so you might want to skip ahead about 2 minutes.

Chris Crowe: The first crane that I believe I had to help catch for semen collection was a big, tall male named Ray.

Tony Cohn: Yep, semen collection.

Chris Crowe: And he's about five feet tall and I'm not much taller than that. So, he's at, you know, eye level with me, not wanting to turn around. Uh, I think I extended my foot, so he would attack my foot and then we're able to distract his bill and then grab them up real quick.

Tony Cohn: It's been about 14 years, since Chris first attempted collecting crane semen. Now, he's got it down to a science.

Chris Crowe: We normally do it with two people. So, after we've caught the crane, one person will stand over the bird, kind of straddle them between your legs and start massaging their legs and their back. And then, that's person's called the, "handler." And then the collector will be at the back end of the crane, on their knees, uh massaging and hopefully stimulating a sample to come out of the cloaca.

Tony Cohn: For those of us who aren't bird biologists, the cloaca is an opening that both male and female birds have. Everything happens out of that one hole, from pooping to laying eggs, to having sex.

Tony Cohn: Alright, so that's the first step of the process. Then what?

Chris Crowe: We draw it up into a syringe. So, then we go over and catch the female, manually massage her. And if she responds well, then we gently insert the syringe and inject the, the contents.

Tony Cohn: There you have it folks. Crane artificial insemination; or, AI for short.

Chris Crowe: It's only about a 30 second or less procedure, but they, they absolutely hate being held.

Tony Cohn: I mean, it's easy to understand why they hate it. But, not all cranes feel that way.

[PURRING]

Tony Cohn: One crane even likes it.

[PURRING]

Tony Cohn: That's Chris imitating a crane's "happy noise."

Chris Crowe: She'll do it during the artificial insemination.

Tony Cohn: Of course, we're talking about our friend, Walnut.

Tony Cohn: We wanted to see Chris and Walnut's relationship for ourselves.

Chris Crowe: Hello, Walnut. Hello, pretty girl.

Tony Cohn: As we approached Walnut's enclosure, she immediately recognized Chris and started doing her mating dance; flapping her wings, ruffling her tail feathers, and wriggling her neck, so it looked a bit like a snake.

Chris Crowe: So, that's some of the dancing, the head bobbing.

Tony Cohn: So, that's one of the signals that...

Chris Crowe: Yeah.

Tony Cohn: She knows you, recognizes you, has an affinity towards you?

Chris Crowe: Yeah, that's part of the dancing, it just shows that she's excited.

Tony Cohn: Chris told Rachel and me to wait outside, while he entered her enclosure with some treats. And Walnut didn't take her bright orange eyes off us.

Rachel Aronoff: Alright, I'm going to record her eating a peanut.

[Clacking Sound]

Tony Cohn: That sound you heard, that was Walnut snapping at our producer, Rachel, through the fence with her knife-like bill.

Chris Crowe: She's much more hostile when, when she sees me with...

[Laughs]

Chris Crowe: With other women, other keepers or female volunteers. Her, her demeanor totally changes.

Tony Cohn: Walnut was actually just jealous of Rachel.

Chris Crowe: And that was a threat she just did there.

Tony Cohn: By, by lifting her tail and putting her head between her legs?

Chris Crowe: Yeah, and also, when she, she also growls. It's kind of subtle when she does it, but...

Tony Cohn: Meanwhile, Chris was on the other side of that fence, about 2 feet away from her.

Tony Cohn: So, you're not nervous at all right now?

Chris Crowe: No, no. No. She's totally cool.

[MUSIC]

Tony Cohn: Now I should clarify, Walnut is still a wild animal. Though Chris and Walnut have a special relationship, she's not a pet. She is 5 feet tall, and her sharp claws and bill look dangerous. I mean, you heard the way she snapped at Rachel. But, she sees Chris, a human, as her mate.

[MUSIC]

Tony Cohn: So, how did Chris gain this cranky wild bird's trust in order to help her reproduce?
Tony Cohn: We get the full story, right after a quick break.

[MUSIC]

Tony Cohn: In late February, Chris got up on stage to tell an audience about his and Walnut's intimate relationship. This was part of an event called, "Strange & Curious Smithsonian Jobs." Needless to say, Chris's job definitely fit the bill.

[APPLAUSE]

Tony Cohn: And as the evening's host, I introduced Chris on stage. Then, Chris told everyone about his and Walnut's relationship over the past 14 years, and it was so weird and wonderful, that it inspired this whole episode.

Tony Cohn: Chris began by telling the audience about cranes and how AI, or artificial insemination, is typically done. But I'll let Chris pick up the story, right when he and Walnut first met.

Chris Crowe: Um, she came to us at 24 years of age, never having produced any offspring of her own. They should be breeding at 2 or 3 years of age. And she didn't because she was imprinted on people. She was hand-raised in the early 80s and she bounced around at other zoos. Um, she allegedly killed two males, cranes they tried to pair with her. I say "allegedly." It's not like she was tried and convicted for it.

[Laughter]

Chris Crowe: But, if anything, she was set up or framed.

[Laughter]

Chris Crowe: Because, when we pair cranes, we put them side-by-side, so that they can see each other, but not contact each other. And I think she would have made it very clear she didn't want anything to do with the male. So, as soon as we both arrived at SCBI, in the same year, she was automatically tamer than the others. She would always respond well to when she saw any of us. She would dance, bob her head, dance around. But, given that she was imprinted on people, and that we needed to do AI and that catching birds for AI is stressful to her and involves potential risk when we're catching them, to both them and us. I thought, we thought we could try training her to accept AI, without any physical restraint, which would be much better for her. So, I began spending a lot of time with her, getting her better used to my presence. I'd bring her dead mice, which was her favorite.

[Laughter]

Sidedoor Podcast S2 Ep. 21 A Crane with a Crush Transcription

Chris Crowe: And peanuts. I decided to start by trying to, just put my hand on her. So, I would reach out my hand. I would say the word, "touch," just to get her familiar with that sound. And then, reach out and of course, she would walk away. But, gradually, over time, I was able to touch her, before she walked away. So, I gave her rewards of praise and dead mice. Uh, I would bring her nesting material, which she really liked. She never liked where I put it, but she liked that I brought it.

[Laughter]

Tony Cohn: At this moment, on screen, there's a picture of Chris reaching out and putting his hand on Walnut's back.

Chris Crowe: So, over time, in this one, you can see, she's allowed me to touch her entire back and staying still. I would toss her a mouse after that. And the training would occur at her pace. Um, I would only do it if she would allow me to approach closer. And breeding season rolled around and she solicited me to mate with her. Um...

[Laughter]

Chris Crowe: So, in over the course of this time, she started become more hostile to the other keepers.

[Laughter]

Chris Crowe: Um, and we go from threatening them to attacking them.

[Laughter]

Chris Crowe: But when she started doing this, I would walk towards her to go to reach out, touch, and get her to stay still like that, while I touched her, before she'd walk away. Then, I was able to rub my hands down her back and then start manually massaging her. But then I'd have to stop and reach, to practice to put the syringe into the cloaca. So, I learned to use one hand to massage and one hand with the syringe and we eventually got it together. And, it led to this.

Tony Cohn: So now, there's a picture of Chris, like crouching behind Walnut and artificially inseminating her.

Chris Crowe: Most people would be arrested for this sort of thing.

[Laughter]

Chris Crowe: Yeah, so that led to this.

[Collective Aawwww]

Tony Cohn: It's a picture of a cute, baby crane.

Chris Crowe: We've gotten seven chicks from her. Um, we took her eggs and placed them in another crane's nest. It would have been too much for her to do, on her own; 'cause males and females take turns, uh, during the month-long incubation. Would leave her with a dummy egg. All the other cranes would accept a wooden dummy egg, but she somehow knew it wasn't right.

[Laughter]

Chris Crowe: And she would always kick it out of the nest. So, I would have to use a real egg that was drained and filled with plaster. And she would sit on those. Um, and the reason we let her sit on them is because, if you pull eggs away from a crane, they can, a female can recycle in two weeks and lay again. And we didn't want her to just keep laying and laying. So, we'd let her sit for a little while. Um, at least two of her chicks have gone on to produce offspring of their own, naturally. So, we are both grandparents.

[Laughter]

Chris Crowe: And they were all raised by, by other cranes, so they're perfectly normal. And in case it sounds like too sweet of a story, I have strayed. There have been others. Um...

[Laughter]

Chris Crowe: These are two that Walnut doesn't know about. Um...

[Laughter]

Tony Cohn: And since you can't see Chris' presentation photos, you should know that the other cranes he's trained are named Amanda and Wuchang.

Chris Crowe: These are both imprinted birds that we needed to do artificial insemination. Um, Amanda, first year she was here, I was paired with her. I trained her to do AI without restraint and we got some chicks from her. During the training, I did call her the wrong name. I said, "Walnut."

[Laughter]

Chris Crowe: And she noticed. She stopped and turned around and looked at me.

[Laughter]

Chris Crowe: But, luckily, I had a mouse in my pocket and that smoothed things right over. Um, Wuchang is a hand-raised female who was paired with a hand-raised male at another zoo. We're not bonded as close as Walnut and I. Um, Wuchang still is very friendly to the other male keepers.

[Laughter]

Chris Crowe: Um, we keep getting sent, uh, cranes that are imprinted on people that other zoos can't breed. Every time we think we're done, we, we've solved the problem, we get sent other ones. So, we, we get all the special cranes.

[Laughter]

Chris Crowe: We hope that we, we've bred all the imprinted white-nape cranes. Um, we've been asked to take on hooded cranes, and other Asian species that number s only 26 in captivity. White-napes are up in the 70s, largely to what we've done. We've accounted for about 25 percent of the offspring produced.

[MUSIC]

Tony Cohn: Let's leave Chris there, so that we can drive home his last point.

Tony Cohn: SCBI's white-naped crane breeding program has been an incredible success. They've been able to breed even the most stubborn cranes through techniques like artificial insemination. Right now, they're even working on something called, which will allow scientists to freeze white-naped crane sperm and use it at a later date. But while captive cranes are thriving, their wild cousins continue to die off. 15 years ago, the western population of white-naped cranes was at 3,000. Today, it's around 1,000. Those aren't promising numbers, and they won't improve until their wetland habitats are restored; and who knows when that's going to happen.

[MUSIC]

Tony Cohn: Until then, it's nice to know that there is a Plan B; well, a Species Survival Plan B, that will guarantee white-naped cranes' future in captivity. It might be hard to see a white-naped crane nesting in Mongolia. But maybe you'll find yourself in Front Royal, Virginia, hiking in the forest, and you'll hear a faint primal screech carried on the breeze. "What's that," you might ask yourself? Well, it's Walnut, calling out to her longtime mate, Chris Crowe.

[Crane Call]

Tony Cohn: And with that, we'll leave you with a tribute to Chris and Walnut, performed by the kids at the Smithsonian's Zoo Camp in 2012.

[MUSIC – Children Singing Along]

Tony Cohn: You've been listening to Sidedoor, a podcast from the Smithsonian with support from PRX.

Tony Cohn: This Chris and Walnut musical number was written in collaboration with Kid Pan Alley. If you want to see some pictures of Chris and Walnut, you can check them on our website at si.edu/sidedoor. There, you can also see information for upcoming "Strange and Curious Smithsonian Jobs" events, put on by the Smithsonian Associates. And speaking of, special thanks to Amanda Chavenson from the Smithsonian Associates for letting us be involved with the event and to Sam Game for his excellent sound engineering.

Tony Cohn: We are also supported, in part, by the Alfred P. Sloan Foundation, enhancing public understanding of science, technology, and economic performance. More information at sloan.org.

Tony Cohn: Our theme song is by Breakmaster Cylinder. This episode was mixed by Tarek Fouda. Original artwork by Greg Fisk.

Tony Cohn: I also want to give a very heartfelt thanks to Gabe Kosowitz, Sidedoor's Editorial Advisor and right-hand man, who is headed for a new adventure out west. He's been here since the early days, when we were getting Sidedoor off the ground. Gabe, best of luck on your new adventure and thanks for everything. And as one last send off; Gabe, will you read the credits?

Gabe Kosowitz: Our podcast team is Justin O'Neill, Rachel Aronoff, Jason Orfanon, Jess Sadeq, Nico Porcaro, and Elisabeth Pilger. Extra support comes from John Barth, and Genevieve Sponsler. Your host is Tony Cohn and I'm Gabe Kosowitz. Thanks everybody.

[Chewbacca sounds]

Tony Cohn: What is that?!?!

[Laughter]

Gabe Kosowitz: That was Chewy signing off.

Tony Cohn: Oh, was it?

[Laughter]

Gabe Kosowitz: yeah, that was goodbye, Chewy.

[MUSIC]