## Wonderful! 359: Stacking Till the World Ends

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[theme music plays]

**Rachel:** Hi, this is Rachel McElroy.

**Griffin:** Hello, this is Griffin McElroy.

Rachel: And this is Wonderful!

**Griffin:** Welcome back to Wonderful! It is a podcast where we talk about things we like that's good that we are into, as a husband and a wife... should be. [snort-laughs]

Rachel: Should be?!

**Griffin:** That sentence! That sentence started to take on a sinister sort of shape.

Rachel: Well, you know, it didn't... the construction of that sentence...

**Griffin:** It's a podcast about things we like that's good that we're into, as a husband and wife should be. I don't understand what's wrong with the syntax of that, baby.

Rachel: [laughs]

**Griffin:** As a husband and a wife, then you should be into the same things that's good.

**Rachel:** Oh, okay. Okay. I thought it was more like a suggestion, like, husbands and wives should all have podcasts.

**Griffin:** Husbands and wives should all have podcasts. I do think—

Rachel: Okay.

**Griffin:** —that it is...

**Rachel:** I mean, it holds true in your family.

**Griffin:** And there's a lot of healing... that happens here.

Rachel: [laughs]

**Griffin:** Isn't it? Speak on that.

**Rachel:** I will say, in all sincerity, it is good for us to have a time where we have to talk about things that we like, uh, that is not something that is on television in front of us.

**Griffin:** Or is a—or is our kids. It's nice to—

Rachel: Yeah.

**Griffin:** I love—love kids.

Rachel: Oh yeah. Family...

**Griffin:** Ours especially.

Rachel: Family—

**Griffin:** [loudly] Family is so... so important to me.

**Rachel:** [laughs] I don't know. This is probably different than most people. This is probably a weird thing about us. But family... [laughs quietly]

**Griffin:** Rachel and I have consumed so much reality television that there are certain, like, words or sentences that have lost all kind of, like, value, as a piece of raw, human communication. And I would say chief among those is, like, "For me, family is the most important."

**Rachel:** Yeah. This happens a lot on, like, a Bachelor, Bachelorette-type program. Where a person will sit down and they'll be like, "You know, he really shares my values, because we talked about it, and family is really important to both of us." [laughs]

**Griffin:** And it's so interesting on The Circle, I think, most of all, because that is a game where you have to make a whole lot out of a very limited set of information. And so people will say, like, "Yeah. And I love my mom."

And then two episodes later will be like, "Ricky is really into family, so he's getting my second place spot."

**Rachel:** Yeah. "We have a lot in common. We both have moms. Uh... " [laughs]

Griffin: "And family is good." Um, do you have any small wonders... for me?

**Rachel:** Uhh... I mean, this might be stealing yours, but I really like your new office.

**Griffin:** I can't believe you've done this.

Rachel: [laughs]

**Griffin:** Of course that was going to be mine. Of course you stole it. So cavalier.

**Rachel:** Here's what I will—I will zero in. I will zero in on a thing I particularly like, and then you can talk about a thing you particularly like—

**Griffin:** [simultaneously] 'Kay. 'Kay.

**Rachel:** —about your new office setup. Griffin took a real concentrated approach to his decor, and there is a wall that have show posters on it, and it is in perfect alignment. Like, there are six, uh, rectangles, and they are all lined up.

Griffin: 18x24, same frame. I'm very proud of it.

**Rachel:** And the colors look good together. Uh, yeah.

**Griffin:** It took a whole day—now, I will say, two of the frames are empty, 'cause I need to get a couple posters printed, so it does have, like, the, uh—[laughs] the background image that came with the poster.

Uh, that took forever. I love that shit. I love measuring stuff out and drawing little diagrams to, like, make sure that my stuff—I also hung some new shelves in here and, like, measuring that out and making sure it was all level and just perfectly aligned...

**Rachel:** Should you have been, like, a... I don't know, designer or architect or something?

**Griffin:** No, because it takes me so—like, it literally took me a whole day to hang these six posters and these four shelves. Like, so much math. Because I'm so careful. I don't wanna drill holes in the wall that don't have to be there.

Rachel: Yeah.

**Griffin:** Like, those shelves required eight holes to be drilled in the wall, and I feel very self-conscious about that. 'Cause I don't want mouses or Borrowers.

**Rachel:** True. I was gonna say, you know this is our house. Like, nobody's gonna come in here and be like, "Oh. Holes on the wall."

**Griffin:** I don't wanna get in trouble. I don't wanna get in trouble. Uh, I'm gonna say I'll use another piece of decor in my room that you didn't mention. It is a daily calendar invented by someone named Simone Giertz, who's a sort of old school YouTuber, science, STEM-y YouTuber, internet personality who invented this calendar to help her meditate every day. And all it is is just a—like a sort of grid. It has all 12 months, and then going down from each of the months is just a little button with a number, you know, one through 30 or 31 or whatever. And when you tap it it lights up! And so if you

do your stuff that day, and you get done what you want to get done that day, you tap it.

Rachel: Ohhhh, okay.

**Griffin:** And you get—you have—all of a sudden, you have this little, uh, very beautiful object in your room to track stuff.

**Rachel:** Yeah. I was trying to figure out—I mean, it's good that you got it going in January, too. That's very satisfying.

Griffin: Yes.

Rachel: Um, but I was like, "How does this help you meditate?"

**Griffin:** It's not for meditation for me. It's like a daily habit calendar, and for me it is, if I do everything on my to-do list, then I hit the button. I try to be very, very, very... I don't know. I've gotten very into my to-do list!

Rachel: Yeah.

**Griffin:** I have it on my iPad, and I only put stuff on it that I know I can do that day. I only put stuff on it knowing, like, "I have to do this or else I don't get to press the button! And it doesn't light up."

**Rachel:** No, that's very smart. That's very smart, honestly, because I—for me, I have to accomplish something every day that feels significant.

**Griffin:** Yeah.

**Rachel:** And a lot of times I'm trying to come up with that stuff on the fly. So, like, the other day I just organized our silverware drawer, 'cause I felt like I need to do something.

**Griffin:** You had that, uh, a couple weekends ago where we hadn't done anything really productive. And you were like, "We have to move all the records."

Rachel: [laughs]

**Griffin:** And so we moved our record player, which we don't use, and moved all our records to make space.

**Rachel:** I really appreciate, by the way, that you accommodate me on that.

**Griffin:** Of course! God, you look so strong right now.

Rachel: [laughs]

**Griffin:** Rachel's wearing a tank top in the middle of January, which is like, amazing. And you were just reaching upwards, and your biceps were just, like, poppin'.

Rachel: [laughs] Thank you.

**Griffin:** So powerful.

**Rachel:** But yeah, we have a drawer, as most people probably do, where we keep all of our storage containers in, and it has always been a nightmare. And so I just took everything out.

**Griffin:** Yeah.

**Rachel:** And, I mean, it took, like, 20 minutes, you know? But in my head I had been putting it off forever. It's very satisfying.

**Griffin:** Um, thanks... Adderall.

Rachel: [laughs]

Griffin: Um, I go first this week.

Rachel: I want to be clear that I am not [crosstalk] Adderall.

**Griffin:** I am. I am. Um, I want to talk about the Tower of Hanoi. You might not know what this is, but you do know what it is.

Rachel: Okay.

Griffin: We went to the Museum of Illusions here in DC, which we've been

to before.

Rachel: Yes.

**Griffin:** Which is like a good guaranteed, like, 30 minutes of fun.

**Rachel:** They have these, like, all over the country too, by the way.

Griffin: Yeah.

**Rachel:** And they're almost always exactly the same.

Griffin: Yes. It's not the most—you can't make a day of it, but it's neat, and

the boys like the illusions.

Rachel: Yeah.

**Griffin:** I like the gift shop. 'Cause once you get up in there, it's a bunch of puzzles, and there is one puzzle that whenever I see it, I feel this compulsion to solve it. And I think it's probably, like, the same way some people feel about Rubik's cubes, where they see a Rubik's cube and they know how to solve a Rubik's cube so they're like—

Rachel: Is it the three pegs with the rings?

**Griffin:** It's the three pegs with the rings.

**Rachel:** Yes. That always compels me, too.

**Griffin:** It is a mathematical puzzle where you have a tower of discs, varying in size. They stack up from biggest to smallest. Uh, and there's three poles. It all starts on the left pole, and the point of the game is to get the whole stack—again, biggest to smallest—all the way over to the right pole.

The only way you can do that is by moving one disc at a time, and the only other rule is that you can't put a bigger disc on top of a smaller disc.

Rachel: Oh, okay.

**Griffin:** That's it. Did you not know that?

Rachel: You can't—wait. You can't even temporarily, like at any point you

can't?

**Griffin:** No. Not even temporarily.

**Rachel:** Oh, okay. 'Cause I—obviously I know that the point is to get, like, a little pyramid of discs. But I, uh... yeah. Wow.

**Griffin:** You didn't know about that wrinkle.

**Rachel:** No, 'cause I was trying to demonstrate for Henry how it is done, and I thought, like, "I'm doing pretty good at this." Because I was just putting larger rings all over the place.

**Griffin:** Cheating. Just cheating left and right.

Rachel: Wow.

**Griffin:** No, the point of the game is that you can't do that. Uh, and the gist of it then becomes, like, you move one small disc to one pole, and then you move the next one to the next pole, but then before you touch that first stack again, you gotta move that small disc that you moved first onto the second one, and then—

Rachel: Yeah, yeah, yeah.

**Griffin:** So it kind of, like, bounces back and forth between these three poles. You are almost always—I mean, not almost. You are always moving the very smallest disc every other move, because it is, like, always at the top. It's gotta be the one that you are always, always digging out. And I feel

like this game, like, really revels in the pleasure of digging your way out of a tricky situation. And once you, like, get it moving, baby, it is such a thrill.

Rachel: Yeah. Yeah.

**Griffin:** I call it a mathematical puzzle game because it is extremely... solved. Right? Like, depending on the number of discs that you're moving, there is a guaranteed most-efficient plan. Like, uh, smallest number of moves required to solve the puzzle. And there's a very simple mathematical expression for that number of moves. It is 2 to the Nth power minus 1, where N is the number of discs.

**Rachel:** Oh, okay.

**Griffin:** So for instance, if there's five discs, it's 2 to the 5th power, which is 32, minus 1. Always 31 moves is the fastest solution to solve a five disc puzzle.

Rachel: Yeah.

**Griffin:** And there's all kinds of sort of different ways to express the solution that you go through. The easiest way to think about it is the three poles are like the source pole, and then there's a spare pole to help you with your moves, and then there's the target pole where you're trying to move everything. If there's an even number of discs that you're trying to solve for, the very first move you do is you put the smallest disc on the spare, in the middle. If it's an odd number of discs, you put that first disc on the far right, on the target. And then if you just kind of, like, follow what is the only legal move from that point, always moving the smallest disc with every other move, you will, guaranteed, solve it, no matter what.

Rachel: Yeah.

**Griffin:** And, you know, it gets sort of like, exponentially more moves with each disc you free up from that first stack, right? So the first—the first time you want to free up that second disc, it only takes two moves, right? Or three moves. But then the next one takes, you know, exponentially more,

and more, and more, and more. Uh, and... that's basically it. Right?

Rachel: Yeah.

**Griffin:** Uh, it is a math puzzle. And that is, I think, what makes it kind of, like, so, so satisfying. It was actually invented by a French mathematician in 1883. His name was Edouard Lucas. Uh, who published it in a booklet in 1889. When he published it in this booklet, it was accompanied by this, like, fictional origin story for the game. Like, "I found this game."

And the origin story was that there's a temple in Vietnam where Brahmins, like, scholarly sort of monk-like folks, play a version of this game. They are always, constantly playing a version of this game with 64 golden discs.

Rachel: Whoaaa!

**Griffin:** Uh, but it's following the same rules. Three poles, 64 golden discs. And when they finish, they world will end, is basically the origin story. The good—

**Rachel:** What do you mean—what do you mean, finish—oh. Okay.

**Griffin:** Once they get all 64 rings...

Rachel: Okay.

**Griffin:** ... following the legal rules of the game, from the left pole to the right pole.

Rachel: Jeez.

**Griffin:** The world ends.

Rachel: Okay.

**Griffin:** The good news is... that the solution for a 64 disc puzzle would require 18,446,746,730,709,551,615 moves.

Rachel: Wow!

**Griffin:** So if they made a move a second it would take them 585 billion years to solve it, which is 42 times the estimated age of the universe.

Rachel: Wow.

**Griffin:** So we're good. Is basically what I'm saying.

Rachel: Yeah.

**Griffin:** Very little risk.

**Rachel:** Do you think that's what, like, climate change deniers use as an argument? Like, "Guys, it doesn't matter. 'Cause—"

**Griffin:** "The Brahmins, once they solve this..."

Rachel: "No matter what we do to the planet... "

**Griffin:** "It doesn't matter." The game is also called Tower of Brahma. It has a few different names. As the sort of, like, game spread and the legend of it kind of spread, you know, certain details change. Now it's in a monastery, and monks are doing it, or it is in a temple in Hanoi, hence the name Tower of Hanoi. It is also sometimes called Lucas's Tower, because... it was invented by Edouard Lucas, who did a bunch of stuff with, like, the Fibonacci sequence as well, and a bunch of stuff with, uh, sort of recursive patterns and recursive numbers. He's apparently a fairly big name in the field of mathematics.

I don't know anything about that. But apparently, like, he is a known quantity. And that was a math joke. And the fuckin' math-heads out there are losing their minds about that right now.

Rachel: [laughs] Uh-huh.

**Griffin:** Uh, I just—I enjoy a good Tower of Hanoi. Because—and I think it's probably, like, the same reason I enjoy a puzzle, or I enjoy, like, adult Legos. Because there's, like, a solution. There's a guaranteed way to do it. There's a process to do it. And once you start doing it, all of a sudden it is a, like, chill, sort of meditative thing.

**Rachel:** Yeah. And it seems more achievable than a Rubik's cube to me, because there's just those three poles, you know?

**Griffin:** Just those three poles. That's it. There's a very—I mean, at any point there's only, you know, one or two things you can legally do in the game. And it's just a question of like, which one is the right one to do? And there is a mathematical equation that is pretty simple to solve that.

Uh, and that's the Tower of Hanoi. Most of 'em come with, like, six to eight discs. Uh, that's sort of the sweet spot. Obviously you can go higher than that, but then it gets much, much, much, much, much more complicated as the discs go up. Um, but I didn't know anything about the origins of it. I remember playing it in, like, old school, uh, like, logical adventure games.

Rachel: [simultaneously] Cracker Barrel.

Griffin: Cracker Barrel, definitely.

Rachel: [laughs]

**Griffin:** And the origin story I find very fascinating.

Rachel: Yeah.

**Griffin:** Can I steal you away?

Rachel: Yes.

Griffin: Thank you.

[ad break]

Rachel: Alright.

**Griffin:** What do you got?

Rachel: My thing.

**Griffin:** Yeah?

**Rachel:** Uh, is—actually, it's a fish.

**Griffin:** [laughs loudly] Baby, the way that you said that sentence... was amazing to me. It sounded—the tone that you used was like, "Rachel always brings fish to the show."

It was almost apologetic. Like, "Now, it is—now, listen, guys. I am bringing a fish this week."

**Rachel:** [laughs] Well, I—honestly, like, I tend to stay away from animals because one, I'm not, like, a biology... person.

**Griffin:** No.

Rachel: Also, uh...

**Griffin:** Some animals are evil.

**Rachel:** Also, there is a Max Fun podcast called Just the Zoo of Us.

**Griffin:** Delightful podcast.

Rachel: Yes. And they...

**Griffin:** I have guested on that a couple times.

**Rachel:** Yes! They review animals. That's kind of their whole thing. So I figure, like, well, I don't wanna do another... show...

**Griffin:** If you like TAZ: Abnimals, they invited me on to do a whole special about Ross seals, because my character in TAZ: Abnimals is a Ross seal.

**Rachel:** Yeah. But I was super curious about this fish.

**Griffin:** Okay.

**Rachel:** And it is the ocean sunfish.

**Griffin:** I love these big fuckin' weirdos.

**Rachel:** Yeah. So this—you do know what I'm talking about?

**Griffin:** Oh yeah. Yeah, I know about them because of Animal Crossing, I think is probably, like, the first—

Rachel: Ohh, yeah, okay.

**Griffin:** I feel like they are a mainstay in Animal Crossing. And every time you pull a sunfish up out of the water, it is insane, because they are bigger than your villager most of the time.

Rachel: Yes, yes.

**Griffin:** Which is exciting.

**Rachel:** So this is what, um, for those of you that aren't googling it right now, this is one of those fish that looks like a half fish?

Griffin: Oh yeah.

**Rachel:** It's got, like—it's got the regular kind of fins you'd expect, but it has no tail.

Griffin: No.

**Rachel:** And so it looks like, uh, it has been chopped in half. And also, it gets its name—like, people call it the sunfish because it floats on its side,

and typically toward the top of the water. Uh, and so it, uh... yeah. It looks like a fish that has met...

**Griffin:** Is just sun tanning.

Rachel: Yes. [laughs]

**Griffin:** Just sunbathing. I love it. He's a big, round friend.

Rachel: Uh, so these fish, super big, as Griffin mentioned. They are, uh,

the larger bony fish in the world.

**Griffin:** [laughs loudly]

**Rachel:** Which is how they—

**Griffin:** That's not nice. That's not polite.

Rachel: How they're, like, continually classified. Like, I was going to

multiple sites thinking, like, "That's a lazy way to describe it."

And then I was like, no, the largest bony fish is like, that's how they...

**Griffin:** What's the largest not-bony fish? What is a bo—what is a—'cause a shark is a fish, right? Shark is technically a fish. And I know that there are some sharks bigger than these guys. But I guess sharks are mostly just, like, you know, two metric tons of just pure chomp muscle.

**Rachel:** Oh, the whale shark is the largest fish without bones.

**Griffin:** Yeah. Okay. I got there.

Rachel: I just googled it.

Griffin: Good. Thank you.

Rachel: It's not like I knew that.

**Griffin:** No. But I appreciate it. I feel, uh—I was really going out. I was worried I was really showing my ass there.

**Rachel:** So, adult sunfish typically weigh between 545 and 2,205 pounds.

**Griffin:** What a range! What a tremendous range of weight that is.

**Rachel:** Yeah. So they—you know, they are vulnerable to predators. Um, and so often they will not get to be that big. But, like, a fish in captivity or in ideal conditions can really get up there.

Griffin: Yeah.

**Rachel:** Um, and as far as, like, their size, I mean, 5,000 pounds.

**Griffin:** What?

Rachel: No, no, no. [laughs]

**Griffin:** Sorry?

**Rachel:** Up to 5,000 pounds. That's what I'm seeing now on this other site. At the Monterey Bay Aquarium, they have a little exhibit.

**Griffin:** So the average is between 500 to 2,000.

Rachel: Yeah.

**Griffin:** The Monterey Bay Aquarium has a fucking unit. An absolute brick shithouse of a sunfish that weight 5,000 pounds, is what you're telling me?

Rachel: Um, yes. And, uh, 10 feet.

**Griffin:** 10 feet in diameter, I guess? 'Cause it's a circular fish?

**Rachel:** Well, it's not really circular. It's more like bullet-shaped.

**Griffin:** Um, yeah, okay. It has a more circular profile than most fish, than most fishies, I will say.

Rachel: Yeah. Uh, so yeah. That's a big guy!

**Griffin:** That is a huge, huge, huge fish.

**Rachel:** Yeah. I mean, you—

**Griffin:** Are we catching these? Are we catching and eating these guys? I don't... I haven't heard of a menu that has ocean sunfish up on it, so I don't know if their natural predators—

**Rachel:** Not in the US. Apparently, um, in countries like Japan, Korea, and Taiwan, you can eat it?

Griffin: Grab 'em and eat 'em. Okay.

Rachel: But, uh-

**Griffin:** Different strokes for different folks.

**Rachel:** Yeah. They have kind of a—like, a jellylike covering?

**Griffin:** [wheezes] And that's-a the good stuff right there. I would love to taste a sunfish jelly. Not to hurt the guy, but if I could just get a little bit of the jelly, a little bit of the jelly off there.

**Rachel:** They have a thick skin and it's covered in, like, a mucus.

Griffin: Alright.

Rachel: Um, the skin-

**Griffin:** That mucus.

**Rachel:** —can be up to three inches thick.

**Griffin:** Jesus Christ, sunfish.

**Rachel:** So, yeah. It's hard to, like—hard to prepare that. Which I think—

Griffin: I have to imagine—

**Rachel:** —is a lot of why people don't [crosstalk].

**Griffin:** —there would be a lot of stewing. But how do you get a pot big enough for a 2,000 pound fish? You simply can't. I bet that slime makes you... young. I bet that slime—I bet that sunfish slime...

**Rachel:** [laughs] That's the secret.

**Griffin:** I bet that sunfish slime, if you rub that on your—your skin, it's the substance. I haven't seen The Substance.

**Rachel:** [laughs] We haven't seen The Substance yet.

**Griffin:** But I'm pretty sure it's a movie about a beauty product that makes you beautiful.

Rachel: Um, so the sunfish, host to more than 40 species of parasites.

**Griffin:** That's not surprising to me.

**Rachel:** Because it is, like, up near the surface and on its side, um, a lot of birds will, like, land on there and, like, get those little parasites. Like, seabirds will get in there.

Griffin: Oh. But the seabird won't—

Rachel: Munch 'em.

**Griffin:** But there's no seabird that would see a sunfish and be like, "I'll just eat the whole sunfish."

Rachel: [laughs] No. No.

**Griffin:** "I'm gonna eat that jelly-covered, 2,000 pound... bullet-shaped fish."

**Rachel:** That's probably an expression in the seabird community. Like, you can't eat the whole sunfish at once, you know?

**Griffin:** No. You don't got—it's like—it would be tantamount to us eating the plate that we are eating our dinner off of as well.

**Rachel:** Uh, the thing that I saw—and I don't know how common this is—but often sunfish will get so covered in parasites, and because they don't—they can't move very fast. They can move, like, two miles an hour.

**Griffin:** Oh, really?

**Rachel:** Because of their whole structure.

**Griffin:** I would think a flat fish like that could really zoom. 'Cause the—

**Rachel:** I mean, they basically have oars. They're basically rowing, you know? 'Cause they don't have a tail. Like, that—

**Griffin:** Yeah, that's true. I guess that's true.

Rachel: They're just flappin' up and down, you know?

Griffin: Yeah, they don't have propulsion.

**Rachel:** Um, anyway, the sunfish, in order to remove these parasites, have been reported to breach, clearing the surface by approximately 10 feet, in an apparent effort to dislodge the parasites.

**Griffin:** Okay. So. Okay. So when you say...

Rachel: [laughs]

**Griffin:** ... "Clear the surface," you mean they jump 10 feet into the—

Rachel: Yes!

**Griffin:** But the only move two miles an hour. So how the f—how the hell is that possible?

**Rachel:** I don't know! There's a lot that isn't known about the sunfish. And I'm sure that's something I could find out. I did not see it in my research.

**Griffin:** I wonder if they have a symbiotic relationship with, like, another creature. Like, they get on top of a whale's blowhole, and then the whale will blast them 10 feet out of the water, 'cause I don't know how these big boys are getting up that high. Maybe they're incredibly buoyant and they just, like, swim down and just let—let buoyancy do the work?

**Rachel:** [laughs] Just shoot 'em up in the air.

**Griffin:** Just shoot 'em upwards. They get the bends.

**Rachel:** [laughs] There's—I mean, I could go on for a long time about sunfish.

**Griffin:** Then do! Then go! Do that!

**Rachel:** [laughs] But what's wild—so, newly hatched sunfish weigh less than one gram.

**Griffin:** Aww!

Rachel: They're, like, super tiny tiny.

Griffin: Yeah.

**Rachel:** Um, and they school for protection, like a lot of fish. But as they get older, they don't school.

**Griffin:** I have to imagine it's annoying to school when you can only go, like, two miles an hour. [crosstalk]

**Rachel:** [through laughter] Yeah, right? You can't get enough distance between you and the...

Griffin: Yeah.

**Rachel:** Those that survive, as I mention, they can get super huge, which will ultimately being 60 million times their original weight.

**Griffin:** Jesus Christ, man.

Rachel: Yeah.

**Griffin:** I love that. God, nature's cool.

**Rachel:** The most, like, extreme size growth of any vertebrate animal.

**Griffin:** I love that. Good for you, guys!

Rachel: Yeah.

**Griffin:** Everyone sees you and they're like, "No way. You'll never make it in this world, kid."

And it's like, "Oh, really? I am a 5,000 pound slimy beauty."

**Rachel:** And they look—I mean, they look like they have already, like, met some kind of poor fate, you know?

**Griffin:** They do look a little haggard.

**Rachel:** They're like—I maybe wonder if that kind of helps them when it comes to predators.

**Griffin:** Absolutely!

**Rachel:** Right? 'Cause they look like somebody already got there first. [laughs quietly]

Griffin: Yeah.

Rachel: Yeah.

**Griffin:** They have—you know, animal instinct is such an interesting subject to me, because there has to be some sort of, like, deep seated, ancestral, genetic knowledge in the mind of a shark that when they see a sunfish they just go, "Not worth—not worth it, man. Slimy, three-inch-thick skin. No fucking way. I am not gonna be—I am not gonna be chompin' on that today."

**Rachel:** Yeah. So their threats are more, um... I mean, they're honestly more man-made. It's nets, and sea trash.

Griffin: Yeah.

**Rachel:** Um, because they are—one of the things they do eat is jellyfish, like, plastic bags are a real issue for them.

Griffin: Oh yeah, sure.

**Rachel:** But yeah. That's—I mean... that's the sunfish.

**Griffin:** Can I ask you a question?

Rachel: Yeah.

**Griffin:** Sometimes you bring a subject to this show, and I can piece together exactly why—

Rachel: [simultaneously] How I got there?

**Griffin:** —you chose that.

Rachel: [laughs] Yeah.

**Griffin:** What inspired you to talk about the sunfish today?

**Rachel:** Um, so... [laughs] when I was, like, boppin' around the internet, trying to figure out what I was gonna talk about, one of the sites I go to sometimes is, like, National Geographic.

**Griffin:** Oh, sure.

**Rachel:** Just to see, like, what's happening in the animal world.

**Griffin:** Yeah.

Rachel: Or I'll go to, like—today I went to Ripley's Believe It or Not.

**Griffin:** Jesus.

Rachel: [laughs]

**Griffin:** [through laughter] Really scrapin' the bottom of the ol'—

Rachel: But the sunfish is something that, like, I was super curious about.

**Griffin:** Yes. This is not judgmental.

Rachel: Yeah.

**Griffin:** Sunfish is like, the fish that when I am at an aquarium or the Natural History Museum, and you're in the ocean exhibit and you're like, "Oh, there's a big whale. Oh, there's an ancient invertebrate. That's cool. There's a little mollusk. That's neat."

But then you see a big, big, round guy, and it catches your eye, and you're like, "I wanna know more about that sunfish." And then your child pulls you away from it, because they have to go do something else, and you don't get to read about the sunfish.

**Rachel:** Uh, yeah. I had no idea they were that big. Like, I kind of—I could visualize that fish, you know, but I had no idea that they could get that enormous.

**Griffin:** So awesome.

**Rachel:** I will say just one more fun fact. Um, females can produce as many as 300 million eggs at a time. Which is also more than any other known vertebrate.

Griffin: Get it. Get it, girl.

Rachel: [laughs]

**Griffin:** Uh... do you wanna know what our friends at home are talking

about?

Rachel: Yes.

**Griffin:** I got one here from Melissa, who says:

"My latest small wonder is discovering something already well known and beloved by others years later and getting to appreciate it. It reminds me that there's still so much stuff that I enjoy undiscovered and waiting for me out there. This happened recently listening to OutKast's 2000 record Stankonia."

Rachel: [laughs]

**Griffin:** "I was listening like, 'Holy shit, do people know about this?' Yes. Yes they do."

Rachel: [laughs] I love that.

**Griffin:** I do as well. I don't know how you go 25 years without accidentally catching Stankonia.

**Rachel:** Here's the thing, though. Like, very popular when we were young people.

Griffin: True! Yeah, I guess so.

**Rachel:** But if you were born, let's, say, in the year—I mean, gosh. I don't know. 2005? Like, you kinda missed it.

**Griffin:** Probably didn't catch Stankonia if you were five years old, yeah.

Rachel: Yeah.

**Griffin:** Um, just—Speakerboxxx/Love Below is waiting for you, to be exhumed as well.

**Rachel:** I like thinking that they're listening going, "Wait. There's another one?!" [laughs]

**Griffin:** "Wait, what?!" Caitlin says:

"My small wonder is when you discover a word that can be typed using just one side of a QWERTY keyboard. The longer the word, the more thrilling. Cat, reed, boink, onion, cascade, and lollipop are some of my favorites."

Rachel: Wow. I don't think I've ever paid attention to that.

**Griffin:** Uh... yeah, I don't think I have either. It is nice, though. It does make me look at my keyboard and go like, "Lollipop, okay." Yeah, I mean, lollipop, those—L, O, I, and P, those are all right next to each other. Your hands are not moving very far when you're typing out lollipop.

**Rachel:** The only time I ever really think about proximity of letters is when I'm doing one of those, like, typing tests.

Griffin: Uh-huh.

**Rachel:** And I get to a word that I'm like, "Ooh, yeah, this one's easy." You know?

**Griffin:** Yeah. Uh, yeah, that's always a treat.

Rachel: [laughs]

**Griffin:** Man, I love typing tests.

Rachel: [laughs]

**Griffin:** Thank you so much for listening. Thanks to Bo En and Augustus for the use of our theme song, Money Won't Pay. You can find a link to that in the episode description. And thank you to Maximum Fun for having us on the network. Go check out all the great shows over on Maximumfun.org. They have so much wonderful stuff over there. Uh, just like Just the Zoo of Us.

Rachel: [laughs]

**Griffin:** We highly recommend. We got some new merch over at the McElroy Merch store, mcelroymerch.com. We have an Energy's Draggin' pin, a bunch of new stuff over there. And we also have some live shows coming up in Florida, doing TAZ and MBMBaM down there in February. Uh, if you go to bit.ly/mcelroytours, you can find out [crosstalk] all the information.

**Rachel:** Have you guys started talking about theming for the new year?

**Griffin:** I mean, it's early days. It's early days. We have a logo design that McKay has whipped up for us that I'm pretty excited about.

**Rachel:** I know, but you're touring relatively soon.

**Griffin:** Yes. I think this first tour may be... may be a tummy buddy life tour, just because there was a significant amount of, let's say, work that—labor that went into tummy buddy life in the week long span where that was the year's theme.

Rachel: [laughs]

**Griffin:** Um, now that the year's theme is different, we will be adjusting. But I don't know if we will be quite agile enough, or if we want to throw away all of that incredible work that was done for tummy buddy life.

**Rachel:** All the more reason to go to the shows in Florida, just to see what—

**Griffin:** Get this chase merch, uh, of tummy buddy life at these shows in Florida. Here later in February we're gonna be in Tampa and Jacksonville, doing all the shows there. Uh, that's it for us this week! Thank you so much for listening. Have a good week. Have a fun weekend. Have a great summerrr... and we'll see you next week. Bye!

Rachel: Bye!

[theme music plays]

[chord]

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