Sidedoor Season 10 Ep. 18 Cicadapalooza Final Transcription

Lizzie Peabody: Hey there, Sidedoorables. I'm not sure if you know this, but people across America are preparing for an event that nobody in our lifetime has ever experienced.

Floyd Shockley: The Cicadapocalypse, Cicadageddon …

Lizzie Peabody: Floyd Shockley is an entomologist with the Smithsonian's National Museum of Natural History. And he's talking about the emergence of two cicada broods this spring. Although, he prefers the term "Cicada Palooza."

Floyd Shockley: It seems a little bit more fun, uh, and, and, really, these guys are just coming out to party, to mate,

Lizzie Peabody: Yeah, it's like a music festival, you know.

Floyd Shockley: Absolutely, like, it's Coachella for cicadas, right?

Lizzie Peabody: Over the next eight weeks, Brood XIII and Brood XIX will tunnel their way up out of the earth… and start making a racket. The last time this happened was 1803. Thomas Jefferson was president.

Floyd Shockley: The emergence happened, uh, just before the Louisiana Purchase. And the Louisiana Purchase, of course, uh, overlaps the area of the great southern brood. So, it does make me kind of wonder would the U. S. have bought the Louisiana Purchase if it had happened just a few months earlier while the cicadas were all out and everywhere. I don't know.

Lizzie Peabody: Floyd says TRILLIONS of cicadas will blanket the South and the Midwest. The epicenter, with the most cicadas, will be in Northern Illinois.

Floyd Shockley: Between, Springfield, Illinois to just north of Chicago, that's where the densest populations are.

Lizzie Peabody: So be warned if you live near Chicago and have any outdoor events planned over the next eight weeks. Because cicadas can be loud. Very loud.

Floyd Shockley: In some cases, exceeding a hundred decibels. It'll be pretty loud. Not comfortable to the ear if you're near one of these dense populations of singing males. They'll only sing during the day, they go quiet at night, so there's some relief.

Lizzie Peabody: Noise aside, cicadas are harmless and actually pretty cool.

Floyd Shockley: And not something to be, uh, you know, worried about, but, uh, it's going to be a really great event.

Lizzie Peabody: In honor of this 'really great event,' we thought this would be the perfect time for our past episode Ode to Cicadas to also re-emerge.

Lizzie Peabody: We're about to play an episode from 2021, when Brood X swarmed the nation's capital and - I'm sure some even flew into the side door of the Smithsonian.

Lizzie Peabody: So, in honor of Cicadapalooza, this is our Ode to Cicadas. Enjoy.
Lizzie Peabody: This is Sidedoor, a podcast from the Smithsonian with support from PRX. I'm Lizzie Peabody.

[MUSIC]

Lizzie Peabody: A couple of weeks ago, I was sitting on my front steps with my morning coffee, waiting for my brain to wake up. As I sat there, holding my mug, staring off into space, I noticed a twitch of movement off to my right. It was a bug, a big bug, about the size of my thumb, with big red buggy eyes and large folded wings. And as soon as I saw it, I noticed another on the step below it. And another next to that one, and another and another. There were cicadas all around me. The Brood 10 cicadas arrived quietly, under cover of night. But there is nothing quiet about what happened next.

Lizzie Peabody: I am inside my house right now. Let's go on a little walk here. I'm opening my front door. Oh, yeah. This is the sound on my front porch.

Lizzie Peabody: DC, this June is a hot, hot cicada club, where the music is loud and the cicadas are thirsty. After 17 years underground, biding their time in the cool, damp, darkness, billions of bugs are crawling up into the light, busting out of their shells and taking to the skies. They've waited since George W. Bush's presidency for their one shot to mate and they only have four weeks to do it.

Lizzie Peabody: And we're going to walk four houses up the street to this one tree the cicadas really seemed to love a lot.

Lizzie Peabody: Up in the trees, in the final days of their lives, the cicadas sing.

Lizzie Peabody: There's like different layers of their calls. You can hear the ones that are right here in this tree. And then you can hear the echoes of the bugs that are in neighboring trees. And it sounds like a siren off in the distance.

Lizzie Peabody: This sound is a sonic portal to the past. We don't have audio recordings this old, but for millions of years, cicadas have burrowed and reemerged, again and again, singing their primordial refrain. We hear it today just as our human ancestors heard it thousands of years ago. Even the dinosaurs heard it. And if you close your eyes, you can almost imagine yourself in a Jurassic world.

Lizzie Peabody: Okay, walking back to my house now.

Lizzie Peabody: So, this time on Sidedoor, we'll learn more about this ancient insect, who's alien lifecycle and siren song have captivated the human imagination for thousands of years.

Lizzie Peabody: Back inside.

Lizzie Peabody: After the break.

Lizzie Peabody: But you can still hear them.

[MUSIC]

Lizzie Peabody: All right, if you put me in a dark closet without a watch or a calendar and told me to come out in 17 days, I would not be able to do it. So how can a bug underground count 17 years? This is one of the many questions I wanted to ask Floyd Shockley.

Floyd Shockley: There were lots last week, down here on the ground, but as you can see, they mowed this weekend, and so it was a cicada apocalypse.

Lizzie Peabody: Oh.

Floyd Shockley: But here's a really beautiful female.

Lizzie Peabody: Oh, yeah.

Floyd Shockley: She's o-

Lizzie Peabody: Floyd's an entomologist at the Smithsonian's National Museum of Natural History. We're taking an urban cicada safari, right outside the museum on the National Mall. He's carrying a mesh cage of lives at cadence to show me and wearing a t-shirt with a giant cicada graphic that says Brood 10. Like a band tee, if your favorite band only performed once every 17 years in an epic, multi-day concert.

Lizzie Peabody: Floyd is in charge of the 35 million insects in the Museum's collections, which includes 25,000 cicadas. So, he knows a lot about these guys, but let's start with the basics.

Lizzie Peabody: What is a cicada?

Floyd Shockley: Wow. Okay. So, that's a really great question. So, cicadas are true bugs.

Lizzie Peabody: True bugs.

Floyd Shockley: That means they have piercing sucking mouthparts. They are entirely herbivores. So, they only feed on plant juices. They don't feed on other insects or vertebrates or anything.

Lizzie Peabody: There are a bunch of different kinds of cicadas, but they all share the same basic life cycle. It starts when they hatch from tiny eggs laid in the branches of trees. After they hatch, they drop to the ground and burrow into the dirt under the tree. There they grow from the size of a grain of sand into the size of a peanut.

Lizzie Peabody: What are these guys doing underground?

Floyd Shockley: So that's a great question. A lot of people assume that they are hibernating or sleeping and they're not.

Lizzie Peabody: I kind of thought that.

Floyd Shockley: They are actively tunneling and feeding. If they were asleep, they would not be awake

to detect the yearly pulses.

Lizzie Peabody: Turns out, cicadas use trees to tell time.

Floyd Shockley: Remember, these guys are trying to time it just right for a 17-year emergence. And they use the pulses that the trees produce.

Lizzie Peabody: The pulses?

Floyd Shockley: Yeah. So, xylem changes direction and changes in density.

Lizzie Peabody: what is xylem?

Floyd Shockley: Xylem is the nutritive fluid that trees use. They move it back and forth down into the roots.

Lizzie Peabody: Basically, cicadas feed on the roots of trees and at different times of the year, the mix of water and nutrients in the tree roots changes, and the cicadas can tell.

Floyd Shockley: So, the cicadas can actually detect these pulses and they're the same pulses that produce tree rings. When you cut down a hardwood tree, you might see rings.

Lizzie Peabody: Yeah.

Floyd Shockley: Those same pulses are counting for the cicadas. And the cicadas are keeping track.

Lizzie Peabody: Not in the sense of counting on their cicada fingers. They don't have fingers. They do have a molecular clock built into their DNA that tells them when the right number of years has gone by. So, for Brood 10 that's 17 years.

Floyd Shockley: And when it hits 17, then it switches from that to looking for soil temperatures to hit 64 degrees before they're triggered to emerge.

[MUSIC]

Lizzie Peabody: Cicadas stay underground anywhere from two to 17 years, depending on the type of cicada. Brood 10 here is the largest group of 17-year cicadas. When the soil temperature is just right, nearly a trillion of them crawl out of the darkness together. A trillion. The Washington post estimates that's up to 30 cicadas per square foot, and that number is still only 2% of the original eggs laid. The cicadas tunnel up out of the ground during the night, leaving little holes behind them. At this point, they don't have wings yet. They're called nymphs, and they look like something leftover from the dinosaur times.

Lizzie Peabody: How would you describe a Cicada nymph to somebody who's never seen one before?

Floyd Shockley: Well, it's really hard to describe them. I mean, they almost look kind of like shrimp, honestly.

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Lizzie Peabody: I kind of think they look like fleas combined with a hippopotamus.
Floyd Shockley: That's a vivid visual.

Lizzie Peabody: And if you average their sizes, I feel like it's about right.

Floyd Shockley: But if we walk over to a nearby tree, we might find some nymph shells.

Lizzie Peabody: Oh yeah, there are a bunch down here.

Lizzie Peabody: As soon as they come out of the ground, the shrimp-like cicada nymphs start climbing. Banisters, stairs, lampposts, your leg, anything to get off the ground, as they prepare to transform from a digging bug to a flying one. Then the Cicada nymph splits open its shell-

Floyd Shockley: And oozes out. And then-

Lizzie Peabody: Oozes?

Floyd Shockley: Yeah, it's really kind of weird to watch. It takes a little while and they'll pulse as they're pulling themselves out. And then they'll hang from the shell and they'll let gravity kind of stretch out their abdomen, because the adult that comes out of the shell is bigger than the shell it came out.

Lizzie Peabody: Free of its shell the adult cicada needs about a week of R&R before it's ready to mate. And it basically just sits around. It doesn't even eat. Well, I like to think it's probably meditating on what the heck just happened. You live for 17 years in the dark thinking you're a digging bug and all of a sudden, you're in the blinding light and you have wings and everything is trying to eat you.

Floyd Shockley: Seriously. No. Rabbits will eat cicadas. Squirrels will eat cicadas, birds. All mammals eat them. Reptiles eat them. Frogs eat them.

Lizzie Peabody: Really?

Floyd Shockley: And, of course, people can eat them.

Lizzie Peabody: Yeah.

Floyd Shockley: Everything eats them.

Lizzie Peabody: Cicadas are nature's perfect high protein snack. And they're basically defenseless. Their only survival strategy is something called predator satiation, meaning predators stuff themselves silly at the all you can eat cicada buffet, but there are still more cicadas.

Floyd Shockley: So, the individual survivorship is very, very low, but species survivorship is guaranteed.

[MUSIC]

Lizzie Peabody: Here's what I love cicadas. They don't stink. They don't bite. They don't even try to hide. They crawl at a turtle's pace. They fly like toddlers run, with velocity but not a lot of control. And as bad as they are at flying, they are even worse at landing. They just bonk into things and fall on their backs and wiggle their legs in the air. They're sweet and slow and vulnerable. The cows of the insect world.
Floyd Shockley: I love them. I mean, look, as a demonstration of my trust. So, I mean, they're so gentle. I mean, literally if you give them a second. Come one.

Lizzie Peabody: You're putting it on your face. I just want to narrate for.

Floyd Shockley: Yep. Oh.

Lizzie Peabody: Oh, he flew away. He's like, "All right."

Floyd Shockley: Ah. That's okay. That's okay. No, they're totally safe. They're not going to hurt you.

Lizzie Peabody: The cicadas are here to make love, not war.

Floyd Shockley: They're just out here trying to find mates. They couldn't care less about us paying attention to them. They're looking for love and they only have four weeks to do it. So.

Lizzie Peabody: They're on a mission.

Floyd Shockley: That's right.

Lizzie Peabody: It's no stealth mission. The sound we hear in the trees is the mating call of the male cicadas. But how does a little bug make a noise so big?

Floyd Shockley: So that might actually be easier to demonstrate.

Lizzie Peabody: Yeah. Let's take a look.

Floyd Shockley: Let me grab one of the males we have in our cage here.

Lizzie Peabody: Okay. Floyd reaches into the mesh cage.

Floyd Shockley: That's a female. I have to find a male. Oh, there we go. Oh, goodness. You're very fussy.

Lizzie Peabody: You can tell the males from the females by the shape of their rear end.

Floyd Shockley: Got to get the wing out of the way. I don't want to hurt him.

Lizzie Peabody: Floyd gently lifts the cicadas wing.

Floyd Shockley: So now, if you look down, see that silver structure right there?

Lizzie Peabody: Yeah.

Floyd Shockley: That's what's known as the tymbal, and it's a ribbed structure.

Lizzie Peabody: It's like a silvery circle right behind the wing.

Floyd Shockley: So, they're using muscles to deform the tymbal, and then when they release the muscle, the tymbal snaps back creating the sound, but they're doing it so quickly, 300 to 400 times a second, it turns into a whir instead of a pop.

Lizzie Peabody: Wow. So, it's very similar to the mechanism that cats used to purr.

Lizzie Peabody: The male cicada's body is hollow like a drum to amplify the sound. It's so loud the cicada has to cover his own ears when he sings so he won't deafen himself. And I love this, male cicadas work together to woo the ladies, by singing in unison.

Floyd Shockley: It's called a chorus. When they form the larger groups and they begin to sing, it's a chorus.

Lizzie Peabody: The choruses are loud enough to ward off birds that might otherwise swoop in for a snack, but Floyd says that's just a side perk.

Floyd Shockley: The main point is to catch the attention of a pretty female flying by way over there. If all of us scream at the same time, she's going to hear us and come over. It just so happens to be loud enough that it also dissuades the birds.

Lizzie Peabody: It's a very collaborative approach to meeting. Do they not compete, really?

Floyd Shockley: No, not really. And it's all female driven. The female decides which male she's going to mate with.

Lizzie Peabody: Aha.

Floyd Shockley: And she'll let the male that she has decided on now, by flicking her wings.

Lizzie Peabody: Oh.

Floyd Shockley: It sounds a little bit like light snapping of your fingers, something like that.

Lizzie Peabody: So, consider yourself warned. If you walk down the street in cicada season, snapping your fingers to a song in your head, you might be dive bombed by some amorous bugs.

Floyd Shockley: It's entirely possible.

Lizzie Peabody: Or…

Floyd Shockley: If you use power tools, males will often assume that you are setting up like the world's best chorus and they will come and swarm you. So, lawn mowers or a leaf blower or something like that, they will swarm you, thinking that you're setting up to sing to some females.

Lizzie Peabody: And they want to be in your chorus.

Floyd Shockley: That's exactly right.

[MUSIC]

Lizzie Peabody: There's something otherworldly about the sound of cicadas. It seems to come from nowhere and everywhere. Thousands of cicadas calling out from the tree tops after a lifetime underground. It's almost alien. In fact, it may have inspired some iconic alien sounds from film and TV classics.

Floyd Shockley: So, for instance, the sound of the spaceships in the original War of the World. The sound of the radioactive ants that was used in the 1950s classic Them, with the giant ants. Also, the sound of first-generation Star Trek phasers.

Lizzie Peabody: What?

Floyd Shockley: If you listen closely.

Speaker: Fire phasers.

Floyd Shockley: So, we've been using cicadas' songs in lots of different ways. I would suspect long before Hollywood thought to do it.

Lizzie Peabody: When we come back, we look at how the ancestors of today's cicadas captured the imaginations of our own human ancestors long before Hollywood, after the break.

[MUSIC]

Lizzie Peabody: We're back, and we're talking about cicadas. There are a bunch of different kinds of cicadas, but you can basically divide them into two groups, annuals and periodicals. The 17-year cicadas deafening DC are periodicals. They stay underground for long periods and emerge all at once in a mass cicadasplosion. But then there are the annual cicadas which emerge every year at the end of summer. And you can find those all over the world, including in China. That's where we find some of the oldest examples of cicadas in folklore.

Gao Hong: Some people even describe a cicada as the master for musician.

Lizzie Peabody: The master musician?

Gao Hong: Or the queen of the music.

Lizzie Peabody: Queen of music?

Gao Hong: Because that describe how much they pour their heart into singing.

Lizzie Peabody: This is Gao Hong. She's a professional pipa player from China. And the pipa is a 2000-year-old Chinese stringed instrument, kind of like a mix between a guitar and a mandolin. Gao Hong says the pipa is the master of imitation.

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Gao Hong: So, the Chinese pipa can emit many, many sounds. Example, I can make a sound like a flowing water. Or you can hear the blow wind.
Lizzie Peabody: Or the cicada.

Gao Hong: That's that sounds like. You see, this pipa can emit so many sounds. And a very interesting instrument, I will say.

Lizzie Peabody: Because it's a storytelling tool.

Gao Hong: It is, basically. You can talk about story, use the music. Yeah.

Lizzie Peabody: In this piece, which Gao Hong wrote and performed with the Minneapolis Guitar Quintet, she tells the story of a hot, hot summer day.

[MUSIC]

Lizzie Peabody: Young men and women go to work in the fields and at the midday break, when the cicadas sing, they fall in love.

[MUSIC]

Lizzie Peabody: You can hear the plucking of the guitars imitating the drone of the summer cicadas.

[MUSIC]

Lizzie Peabody: Gao Hong was inspired to write this song after a trip to a remote part of Southern China, where she heard the Cicada Song, a song passed down through oral tradition by the Dong people, an ethnic minority in China. For the Dong community-

Jim Deutsch: Singing is a major form of communication. Some people have said that among the Dong song takes the place of the written word.

Lizzie Peabody: This is Jim Deutsch, Curator at the Smithsonian Center for Folk life and Cultural Heritage.

Jim Deutsch: And they have a very distinctive style of singing. And that if, at least traditionally, if you are a visitor coming into the village, you will be welcomed by song.

Lizzie Peabody: This was the case for Gao Hong.

Gao Hong: I just listened to the people on the street and I talked to them about especially the Cicada Song. So, they say, "Oh, how about we sing it?" They're all singing together on the street.

[MUSIC]

Lizzie Peabody: This is a recording of the Cicada Song sung by the Dimen Dong Folk Chorus during the

2013 Smithsonian Folklife Festival.

Jim Deutsch: So, in this recording, it's young women singing, in a chorus, a type of polyphonic music, in which they mimic a very distinctive sound that we hear from cicadas.
Lizzie Peabody: Do we know where this song, the Cicada Song, originated?

Jim Deutsch: No, we don't. We do not know where it began, but it is something that is found and maintained and shared among the Dong people.

[MUSIC]

Lizzie Peabody: Cicadas aren't just found in traditional Chinese songs. They're also in poetry, paintings, and carvings.

Jan Stuart: I mean, we have almost 80 Chinese pieces of art that depict a cicada in the museum. They're just that popular.

Lizzie Peabody: Jan Stuart is Curator of Chinese Art at the Smithsonian's Freer Gallery of Art & Arthur M. Sackler Gallery. She says in ancient Chinese culture, the cicadas' journey from the earth to the sky made it a symbol of immortality.

Jan Stuart: You have this idea of transcendence: coming out of dirt, muck, mire, in the earth, and then to climb up the tree to the tallest branches and unfurl these beautiful delicate wings. It's like transcendence. It's rebirth.

Lizzie Peabody: Jan says from the 2nd century BC through the early 3rd century, AD it was customary to place a piece of jade carved in the shape of a cicada on the tongues of the dead.

Jan Stuart: With the idea that well, jade itself is believed to have the power to prevent a body from decaying. And the tongue would have an amulet, but the tongue amulet was almost always a cicada.

Lizzie Peabody: I love the term tongue amulet. It's so poetic. Like I can feel it on my, this kind of cold, hard, lozenge to just sit on your tongue for eternity.

Jan Stuart: And jade itself is a very wonderful stone to touch. It is a cold, hard stone, but it feels just slightly oily. It's just so pleasant to touch. So, jade itself is associated with immortality and then the cicada are associated with immortality.

Lizzie Peabody: Double whammy.

Jan Stuart: Double whammy, indeed.

Lizzie Peabody: But you don't just find cicadas on the tongues of the dead. They're also on the headwear of the high and mighty in antiquity.

Jan Stuart: Even some Buddhist deities have been carved with a headdress that has a cicada ornament. The idea is that cicada are noble.

Lizzie Peabody: Not the adjective I'd choose, but Jan explained cicadas were seen as lofty because they go to the highest branches of a tree. And they were said to subsist on quote, "Wind and dew."

Jan Stuart: They seem to be able to sustain themselves in the purest of lifestyles. And they have these gigantic eyes, which easily leads to an interpretation that they're all seeing. And so, they become an appropriate idea for a ruler.

Lizzie Peabody: I don't know. If I were a ruler, I think I'd go with a lion on my head dress. But Jan says the cicada signaled refinement, modesty, and full awareness of one's surroundings, which has not been my experience of cicadas.

Jan Stuart: It is a very good point that they don't seem to actually be successful at navigating. But I think their eyes are just so suggestive that they should be.

[MUSIC]

Lizzie Peabody: Whether you love them or you loathe them the cicada is a remarkable bug.

Jim Deutsch: The cicada is a remarkable bug and it's something that human beings have noticed for as long as there have been human beings interacting with cicadas.

Lizzie Peabody: While the earliest relics come from China, Jim Deutsch finds cicadas in folklore across cultures around the world, from ancient Greece, to the Hopi and Navajo people, to Papua New Guinea, to the rainforests of Malaysia, to Indonesia, to South Africa. And in all of these stories and songs, the cicada represents everything from indolence and laziness, to pain and sorrow, to joy and rebirth.

Lizzie Peabody: The impression that I get is that cicadas are kind of like a blank canvas for allegory. Like you can see whatever you need to see reflected in the cicada.

Jim Deutsch: I think that many of the creatures, animals, birds, insects, that human beings encounter are a blank canvas onto which we human beings project some of our fears, anxieties, hopes, and dreams.

Lizzie Peabody: So, in this year of 2021, the Brood 10 cicadas are emerging from their subterranean homes, just as much of the world begins to emerge from a year long isolation. And I can't help this urge to do what so many others have done and look to the cicada for some kind of guidance. So back on the National Mall, I had one more question for entomologist Floyd Shockley.

Lizzie Peabody: What can we learn from cicadas?

Floyd Shockley: Well, you can either look at it as an annoyance, or you can look at it as the natural phenomenon that it is, and a gateway to getting back outside, enjoying nature, enjoying sort of being around other organisms, whether they be people or otherwise. So, I think there's a lot to kind of take away from that.

Jim Deutsch: As far as what we can learn from watching them, it's this idea of rebirth, re-emergence, and we're going to enjoy ourselves while we can.

Lizzie Peabody: That's a great message.

Jan Stuart: I think we can learn that you can be the bottom of the food chain and yet actually still have such power and respect over human imagination. I mean, just think of it. They are eaten by everybody in the gazillion, and yet there is so much art and culture dedicated to them because they are wondrous. So maybe it should teach us to temper our ambitions.

Lizzie Peabody: I love that.

Jan Stuart: That's all I want to be. A cicada. Good enough to be a cicada and I'm good enough to feel very happy.

Lizzie Peabody: For millions of years, cicadas have sung their refrain, disappearing and returning again. Their strange song reminds us that we're part of that continuum. It connects us to the past, but also to the future. Soon, the next generation will hatch and begin burrowing. And it makes me think, where will I be in another 17 years? Where will you? Where will we? One thing is certain, the cicadas will be back, in all their noisy glory, again, and again, and again, and again, and again, and again.

[MUSIC]

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

[MUSIC]

Lizzie Peabody: To see pictures of the cicada collection at the Smithsonian's National Museum of Natural History, which goes back hundreds of years, check out our newsletter. Floyd showed me cicada, the biggest in the world, that is larger than a sparrow and weighs more than a golf ball. You want to see this bad boy. Subscribe at si.edu/sidedoor.

[MUSIC]

Lizzie Peabody: Special thanks this episode to Gao Hong, Jan Stuart, Sonia Coman-Ernstoff, Floyd Shockley, Randall Kremer, Ryan Lavery, Tina Tennessen, Jim Deutsch, and the many, many cicadas who accompanied me in this episode. Thanks also to Smithsonian Folkway's recordings for sharing their cicada songs.

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Lizzie Peabody: Our podcast team is James Morrison, Stefanie De Leon Tzic, Ann Conanan, Caitlin Shaffer, Tami O'Neill, Jess Sadeq, Lara Koch and Sharon Bryant. Episode artwork is by Dave Leonard. Extra support comes from Jason and Genevieve at PRX. Our show is mixed by Tarek Fouda. Our theme song and episode music are by Breakmaster Cylinder.

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Lizzie Peabody: If you enjoy Sidedoor, let us know. Leave us a review in Apple Podcasts, and say hello on Twitter or Instagram @sidedoorpod. If you want to sponsor our show, please email sponsorship@prx.org. I'm your host, Lizzie Peabody. Thanks for listening.

Gao Hong: Or I can even imitate people laughing.

Lizzie Peabody: See sounds like you.