

But Why: A Podcast for Curious Kids

[But Why Live: Hoots, Screeches and Whistles, Part 2](#)

[Jane] This is *But Why: a Podcast for Curious Kids*. I'm Jane Lindholm. On this show, we take questions from kids just like you and we find interesting people to answer them. Later we'll tell you how you can send your questions to us. But first we're going to be answering questions about birds in today's episode.

[Jane] We're going back to the Coolidge Corner Theatre in Brookline, Massachusetts for the second half of our live show, Hoots and Screeches and Whistles: All About Owls and Other Birds. If you haven't listened to the first half about owls, I think you'll really like it. We learned how to communicate with barred owls. You can listen to it where you get your podcasts, but you can actually watch these two episodes too since it was a live show in front of an audience, we have a video of it and you can watch it on our website butwhykids.org.

[Jane] We're going to pick up where we left off last episode with our friend the bird diva, Bridget Butler and some facts, I told our audience about just how many birds there actually are.

So we've spent some time talking about owls. But did you know there are more than ten thousand birds in the bird world? Ten thousand different kinds? We are mammals. There are only 5000 different kinds of mammals so there is a ton of diversity in the bird world. So, we're going to answer some questions about birds more generally and teach you how to make more bird calls and identify the birds that might be in your own neighborhood. Here's another question.

[Cooper] Hi my name's Cooper and I'm from Palo Alto. I'm 6 and my question is how fast can the fastest bird go in the air and what is it?

[Jane] Bridget, how fast can the fastest bird go? And what is it?

[Bridget] You know what? I bet this audience has somebody in it who knows what the fastest bird is. Oh, look at all the hands go up. All right. You want to just shout it out.? What's the fastest bird? Go!

[Audience] Peregrine Falcon.

[Bridget] Yes! You guys are super smart. So, peregrine falcon is a bird of prey, okay and when it dives it can go 240 miles per hour. I know.....

[Jane] That's like race car speed.

[Bridget] It is like race car speed. So very, very fast. That's the fastest one. But you know what?

[Jane] What?

[Bridget] The next one is pretty fast too.

[Jane] Do you think they know what that is?

[Bridget] I don't know. What do you think the next fastest bird is?

[Audience] Pigeon.

[Bridget] The pigeon that you saw on your way in here today is very fast. 93 miles per hour.

[Jane] What, a pigeon?

[Bridget] Yes, now I want you to think for a minute.

[Jane] Yeah.

[Bridget] If you were a pigeon trying to get away from a peregrine falcon, ahh, you would need to be superfast. So, the same thing pigeons when they go into a dive they can go as fast as 93 miles per hour and it's all about avoiding a bird of prey.

[Jane] That's faster than any of your adults should be going on the highway by the way. OK. So that's in a dive. Those are flying birds. What about, just give us one more fast bird.

[Bridget] OK so here's another superfast bird and your parents can drive this fast on the highway. This one. Who's that?

[Audience] Ostrich

[Bridget] Ostrich. Now are they going to fly fast?

[Audience & Jane] No.

[Bridget] No. What are they going to do?

[Audience] Run

[Bridget] Run superfast so these guys can go 60 miles per hour.

[Jane] What?

[Bridget] So, imagine driving down the highway and looking out your window and seeing an ostrich right there. That would be pretty be pretty cool.

[Jane] That would be pretty cool. All right. Here's some more questions.

[Brody] My name is Brody. I am 6 ½ years old and my question is why do birds have wings?

[Simon] Hello, my name is Simon and I come from Washington, D.C. and I am 7 years old. And my question is why do birds have wings?

[Sabrina] Hi my name is Sabrina and I am from Yangon and I am eight years old. And I want to know why and how birds can fly and why can't humans fly?

[Jane] OK, Bridget. First of all, why do birds have wings?

[Bridget] Why do birds have wings? So, here's the thing, over time as... How many of you like dinosaurs?

[Audience] Me!

[Bridget] OK good. So, if we think back to the very first dinosaurs right, start to crawl out of the water and onto the ground. Right? And they're all out there on the ground maybe like all of us trying to get popcorn earlier. Right? We're all trying to get in there and get that popcorn, okay?

[Jane] Or stickers?

[Bridget] Or, stickers, right? Maybe if there were stickers and popcorn up higher, right? That would be, oh I see food up there. I need to get up there. And so over time birds actually adapted and evolved to be able to get food and to escape predators from the ground. So that advantage was wings!

[Bridget] Right, we're going to get wings so we can get off the ground and be in a different niche or niche, that special place where we can get the food and the shelter that we need to be able to survive, where it's a little bit less crowded and there's more food.

[Jane] Can we practice flying? I feel like maybe we need to move our arms a little bit. Do you guys agree?

[Bridget] I do to. Yes!

[Jane] Are you ready to move around different birds fly and use their wings in different ways. So, let's start with a flapping bird.

[Bridget] Okay, flapping bird. Everybody knows Crow, right? All right. So, crows do this wonderful flap at one of the things that happens when you start flapping your wings. If you have feathers and your body is designed with hollow bones to be able to get you off the ground what you create is lift and you're able to actually pull your body off of the ground. So, crows, most birds flap. All right? But some birds do something else.

[Jane] Yeah, my arms are tired. Can we do something else?

[Bridget] Yeah. They've got those special muscles, so it makes it so much easier. Let's do some soaring. This is a little bit easier. Anybody know this bird?

[Audience] Turkey Vulture.

[Bridget] Yeah, right on, turkey vulture. So, I call turkey vultures, tippy. Jane's going to do this for us turkey vultures hold their wings in a V shape, don't go flat, go make a V like a vulture and then they're tippy when they fly through the sky. They're like whoa, I'm going to fall out of the sky. But no, I'm not because I'm soaring. Good job. All right.

[Jane] OK so we've got flappers, we've got soarers. What are the birds might use their wings in interesting ways?

[Bridget] Oh my gosh! OK. This one is really... I see you guys are all doing it already. So, we were talking about how fast birds could fly, right? Now imagine being able to be a hummingbird and flap your wings 53 times in one second.

[Jane] I'm going to do it with my fingers.

[Bridget] OK. Are you ready? You can do it fingers or you can do hands. I'm going to count to one. And let's see how many times you can flap. On your mark get set, one.

[Audience] Laughter.

[Bridget] What did you get like two, maybe one?

[Jane] Let's do it again. Let's do it again.

[Bridget] Alright. One more time.

[Jane] Ok.

[Bridget] Shake it out.

[Jane] Okay.

[Bridget] Here we go.

[Jane] We've got to get to 50 in one second, ok, are you ready? (Overlapped with first part of line below)

[Bridget] 53 in one second. On your mark, get set. And one.

[Jane] What?

[Audience] Eleven!

[Jane] Eleven? You're fast. I got three. That's amazing. Why does a hummingbird have to do that anyway?

[Bridget] So, hummingbird's if you think about the niche that hummingbird's want to be in, they want to be able to sip nectar and pick little insects off of flowers. And if they can get off the ground and they can hover like bees...

[Jane] Like a helicopter

[Bridget] Like a helicopter, yeah, Jane then you have your own special niche that you're not competing with other birds with for food.

[Jane] Ok, one more. One more interesting winged bird.

[Bridget] I went to the New England Aquarium yesterday and I got to see the penguins and we looked at their wings and we were waiting for them to take off, right and fly?

[Audience & Jane] No.

[Bridget] No, you know but have you ever watched the penguin when they go underwater, they look like they're flying underwater don't they? So, they have adapted to living in some place totally different underwater to be able to catch their fish, awesome.

[Jane] Well, that's pretty cool, but you know so they're using it like wings underwater, but you mentioned an ostrich earlier which doesn't even get wings right?

[Bridget] Ooh. Right. So, Jane.

[Jane] Yeah.

[Bridget] Look they do have wings.

[Jane] I know but why? – (Overlapping dialogue with Jane & Bridget)

[Bridget] That little white edge. I know, why have wings, right?

[Bridget] It's so that you can turn left and right. OK. And this is another thing that's really kind of cool to look at in fish when we look at fish they use their fins to turn left and right. And it's the same thing with an ostrich. If you're running 60 miles per hour and you've got to turn around a shrub, really quick you're going to throw out a wing and that's going to help you move around that bush.

[Jane] Great flying everyone. That was awesome. All right. Here's another question.

[David] Hi, my name is David, I am six years old, I was born in Texas and I live in Korea. Why are birds colorful? And bye-bye.

[Jane] (Laughter) All right. So, we said 10,000 different species of birds, a lot of different colors.

[Bridget] Yeah, beautiful, beautiful colors. So, here's the cool thing. Color is also a way of communicating to other birds so males have these beautiful colors so they can communicate to other females, so they could display to other males when they're getting into territorial conflicts. But the really cool thing is that for most birds being eaten isn't a problem. So, you can be a bright color. You can show off, all right.

[Bridget] However, if you're a bird that's on the ground most of the time like turkey or ruffed grouse, what color are you going to be?

[Audience] Brown

[Bridget] Brown, so here's my rhyme. If you're brown, you're on the ground. If you fly, you let your color, no if you're in the sky, you let your colors fly. All right, so that's how we can kind of remember it. If it's a bright, bright colored bird, it probably lives way up here somewhere. If it's a brown bird it probably lives on the ground because it needs to be camouflaged and hide.

[Jane] But, Bridget oftentimes the males are really colorful, and the females are not as colorful. Why's that?

[Bridget] Why did the ladies have to be brown, what did they do? They sit on the eggs, right? So, they have to stay hidden on the nest to be able to make sure that those babies grow up big and strong.

[Jane] Up next we're going to teach you to talk to the birds in your own neighborhood.

[Jane] This is *But Why: A Podcast For Curious Kids*. I'm Jane Lindholm and today we're listening to a live show we did in Boston at the end of April as part of the first ever kids podcast festival. Our show was called Hoots and Screeches and Whistles all about owls and other birds.

[Jane] OK, we have one more question we want to tackle today and after we're done answering it, we need your help. So, are you ready? OK. All right here's the last question.

[Anna] My name is Anna. I live in Surrey and I'm 3 years old. My question is why do birds sing to other birds in dusk and in dawn?

[Jane] Why do birds sing, does everybody know what dusk and dawn are? Yeah shout it out. Dusk is between day and night, right when the sun goes down and it starts to get a little bit darker. And dawn is right as the sun is rising and it goes from darkness into light. And if you listen when you're at home in the morning, if you're up early at 5:30 or 6:00 maybe you can start hearing birds.

[Jane] So, I recorded this last weekend in my backyard in Vermont and it was about five thirty in the morning. There were dozens of different kinds of birds and maybe Bridget, you can explain why they're singing and then we can learn how to identify some of them.

[Bridget] So dusk and dawn, right? These are the times when birds are either waking up or they're going to sleep. And we talked a little bit about territory, and we talked about communicating. Right? So, at dawn what you want to do when you are a bird is saying I'm here don't mess around with my food. I'm looking for a lady. And at dusk before everybody goes to sleep, you want to let all the other birds I'm coming back in the morning for food and ladies. So, you're setting your territory and you're letting those other birds know that you are going to be around once again when the sun comes back up.

[Jane] What happens during the day?

[Bridget] What happens during the day? Well you got all these other things to do, right? You got to eat food, you got to escape from predators, and you got to feed your babies. So that's when you get much quieter because your mouth is so full of caterpillars and bugs and insects that you just can't sing anymore.

[Jane] All right in a minute we're going to be our own Dawn chorus. But first we better learn how to make a few bird calls so we can all pick the one that we want to be. Hmm, let's start with the chickadee.

[Bridget] OK. Chickadees, so when a male chickadee sings to a female chickadee he sings hey sweetie, hey sweetie. Can you guys do that?

[Audience/Jane/Bridget] Hey sweetie, hey sweetie.

[Bridget] Good job.

[Jane] I thought they said chickadee dee, dee, dee.

[Bridget] So that's a different kind of sound that they make for a different reason. So, hey sweetie is to find a mate or to say this is my territory and chickadee dee, dee is to stay in touch with one another. So, you'll hear them just be like, chickadee dee, dee. And you'll hear the other one will go chickadee, dee, dee. That's when they're all happy and they're getting along and they're finding food.

[Jane] OK. But sometimes I hear them do something else and it sounds like they're really, like, they really want you to know and they just go dee, dee, dee, dee.

[Bridget] Yeah right. So that gets intense dee, dee, dee, dee, they're either mad another chickadee, because they're not taken turns and chickadees do that. They take turns or because there is a predator or danger. So, if it's an intense short call it's an alarm dee, dee, dee. The more dees, the more you better watch out.

[Jane] All right. So, does everybody know their chickadee call? Make one of the three, right now, we are going to do it all together. You can do hey sweetie or chickadee, dee, dee. Or, dee,dee, dee. OK ready? Go.

[Audience, Jane, Bridget] Hey sweetie, hey sweetie, hey sweetie, dee, dee, dee and chickadee dee, dee. (Somewhat muffled)

[Jane] Wow, you guys are awesome. All right. I want to know a robin.

[Bridget] A robin. All right. Robins we're going to put a set of words to it and we're going to kind of mimic the pattern that they make. So, we're going to say cheerio cheery me cheerio.

[Jane & Bridget]: cheerio cheery me cheerio. Cheerio cheery me cheerio.

[Bridget] Now if t's at Dawn you're going to go, (fast tempo) Cheerio cheery me, cheerio.

[Jane & Bridget] Cheerio cheery me cheerio. Cheerio cheery me cheerio.

[Bridget] Because you want to make sure that everybody knows you're back and you're awake and you're ready to go. All right.

[Jane] Can I teach you one? OK, so this is one that we have where I live in Vermont and you can do it without using your mouth at all. It's ruffed grouse and if you are listening in the morning and you hear something that sounds like somebody starting up a lawnmower or maybe like a chain saw or a motorcycle. it might be a ruffed grouse so you can do this by pounding on your chest Are you ready? (pounding on chest sound) Just get faster and faster, it hurts a little bit. (pounding on chest sound)

[Bridget] So the cool thing about this is this is the bird sitting up on a log often the male. Very good Jane. You got it. The male is going to flap its wings really strongly and the sound that you're hearing is the vacuum that's created with the air between the bird's body and the bird's wing.

[Jane] All right. Shout out a bird that lives here. We're going to do local birds so we can sound like a Boston dawn chorus. Shout out a bird you want Bridget to teach us

[Audience] Blue jay.

[Jane] Blue jay, cardinals...

[Bridget] Oh my gosh, lots of blue jays. Let's do. Let's do Blue Jay. OK. All right. This was the bird that my daughter learned at two years old and she walked around in the backyard going jay, jay. Jay, jay.

[Jane] It's kind of a mean sound.

[Bridget] It is. But they're the Sentinels in your neighborhood. And that means that they're the ones that are looking out, out over everything and often they're the ones that call out first and let all the other birds know that there's danger. So, they have a really important job.

[Jane] OK. All right. But Bridget I'm getting a cold, is there a good one for me to call?

[Bridget] Oh, Jane, there is a great one if you have a cold. It's called the white breasted nut hatch.

[Jane] A nut hatch?

[Bridget] Plug your nose and repeat after me. (Mimic SFX of nut hatch)

[Bridget] It's so good with hundreds of nut hatches.

[Jane] Yeah, all right. One more, a whistly bird.

[Bridget] OK. One more whistly bird? Which one are we going to do?

[Jane] Sparrow?

[Bridget] Yeah. Let's do white throated sparrow. OK wet your lips, the birds that have nice clear notes are the easiest ones. So, this is white throated sparrow we call it the sound of the Northwoods. So, it goes, hi sam (?), Peabody, Peabody, Peabody. (Background whistling)

(Whistling)

[Bridget] There we go. Good.

[Jane] Oh, that's beautiful. OK. Are you already to be the dawn chorus? Pick your bird. Pick your favorite bird it can be one of the ones we learned, or it can be one that you already know. And we're all going to make our dawn chorus sounds. What are you going to be Bridget?

[Bridget] I am going to be the nut hatch.

[Jane] I'm going to be the sparrow. Everybody got their bird? OK on the count of three, be your bird. One, two, three.

[Jane] And now it's daytime and we're all eating.

[Bridget] That was so (indistinguishable word)

[Jane] That was amazing, you guys are awesome! (sound of applause)
So, before we let Bridget go. If you want to learn how to count birds in your own backyard and identify them, this is what you do. So, can you give us some tips?

[Bridget] So I have three kiddos at home. Five, six and seven. Chloe, Colby and Alexis. And this is the list that we keep every year. We call it our backyard big year list. And so, we try to get to know the birds that we see throughout the year and we put the bird down and the first date that we hear and it's on a big huge post it note on the wall in our sunroom. So, what we do together is we try to listen when we go outside.

[Bridget] You saw me doing this with my ears to make my ears bigger? And then we chase the bird down. We have some binoculars, sometimes we go without the binoculars and we watch the birds sing, because oftentimes when you see the birds sing, it sticks with the identification of the bird in your head and what the bird sounds like. So, you can start with some of your really basic birds. I've got to tell you guys, I added another bird yesterday to this list. So, number 29, Eastern Phoebe showed up in our yard. And so, as we get further into May, more birds are going to be coming back from Central and South America. And you'd be really surprised at what you can see in your own backyard.

[Bridget] We've seen or heard over 80 species in my yard which is in a small city in Vermont.

[Jane] So, if you're ready to start your own backyard bird count. This is how you can do it. And if you ever have more questions for Bridget you can find her Web site or if you want her to lead a bird walk for you in Vermont, come on to Vermont, we'd love to have you. Can you help me thank Bridget Butler for coming today and sharing her knowledge with us?

[Audience] Applause.

[Bridget] Thank you all. Thanks so much. Thanks for having me.

[Jane] I also want to thank Tyler Paquette for sharing some really fabulous bird photos with us. And thanks to all of you for coming today and making bird sounds. You guys were excellent birds.

[Jane] And if you haven't yet, you can subscribe to but why wherever you get your podcasts. You can find us on our website as well, butwhykids.org, we publish a new episode every two weeks and we take questions on anything. Science, history, emotions whatever you have that you want to ask, send it to us. You can send us a recorded file at questions.butwhykids.org. And we are so thrilled to be here at this festival. Thank you all very much for coming. Thank you.

We loved making that live show and getting to meet some of you in person in Boston. We really hope we can do more live shows like that and maybe get to where you live. We're

definitely going to try to do one in Vermont later this year or next spring. We'll let you know when we have a date.

But why is produced by Melody Bodette, and me, Jane Lindholm at Vermont Public Radio. Our theme music is by Luke Reynolds. Very special thanks in this episode to WBUR and the crew at the Coolidge Corner Theatre in Brookline and of course to Bridget Butler, at the bird diva.

If you have questions that you'd like us to answer send them our way. Have an adult help you record your question. You can use a smartphone. Tell us your first name where you live and how old you are.

We take questions on all kinds of subjects, math, history, ethics really anything you can think of. We have thousands of questions, and it actually makes us kind of sad that we can't answer them all, but it helps to know what you're wondering about because then that gives us ideas for future episodes. So even if we can't answer your question, you're actually helping determine what comes on this podcast next.

And speaking of next, we'll be back in two weeks with a new episode all about ants. It's going to be more interesting than you think. I always thought big ant, little ant, that's all there is red and black. Turns out the ant world is fascinating.

So come back. Stay with us. We'll be back in two weeks. Until then. Stay curious.