But Why: A Podcast for Curious Kids

What's A Screaming Hairy Armadillo? How Animals Get Their Names

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Jane [00:00:21] This is But Why: a Podcast for Curious Kids from Vermont Public Radio, I'm Jane Lindholm on this show, curious kids just like you from all over the world, send us questions and then we try to answer them.

Jane [00:00:34] And we usually bring in special guests who have a lot of knowledge or expertize in the topics you're curious to learn more about. We'll tell you how to send in your own questions at the end of the episode. You send us a lot of questions about animals and you also ask us lots of questions about why and how various things got their names. So today we're going to combine the two and we're going to introduce you to the concept of taxonomy or how animals are classified and categorized. There are some animals whose names don't really seem accurate, like daddy long legs, which certainly aren't all daddies or bald eagles that very clearly have plenty of feathers on their heads or guinea pigs. They aren't really pigs. And then there are animals with awesomely silly names. Have you ever heard of the umbrella bird? How about the sparklemuffin peacock spider or the monkeyface prickleback, the sarcastic fringehead and the white-bellied go-away-bird. We're going to learn about some of those fantastic creatures and answer your questions about how various animals got their names with two people who wrote a book about this.

Steve [00:01:53] I'm Steve Murrie. I'm a retired middle school science teacher and I'm living just outside of St. Louis.

Matt [00:02:00] My name is Matt Murrie. I'm Steve's son, and I'm out here in Orange County, California.

Jane [00:02:06] This father son team have written seven books together, but we brought them here to talk about one in particular.

Matt [00:02:13] The title of the book is The Screaming Hairy Armadillo and 76 Other Animals with Weird Wild Names.

Jane [00:02:21] What inspired you to write this book, Steve?

Steve [00:02:23] Well, a lot of kids are aware of common animals, the cute animals, the koala, the panda, blue whale, all those. But you're not familiar with the diversity of animals in the world. And this book is out there to show the diversity of animals and the cool features that they have.

Jane [00:02:47] Matt and Steve were ready to answer some of the questions you've sent us. Here's one from Reina.

Reina [00:02:52] And I'm from Kenosha, Wisconsin. I'm 10 years old. And this is my question: why are killer whales called killer whales instead of orca or just killer dolphin? Thank you a lot.
Matt [00:03:07] This is a confusing one, and the answer, while straightforward, might confuse you even more. So the killer whales aren’t whales. They are dolphins, right? But they do kill whales. So they were whale killers is what they were originally known as. And then over time, it morphed into killer whales. But it’s when these European sailors first saw them, they were observing them. And what they saw them doing was, you know, killing and eating whales. And they just I think they just assumed that they were they were whales.

Jane [00:03:38] Reina mentioned the word orca. And in case that’s unfamiliar to you, the actual species name for what we call killer whales is Orca. That’s its scientific name. And these marine mammals are actually the largest species of dolphin. They are remarkable hunters. They hunt and eat penguins, seals and fish, sometimes lifting their heads out of the water and grabbing seals right off an ice floe. Sometimes they even snap up floating seabirds. Orcas do also kill and eat some other small species of whales like minke whales, and they’re the only known predators of the great white shark. But the name killer whale has definitely stuck in everyone’s brains, so it seems like it’s here to stay. Matt Murrie says there are lots of animals whose names aren’t really descriptive of the animal itself, but are so funny or cool to say that they stick around.

Matt [00:04:33] There’s another one in the book called the sarcastic fringehead, I just writing about this recently...

Jane [00:04:38] Wait, stop the sarcastic fringehead?

Matt [00:04:40] And here’s here’s a good question for everybody else. What kind of animal is it? Right. So it’s a fish and like, how can a fish be sarcastic? But you break it down the word sarcastic, it comes from the original Greek word sarkazein. And when you look at sarkazein in the way the Greeks used it, it was like biting like a dog, like biting flesh off of a dog. So it was literally like being able to scrape meat off of bones, right? And it morphed over time. Now, sarcasm means like biting comments. So they went and kind of flipped and they named it using an old definition that we don’t normally use now. But it’s very accurate in the sense that it’s a fish that opens his mouth four times larger than when it’s closed and has very vicious teeth and so on and so forth. So, yeah, it’s fascinating that you think you’re reading a book about animals, the next thing you know, you’re reading about history and words and language and yeah.

Jane [00:05:33] I always think that’s so cool because when you do stop to think about how words became words and you learn about their origin, it does teach you a lot about history. And that’s especially true in animals and how animals are named. Before we go through, you know, exactly how animals are named and the difference between a common name and a scientific name while we’re talking about animals that are sort of misnamed, that live in the ocean. We also have a question from Ellie.

Ellie [00:06:01] I live in Burlington, Vermont. I’m seven and a half years old. And my question is, why are whale sharks called whale sharks? Because they’re not whales and they’re not sharks. Thank you. Bye!

Jane [00:06:14] Here’s Steve.

Steve [00:06:15] It’s the very largest of all the fish and especially the shark group. So since a whale is the largest mammal, they just kind of morph that over into the whale shark.
Here we got the largest shark. What are we going to call it? Well, let's see. How about whale shark?

Jane [00:06:34] So, Ellie, it is a shark, but it's not a whale. Not only is it the biggest shark, in fact, the biggest fish in the whole world, but there's another reason it carries that whale nickname. It kind of acts like a baleen whale. It's a filter feeder. So it takes a big gulp of water and then pushes the water out to catch the krill, shrimp and other plankton that makes up its diet.

Matt [00:07:00] But the big difference is it's not a mammal. So sometimes we think of it's easy to think, well, it's a shark and, you know, a dolphin versus a whale, for example, very close. And we often think a shark and a whale are very similar, but they're actually so different because, you know, the whale needs to breathe the oxygen and gives live birth and all of this. So, yeah.

Steve [00:07:17] Hey, what we're talking about whales. Let's tell you about one of our animals in the book.

Jane [00:07:22] Yeah, please.


Steve [00:07:30] It feeds on whale bones that drop to the ocean bottom. It's able to digest the outer part of the bone and then it feeds on the the inside the bone. And it's covered with like a like a snotty mucus. And it kind of looks like a flower, but it's just an incredible animal with such a crazy name.

Jane [00:07:53] Well, the name is kind of amazing. And, you know, while we're actually talking about this, I think maybe we should explain how animals get their names, because the names that we've been talking about right now are common names. But when we think about something like, is this a whale or a shark, that also gets us into how animals are categorized and how we know what kind of animal an animal is. And you go through at the beginning of the book taxonomy and the different categories an animal will be placed into so that if you know all of those different categories, you know a lot about the animal, even if you have never seen it. So can you describe taxonomy and the eight different groups that that an animal might be placed in?

Matt [00:08:37] Taxonomy is is it sounds a lot more intimidating than it truly is, really. And that's both when you hear taxonomy, it's it's just a classification system, right? And I think you touched on a lot of it before. It's a way that scientists and you've got to remember that, you know, scientists have been around for hundreds of years now. But when they first started, everything was all over the map, eright? You know, from across languages and countries and everything. So in order to to make the most progress possible, they needed to find a way to communicate as easily as possible. And good communicators know organization's one of the top things, right. So they they formed a system to organize not just animals, but also plants, fungi, and I believe bacteria, I could be missing....

Jane [00:09:24] Yeah, but it's basically all living things that are categorized this way?
Matt [00:09:27] It gets very general and then the farther down you go gets more and more specific until you get to what we call the species you have. The domain is the top. Then you have kingdom, phylum class, order, family, genus, species.

Jane [00:09:42] I'm going to repeat those categories just so you have a second to get them in your brain. The biggest, broadest category living things are put into is called the domain. There are three domains, archaea, bacteria and eucarya. Bacteria and archaea are both for microorganisms. All animals and plants belong in the eucarya domain. Below domain is kingdom. There's a kingdom for animals called animalia and a kingdom for plants called plantae. And then as you go down through the classification system, it gets more and more specific. So take humans. We belong to the eucarya domain, the animalia kingdom, the Chordate phylum, because we have a backbone, the mammalia class, because we're mammals, the primate order, hominidae family, homo is our genus and homo sapien is our species name. All species have two official scientific names, kind of like how you have a first name and a family name. So the species name for humans, as I mentioned, is Homo sapiens. The species name for a common black rat is Rattus rattus. An Asian elephant is elephas maximus. Those names sound fancy and originally the scientific names of animals were all in Latin or Greek. But they don't have to be Latin or Greek anymore. They just have to sound like they are. So animals have kind of fancy and maybe sometimes intimidating scientific names. But Matt Murrie says the people who discover a new animal species and get to name it can kind of go a little wild when it comes to how they name animals.

Matt [00:11:31] And that's where they have a lot of fun, right. Especially when it comes to fans of stories, you know, stuff like Star Wars or Harry Potter or I think there are literally hundreds of species now named after characters from movies. And it's not the common names. It's actually written in there.

Jane [00:11:49] So, yeah, it's there. Yeah, they're for their scientific name, but it might include Batman.

Matt [00:11:54] Exactly. Exactly. Or Lucius Malfoy. There was a WASP named Lucius Malfoy and that's the scientific name, not the common name. Yeah.

Jane [00:12:03] I think you even talk about one scientific name and again, they're two words when you get to the to the actual species name where if you say it out loud, it sounds like here's looking at you.

Matt [00:12:13] Yeah, here's looking at you, or pizza pie.

Jane [00:12:15] Those are silly. But is that even taking it seriously enough? I mean, you're naming a whole species of animals. Shouldn't you be more thoughtful about it?

Matt [00:12:23] So I had the same question, but this is what we discovered is some of these guys out there. And this is an encouragement for the listeners here, some of these people, and I think it's the pizza pie guy, he's discovered like 500 different species of insects, right. So I think it's I don't know how much of it is him being funny or him just giving up, like I've run out of names!

Jane [00:12:43] Right, like if you had 500 pets or 500 kids, you'd struggle by the 500th. That's right. Some people have discovered and named hundreds of animals.
Generally, if you're the first person to officially discover an animal, you get to name it for the record books. And Matt says, keep your ears open. Sometimes scientists put out a call to the public to help them name a new species. So that's scientific names, but we don't call all animals by their scientific names. We usually call them by their common names. Common names can be different in different languages, like the scientific name for a wolf is canis lupus. That's the same in every language. But in English we call it a wolf. In Spanish, you'd call it lobo. And in Welsh, it would be blyth. Even within the same language, an animal can have lots of common names. Here in Vermont where I live, we have an animal called a groundhog, but most people around here call it a woodchuck. In some other places, it's called a land beaver or a whistle pig.

And there's also a history behind some animals were, again going back to the whole discovery thing, the people who named them whale killers or killer whales weren't the first people to discover them. Some of these animals were given a common name before scientists even went about classifying them, right? Or they were discovered and they were being used in common, you know, common vernacular and then scientists say what is this? Oh, yeah. And it's also just funny to see what names, you mentioned, languages sometimes, when it's in a different language, it translates into something completely different. Sometimes it translates into exactly the same even. And it goes both directions, like the screaming hairy armadillo. Armadillo, for example, I don't know if there's any Spanish speakers out there, but Armadillo is little armored one. That's a Spanish word. That was you know, again, it wasn't discovered by the Spanish coming to Latin America, but it was named that. It's another example right now. We use that word and I think most English speakers wouldn't know that. It means little armored one. But now we're using that. It can be then classified according to whether it's pink, whether it's hairy, whether there's lots of armadillos we've discovered.

Well, tell us a little bit more about the screaming hairy armadillo. I mean, that is the whole name of your book, but is it a hairy armadillo? How can it be hairy and armored? And does it really scream?

It does really scream. And there are some funny YouTube videos. You can just a little short segments like some zoos will put out little. It makes a very, very loud scream for its size and its hairy but not probably hairy the way you think. It's got like hairs on it, yeah, but other than that it's very much like an armadillo, but it's not even my favorite armadillo. I think the pink fairy armadillo is probably my favorite after doing the research on this.

Why is the pink fairy armadillo better than the screaming hairy armadillo?

There's a couple reasons. While writing this book, I end up doing some visits to to Argentina and met some people in Argentina. The pink fairy armadillo is like one of their kind of national animals that's the only place it lives. But also its so different. I mean, it looks like an armadillo, but it's so different because it's got some armor plates on it. But it's it's more furry. It's got white fur underneath of it. And then it's got these big armor plates. It's a very strange looking creature. So I think is one of the most unique and also just a pink fairy armadillo. I just love the creativity in some of the names.

When we come back, more weird wild animal names.

This is But Why: a Podcast for Curious Kids today, we're talking taxonomy, that's how animals are classified and named, and we've been discussing the
differences between common names and scientific names. It's kind of like the difference between your nickname and the name officially on your birth certificate. We're talking about all of this with Steve and Matt Murrie, authors of the book The Screaming Hairy Armadillo and 76 Other Animals with Weird Wild Names. Here's a question from Kalyn.

Kalyn [00:16:48] I'm seven years old and I'm from Rogers, Arkansas, and my question is, why are German Shepherds called German Shepherds?

Jane [00:16:56] Here's Steve.

Steve [00:16:57] I wanted to find out in my research what did the Germans call a German shepherd? And they used their own language. It's a schaferhund like a dachshund. Schaferhund is what they call, huh? Yeah. And that's how it got its name. It was it was bred in in Germany. That's where it got started.

Jane [00:17:19] Yeah. And a lot of dogs in particular, and some cats where they're bred very specifically to look like a certain kind of animal and to behave in a certain way and to have hair that looks a certain way. They may have been bred in a specific place. And so they're their name is connected to that place where they were sort of bred or developed to look like that.

Matt [00:17:40] And it's a different kind of place, but it's still a place some of these animals have place in their names. That's not a country specific, like the southern hairy wombat or hairy nosed wombat is named such because there's a northern hairy nosed. Now, those are all Australia specific, but they're also, you know, sometimes the names are silly and sometimes they're helpful. Sometimes common names I mean, right. They'll tell you because, you know, a wombat's a wombat, oh wait but these live specifically.

Matt [00:18:09] And it's weird because of where they can live, there's still a different species, meaning that there's other biological differences. It's not just geographic, but that could be with what's available for them to eat or the climate or other conditions that, you know, allowed them to evolve differently over time. So, yeah, place whether it's country or directional, a lot of times have has as a place in common name.

Jane [00:18:32] Well, here's a question from Norah.

Norah [00:18:34] And I live in Anchorage, Akaska. I'm six years old and I want to know why are daddy long legs called daddy long legs?

Steve [00:18:47] Well, that's kind of an easy answer, no one knows.

Matt [00:18:49] The best I could find is that they gave it. They just give them out to a lot of different species of arachnids. And nobody knows the daddy part. They clearly have long legs, but yeah. No. Did you find anything else, dad?

Steve [00:19:02] Well, I think they're called harvestmen and there's some harvestmen with short legs. There's several species of the these harvestmen. And I was interested to learn that they're really not spiders. They've got eight legs, but they're in a separate group of spiders because they only have two eyes instead of eight eyes that spiders have. And there's something they've got eight legs like spiders, but...

Matt [00:19:31] They don't have venom or silk. I think I was reading they...
Steve [00:19:33] They still have venom that...

Matt [00:19:36] I'm sorry, you're right so they don't spin silk.

Jane [00:19:40] I wonder if there's a connection to a nursery rhyme or a story that makes the connection to the name, because of course not all daddy long legs are male, just like not all ladybugs are female, but we can't really find evidence of how exactly they got their names. So I guess we'll just have to live with not knowing. Here's a question from Heather.

Heather [00:20:00] I'm seven years old and I live in San Antonio, Texas. Why is the fox snake called fox snake?

Jane [00:20:07] Why a fox snake?

Matt [00:20:09] Because some of these fox snakes give out a musk that's similar to musk or a scent that a fox gives out. And that really blew my mind because I was thinking because of the coloration or where they live, there's some kind of behavior. Maybe they eat chickens, right? But it had to do with the smell like I had no idea that that a snake could give off a musk! And that it's the musk was so similar to the smell...I've seen a fox. I've never smelled the fox, right? But it was so similar to the smell of a fox that they called it a fox snake.

Steve [00:20:40] Yeah, I found that the same thing. Yeah, they do have scent glands around their their tail and then they can, they can spray it or they, they put it down to mark their territory or whatever. But yeah!

Isaiah [00:20:53] I live in Edmonton, Canada and I'm four years old, and my name Isaiah. Why are guinea pigs called pigs when they're not actually pigs?

Jane [00:21:07] Why are guinea pigs called guinea pigs when they're not actually pigs?

Matt [00:21:11] They're actually named that because of the sound they make. It sounds very similar to a baby pig or a piglet. So the kind of the squealing sound they went ahead and named it. T.

Jane [00:21:20] That makes sense, so it sounds like the animal that it's named after. And again, a lot, you know, sometimes especially the nicknames, even if the the scientific name is silly because the person who named it got to choose whatever they wanted. The common names that rise to the surface are common because a lot of people are going to associate that animal with that name, which is kind of neat.

Matt [00:21:42] It has to make sense if they called it something that didn't make. At least at the time, it would never take off. That's the thing about the common name is a common name can change over time and everything else. The meaning can change. But, you know, based on how people interact, the scientific name's more in stone.

Ben [00:22:00] Hi, My name is Ben and I'm four years old. I live in Essex, Vermont. Why are eagles called bald eagles. But they're not really bald?

Jane [00:22:15] Why are bald eagles called bald eagles. They're not bald.
Steve [00:22:18] Well, I think it has to do with the French word for bald, Matt, you probably know it.

Matt [00:22:24] It's actually the old middle English. It's actually an old English. We talked about morphing and evolving language, not just, you know, from whale killers to killer whales and all of that, but even just the English language. There's old English, middle English and the English we speak today. So if you had a time machine and you could go back four, five, 600 years ago and you went to say, England, even if you were an English speaker from today, you probably wouldn't understand anything they were saying and they wouldn't understand you either. And one of these words from middle English, the word bald meant white, and I think you kind of see this, too, sometimes even like with bald mountains and different things, that they look bald. It doesn't mean there's no hair. I could mean that it's bare, but it's covered in white. Right. And that's where the word bald was originally. Balde, I think is what the spelling was for white.

Jane [00:23:17] So why don't you tell me one of the favorite animals from your book and why it's a favorite too.

Matt [00:23:23] Do you wanna go first, dad?

Steve [00:23:25] Yeah, I'll go. There's an octopus called a wanderpus and octopuses in general are just amazing. And most of these things, they're able to change their color, their coloration as they move from one place to another. If it's if they go from the coral reef to the sand, you know, they can change their their color. They've got things in their skin, the chromatophores and these things just do it automatically. It's just amazing how they can do this. They don't think about it consciously, think about it. It's just that the nerves, I guess that responds to the light.

Jane [00:24:11] That is so cool. And Matt, what about for you, is that a favorite of yours or do you want to share a different one?

Matt [00:24:17] One I'm fascinated with recently is the hagfish, and not just because it's just kind of grotesque in the way it looks, but just the fact that a hagfish now, again, we know about octopus, like they'll squirt out into, you know, defend themselves or to get away. Hagfish doesn't do ink, but it does slime. And it's fascinating that just a few minutes this hagfish can produce five gallons of slime, which is a mind blowing when you think about it. Right? I think about kids, like when I was younger, what would I do with five gallons of slime? That's like five.

Jane [00:24:51] I don't even know!

Matt [00:24:52] Yeah, but here's what gets crazier. Because of the way it interacts with the water is that that five gallons can actually expand to ten thousand times its original size because the slime interacts with the water in a way. And it kind of, so, yeah, to think that the first of all an animal is called the hagfish is funny enough but then to think that it defends itself with slime in such large quantities.

Jane [00:25:17] Before we let them go, I had to ask Matt what it's like to write a book with your dad?

Matt [00:25:23] Well, you know, it's funny. This is actually our seventh book together. So if you're to ask me that on the first book, it'd be a very different answer then.
**Jane [00:25:32]** A better or worse answer?

**Matt [00:25:34]** Yeah, no, but no, it's been it's been a real pleasure being able to work with my dad writing these books and yeah. And not just my dad, but the scientists like, you know, my dad is telling you why he wrote the book. You know, he's a scientist. He loves science. He has animals. I wrote the book because I don't like science or I should say because I didn't like science, right?

**Matt [00:25:55]** A lot of it is, I think growing up, the way science was presented and everything, and you discover later on in life that, you know, science is there's more about discovery and imagination and creativity than it's easier or more interesting to get to the other stuff, maybe the harder stuff or the less interesting stuff on the surface.

**Matt [00:26:13]** And I don't know if I didn't have a father who was a scientist, if I would have come to that later on in life. So in a lot of ways, it's great. You know, I have this journey together.

**Jane [00:26:21]** That's it for this episode. Thanks so much to Matt Murrie and Steve Murrie, authors of The Screaming Hairy Armadillo and 76 Other Animals with Weird Wild Names.

**Jane [00:26:32]** Now, if you have a question about anything that you'd like us to tackle, have an adult help you record yourself asking it. It's pretty easy to do with a smartphone or a tablet device using a voice recording app.

**Jane [00:26:43]** Don't forget to tell us your first name, where you live and how old you are, then email the file to questions@butwhykids.org. We can't answer every question you send us, but we do listen to them all.

**Jane [00:26:56]** And we love to hear what you're thinking about. But Why is produced by Melody Bodette and me, Jane Lindholm at Vermont Public Radio. Our program is distributed by PRX and our theme music is by Luke Reynolds. We'll be back in two weeks with an all new episode. Until then, stay curious.