

# Raccoonology with A Gaze of Raccoonologists

## Ologies Podcast

### December 22, 2021

Oh hi, hey, it's that neighbor who just still needs some tips on how to start weightlifting, Alie Ward. It's me... I'm back... Part 2... raccoons... as promised. So, Part 1, last week, it features North America's most lauded and trusted raccoon expert, Dr. Suzanne MacDonald of York University. She is on deck; when everyone has raccoon questions, they call her. We covered brain worms, we talked about their big bushy, beautiful bottoms, if you should keep them as pets, so many noises that they make, we talked life advice, why they thrive in your driveway, onion repellent, bisexual iconography, how many are over our heads just napping on tree limbs on any given day? We talked about their two-month gestation periods, dick bones, and how being a procyonologist means just getting to watch hours of nighttime footage of them eating chicken bones in your backyard.

But before we get into it, Part 2, I just want to thank everyone at [Patreon.com/Ologies](https://www.patreon.com/Ologies) for supporting the show. It costs as little as a dollar a month to submit questions to the ologists. You get to be also the first to know and see behind-the-scenes photos whenever I take an ambulance ride or have an ER trip and a concussion. It doesn't happen often, but it happened last Thursday, so thanks Patreon, you knew what was going on first. There are more details on my Instagram and in the secret at the end of the episode.

But I want to thank you also to everyone who passes along these episodes and talks about *Ologies* over walks and dinners, and sends links to friends, and who rates and subscribes, and of course who reviews. I read all of them, even though my screen time has been medically limited this week as my brain heals but thank you for leaving this fresh as hell one, Momojosa, who left 4 out of 5 stars because episodes are skipping or repeating throughout, there are glitches. They wrote:

*I really do love this podcast! But the editing needs a little help - the most recent episodes on Bad Knees had a lot of skipping and repeating throughout.*

That review, Momojosa, I so appreciate the honesty, made me a little sad, and then it made me go down a research hole, and turns out... we're fine! We did make one tiny mistake or two in a couple recent episodes but the skipping and repeating, that's a streaming issue and it means that your Wi-Fi is spotty and to download it before you go on a road trip or a walk.

We did recently change from one hosting platform to another and so we followed up with Stitcher and Simplecast, they're looking into it too. But essentially, a lot of podcasts are having these problems recently, and downloading the episode instead of streaming can help in case you're finding that episodes are glitching. It's not just us and it's not our fault, which felt great to hear. Not a big deal, thank you to everyone who helped us troubleshoot. Thank you, Momojosa for letting us know and we're sorry for the little mistakes we have made but yeah, it's a streaming issue, so a big shrug on that. We are looking into it, if there's anything we can do about it.

Anyway, but as promised, more raccoons, more facts, more thoughts on what this ology should be called, and more procyonologists and raccoonologists, including Hannah J. Griebing, Dr. Kelly E. Lane-deGraaf, Dr. Jessica M. Andersen, Dr. Lauren Stanton, Jessi Knudsen Castañeda. All of them are she/her and Jennifer Colbourne, who is cool with she/they and honestly... what a gaze, what a nursery of experts you're about to meet. So, we have interspersed this episode with more facts too. So, just once again, hold on to those big butts with your tiny hands, which we know aren't actually hands but paws, for more minds, and more wonderful people who are all procyonologists and raccoonologists, Part 2.

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**Aside:** Since this is a little departure from the usual format, I'm going to let them introduce themselves.

**Hannah:** Hi, I'm Hannah Griebing and I'm a PhD student in Sarah Benson-Amram's Animal Behavior and Cognition Lab, at the University of British Columbia in Vancouver, Canada. I am interested in how raccoon behavior and cognition varies within the city of Vancouver, and how this variation in their cognitive abilities could potentially impact or be impacted by the human perceptions, interactions, and conflicts that humans may have with urban raccoons.

**Kelly:** My name is Kelly Lane-deGraaf and I am an Associate Professor of Biology at Fontbonne University, a small liberal arts college with a social justice mission in St. Louis Missouri and I work with raccoons. [*"This is my dream job."*] So, in my lab, we are really interested in understanding how human activities affect wildlife and their parasites. So, specifically, we look at raccoons and their population genetics, and genetic diversity, relatedness, et cetera. We look at their parasites, and we look at their parasites' population genetics and diversity.

**Aside:** Listen, sometimes you have to look for roundworms in raccoon poop for your job, I think that rules.

**Kelly:** But we also look at things like environmental contamination and raccoon behavior, all across St. Louis City and County. So, we look at St. Louis in particular as a model system, because St. Louis unfortunately has a long history with racism and that has really shaped how people live, where people live, and where resources are allocated within the community and that affects how we see and how raccoons see and use our own environment.

**Lauren:** Hi, I'm Dr. Lauren Stanton, I'm really interested in how raccoons use their cognitive abilities to thrive in urban environments. As a graduate student, I studied the learning and problem-solving abilities of raccoons in Laramie, Wyoming using puzzles and automated feeding devices similar to Skinner boxes.

**Aside:** You can see her 2017 study entitled, "Adaptation of the Aesop's Fable paradigm for use with raccoons: Considerations for future application in non-avian and non-primate species," which à la the fable, "The Crow and The Pitcher" involves stuffing a marshmallow into a narrow, clear glass, just out of reach of tiny raccoon-y hands and then providing the raccoons rocks to displace the water to reach the marshmallow and then eat it with those hands. And according to Dr. Stanton, raccoons performed differently than corvids and human children did in previous studies of Aesop's Fable, but they found raccoons to be innovative in many aspects of this task. Way to go!

**Lauren:** I'm now a postdoctoral researcher at UC Berkeley and in a few months, I will begin working on a new research project with raccoons in the San Francisco Bay Area where I will be focused on understanding how socioecological factors, including social inequity shape the behavior and cognition of urban carnivores.

**Jessica:** My name is Jessica Andersen. I am a wildlife rehabilitator and I work at the Blue Ridge Wildlife Center in Boyce, and we work with a variety of wildlife, but raccoons included with the purpose of rescuing, rehabilitating, and releasing them back to the wild.

**Jessi:** I'm Jessi Knudsen Castañeda. I care for a non-releasable raccoon named Ringo at an animal rescue organization called Animal Wonders. We are located in Montana, and we teach informal science education about the animals at our rescue center.

**Jennifer:** My name is Jennifer Colbourne. Starting off my graduate studies with raccoons is what got me into what some refer to as “bin animals,” [*Excuse me?*] animals that live in our cities and eat our garbage. I’m fascinated by how these bin animals are adapting to our cities because you can see evolution in action. I was raised a Young Earth Creationist and thought evolution was some sort of conspiracy theory, so learning the process of evolution *really* blew my mind in university and I’ve been obsessed with it since. Some know me as the Raccoonologist on Twitter and technically, I guess, I coined the term raccoonology?

**Aside:** So, we went over this in Part 1, when Dr. Suzanne MacDonald was not having the term raccoonologist. [*clip from Procyonology: “No. No that’s ridiculous.”*] She was not having it. But around these parts, you know what, I’m open to ideas and honestly, I’ve been following Jennifer on Twitter forever, for years, for their raccoon content. In my mind they are the original raccoonologist. So, let’s hear why these ologists would call what what.

**Jennifer:** You see, initially I was drawn to raccoons because they seemed a lot like primates. Actually, it’s been speculated they fill that niche in North America; they are omnivorous, they exploit a wide variety of food, they live in trees, they have thumbs which is very unusual for a carnivore though they’re not opposable, so they’re not quite like our thumbs but they can do a lot with their hands. Anyway, since I couldn’t call myself a primatologist, I decided that I was a raccoonologist.

**Aside:** It’s not unanimous but she’s not alone.

**Kelly:** In terms of what ology I think about raccoons, from a purely phylogenetic standpoint, I think procyonology makes the most sense. From the perspective, slightly more unprofessional admittedly, of thinking about their whole reputation, probably something more like crafty buggerology would be more fitting. [*I like it.*] But for the work that I do and the lens that I look at raccoons with, I think something more akin to like, urbaniteology might actually be the most fitting. They do really well, of course, in their own evolved ecosystem, but we know that raccoons that live in cities are incredibly witty, and they have evolved to really thrive around humans. So, I think acknowledging their love and ability to thrive with people is probably real.

**Lauren:** So, a few ideas for an *Ologies* episode on raccoons could be raccoonology or maybe procyonodology or even banditology. There are a lot of good ones to consider. Raccoons give us a lot of really good material to work with in general.

**Jessi:** I think the study of raccoons should simply be called raccoonology.

**Jessica:** I think the study of raccoons should be procyonodology and that would include both North American raccoons as well as the lesser-known raccoon species that are found down in the tropics as well.

**Hannah:** I think that the ology should be called procyonology, it’s a little bit of a mouthful but *Procyon* is their genus, and it actually means early or before dog.

**Aside:** So, there you have it, a bunch of different but informed opinions. And you know what, this one, we’re just going to call it Raccoonology, how’s that? Great? Great. For more on the word raccoon and its etymology and significance in Indigenous cultures of the North Americas, pick up the book *Raccoon*, by Daniel Heath Justice, who is a Cherokee Nation writer and a professor of English and Critical Indigenous Studies at the University of British Columbia and the book description got me, it’s like next on my to-read list:

*From intergalactic misanthropes and despoilers of ancient temples, to coveted hunting quarry, unpredictable pet, and symbols of wilderness and racist stereotype alike, Raccoon offers a lively consideration of this misunderstood outlaw species.*

So, if you need a book on raccoons again, that was Daniel Heath Justice's book, *Raccoon...* very easy to remember.

Now, what obscure raccoon facts do our ologists hold dear? Let's have self-described raccoon evangelist, Hannah, start.

**Hannah:** My favorite weird fact about them is that raccoons have an unexpectedly high concentration of neurons in their cat-sized brains and their neuronal density is actually comparable to that of primates. And I have a second fun fact because I couldn't resist, and I know their front feet get a lot of press and attention, but their hind feet are actually pretty remarkable too. They can rotate their hind feet in order to climb down trees headfirst, and they're one of the few species of their size that's able to do so.

**Aside:** Hannah continues...

**Hannah:** My very favorite thing about raccoons is how they challenge and push against the boundaries that we've tried to place between us humans and nature. Raccoons will do this both literally and figuratively. Literally, they will get into our garbage, start living in our homes and attics and they also do this figuratively by challenging our perceptions of ourselves as the cognitively superior animal. We have a difficult time outsmarting them and that's something that makes them fun but, of course, sometimes challenging to work with.

**Aside:** Kelly chimes in...

**Kelly:** Raccoons are of course true omnivores but man, they love a good campfire-sized marshmallow, those really big ones. If I'm being completely honest, they are ridiculously adorable to watch eat them.

A favorite thing of mine about raccoons, raccoons sit in kind of a weird intersection of everyone thinks that they are both adorable and a pest species. Their little masks and their little hands, kids love them, they're so, so cute, and as adults, we see them as a big pest. I know that that is in large part because they have evolved the ability to thrive in our spaces and we tend to sort of break animals up into: things that can thrive with us become pest species very quickly, and things that cannot become vulnerable to extinction, sadly. But I do think it's kind of a funny-ironic, not funny ha-ha, that raccoons occupy that niche.

**Aside:** Jessi from Animal Wonders in Montana, who has a really great YouTube channel with all kinds of wildlife rehab videos, waxes affectionately at their paws, which don't have proper thumbs, but we all call them hands anyway because come on.

**Jessi:** My favorite thing about raccoons is their hands. They just... they have to touch everything. And the pads are really, really soft. Also, they have about ten times more nerves in their hands than humans do, so I can kind of see why they're so obsessed with the touching.

The weirdest fact about raccoons is that for a mammal in the order *Carnivora*, they have to be fairly smart in order to catch prey and survive. But their neuron density is impressively more comparable to primates than the dogs or cats.

**Aside:** Here, Jennifer talks about a raccoonologist named Stan Gehrt, who they say eventually got so fed up with the challenges of crafty buggerology that he switched to mostly just researching coyotes. He's like, "I'm out. You know who doesn't have handlike paws?"

Coyotes, I'm out." But Jennifer notes a study of his, on raccoon sociability, or what it takes to join a procyonid posse.

**Jennifer:** Turns out that the males tend to hang out in groups of three or four. It's not that unusual in the animal kingdom for male animals to bond together so there were several plausible reasons that he tested. Actually, he ran a bunch of studies, and he just can't figure out why these males hang out together. They're not related so they're not trying to increase their fitness, they aren't making these coalitions to back each other up during fights. They aren't sequestering females during mating season. Why are they hanging out? No one knows. But personally, I like to speculate that they're just bros who enjoy each other's company.

**Aside:** So, from Part 1 we learned a group of raccoons is a gaze. So, this is literally the mystery of the male gaze... male gaze.

**Jennifer:** This is typical of raccoon research though. You make a prediction based on these robust models and the results are more likely the opposite of what you thought they'd be. We really just have a lot to learn. I mean, for my own master's thesis, they did not perform at all like we expected them to. In fact, they did rather poorly though we did have a small sample size. To be honest though, my feeling is that raccoons aren't even that "intelligent" so much as persistent. My impression is that they'll just work on a problem until eventually it's solved, much longer than monkeys will. I've taken that motto into my PhD: I don't have to be the smartest, I just have to keep working at something until eventually, it clicks.

**Aside:** Augh, I love that so much. Let's repeat that raccoon-based life advice from Jennifer Colbourne, AKA, @Raccoonologist.

**Jennifer:** I don't have to be the smartest, I just have to keep working at something until eventually, it clicks.

**Aside:** Okay so, Jessica from Blue Ridge Wildlife Center also has to hand it to these critters... Wait, you know what? I should probably pause here to take some money and throw it chaotically in the direction of raccoons.

So, for this episode, we're actually going to be splitting donations between different wildlife rehab programs that these raccoonologists work with including the Center for One Health via Dr. Kelly Lane-deGraaf, Blue Ridge Wildlife Center via Jessica Andersen and Jessi Knudsen Castañeda's AnimalWonders.org. And those donations were made possible by sponsors of the show.

*[Ad Break]*

Okay yes, back to Jessica from Blue Ridge Wildlife Center.

**Jessica:** Fun or obscure fact about raccoons would probably be in their paws. I know a lot of people already know that raccoons like to dip a lot of their food and items into water and a lot of people think they're washing their food. But in reality, raccoons rely on their sense of touch way more than most animals and they actually have four to five times more neurons in their paws and over two thirds of their brain is actually dedicated to interpreting the data from their touch and from their paws. So, by wetting these items, they can actually improve how their paws are feeling and interpreting every piece and every surface of the item that they're feeling, and it helps them interpret what they have, how to grab it, if it's edible, if it's something they recognize. To me, that's really incredible for an animal who also has decent vision, hearing, and smell as well.

After working with raccoons for the last seven years, my favorite thing about them is probably just how interactive and smart they are. We really have to stay on top of our game to keep these animals enriched when they're in captivity, to prevent them from destroying things or getting into further trouble. If you have a sheet anywhere near an enclosure where a raccoon can stick their arm out and grab it, guaranteed that sheet will be pulled as far into the enclosure by the next morning, torn to shreds, bitten, maybe even looped through other parts of the enclosure as well. So, we really go to great lengths to keep these guys engaged with their environment; lots of different textures, substrates, things to climb, toys, and things like that to make them really work for their food. Different sleeping areas like hammocks, tires, barrels, stuff like that. Just things that are going to allow them to interact with what's in their enclosure versus giving them time to figure out how they can destroy the rest of the enclosure as well.

**Aside:** You know who knows a lot about this? The White House. So, in 1926, President Calvin Coolidge was sent a live Mississippi raccoon as a gift, to kill and eat for Thanksgiving dinner. And he was like, "Mmm... Nah. I think I'll just name her Rebecca and give her an engraved collar that reads: White House Raccoon."

They let her run through the West Wing. Rebecca attended Easter egg rolls on a lawn, cuddled by the First Lady on a leash. Rebecca even ended up inhabiting a small outdoor home, located atop a tree stump on the White House lawn, and then later due to mayhem was transferred to the National Zoo in DC where she quickly died because she was like, "What the fuck, where's the bone china? Where is the press attention? Hello, I need long drapes to scale. This sucks." The whole thing is very sad. But as long as we're in a historical groove, Dr. Lauren Stanton dishes up more lore.

**Lauren:** So, one weird fact about raccoons is that in the early 1900s, raccoons were proposed as a model system for studies in animal cognition, but psychologists had a hard time managing raccoons in the lab because raccoons were pretty good at breaking out of cages and they're just generally a handful. So, for decades, researchers pretty much abandoned raccoons as a study species.

I love working with raccoons. Raccoons are just so expressive and there's so many interesting things about them. The more I study raccoons the more questions I have about them. They really have a mind of their own and despite some of the frustrations I've experienced trying to study raccoons in the wild, I really admire them as a species, and I enjoy getting to know them as individuals through my work.

My favorite thing about raccoons is actually a tie between two things. The first is their dexterous forepaws. I'm totally obsessed with how raccoons use their forepaws to perceive and interact with the world around them and I think it's something that we as humans can relate to, right? If you've ever had to reach into the bottom of your bag to find a pen, or you reach far back into a cabinet, feeling around what you're looking for, that's a very raccoon thing of us to do.

And my second favorite thing about raccoons is their social behavior. I really enjoy watching videos of wild raccoons interacting with each other, like watching two individuals greet each other, or watching juveniles play, or even watching two adults square off against each other and try to exert dominance over one another. [*series of snarls, barks, screeches*] It's really fascinating. I think we've always considered raccoons to be a rather solitary kind of cryptic species, but more and more, we're beginning to realize that raccoons have a social life, especially raccoons that live in high densities in cities.

**Aside:** I mean, they're cute, they're smart, they're happy eating leftover spaghetti, and they're everywhere. Don't you want a presidential pet? No? Okay, so you did listen to Part 1, good. Jennifer reiterates in case you had your head in the compost bin and you missed it.

**Jennifer:** Just one final thing I want to add because I see so much of this on social media. Raccoons are not pets. Not only is it illegal in most countries, but they'll put your pet down if they catch you with one because of the rabies risk. They also carry this horrible disease called raccoon roundworm that can burrow into human brains so like... really, it's just a bad idea.

I honestly don't know why anyone would want a raccoon as a pet because they can get into everything, your stuff is going to be destroyed and you're going to get bitten a lot. They're not domesticated pets. If you find babies, just contact a wildlife rehab which, by the way, rarely have any government funding so please consider supporting your local rehabs. They're usually volunteers working round the clock in breeding season and desperate for help. We owe them big time for sacrificing so much for our wild neighbors.

**Aside:** These will all be linked at the website in the show notes.

**Lauren:** You can find me on Twitter as @Lauren\_Stanton\_.

**Jessica:** If you guys want to follow my personal rehabilitation and animal opinions, you can follow me on Twitter @Jess\_InTheWild as well as on Instagram @JessInTheWild. Or you can follow my facility that I work at which is Blue Ridge Wildlife Center across all platforms, we're on Facebook, Twitter, Instagram, TikTok even. So, if you guys are interested in learning more about wildlife rehabilitation, wildlife medicine, we do post a lot of our stories and patients on there as well.

**Aside:** And Jessi, and Hannah, and Dr. Lane-deGraaf.

**Jessi:** You can follow our animal adventures by searching "Animal Wonders Montana" on YouTube or Instagram, thanks.

**Hannah:** You can find me on Twitter @HannahGriehling, thank you.

**Kelly:** In terms of social media, you can find me on Twitter @DrKLDG or the gram @DrLaneDeGraaf. In terms of projects, if there are any local St. Louis community members that would be interested in environmental racism, One Health, and raccoons, I would love to hear from them to get involved. Thanks.

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So, ask resourceful raccoonologists really basic questions because just like the raccoons, procyonologists may be all around you, hiding in plain sight, they may or may not be sleeping in a tree, we don't know. But there's a link in the show notes to the ologists' accounts so you can follow them, make more raccoony pals. Plus, there's links to the recipients of this week's donations, and to our website where we have more links.

You can follow us at [Instagram.com/Ologies](https://www.instagram.com/Ologies) for all the raccoon memes you care to gaze at. I'm on Instagram too [@AlieWard](https://www.instagram.com/AlieWard). I'm posting some intermittent concussion updates for those who are like, "What? Huh?" We're on Twitter [@Ologies](https://twitter.com/Ologies) and I'm [@AlieWard](https://twitter.com/AlieWard) on Twitter too. I'm sometimes on [TikTok @Alie Ologies](https://www.tiktok.com/@AlieOlogies).

Thank you to Erin Talbert for adminning the *Ologies* Podcast [Facebook group](https://www.facebook.com/OlogiesPodcast), to Shannon and Boni for [merch](#) help. Susan Hale and Noel Dilworth for *Ologies* business and scheduling. Emily White of The Wordary who does our professional transcripts. Caleb Patton bleeps the swears and those are

up at our website at [AlieWard.com/Ologies/Extras](http://AlieWard.com/Ologies/Extras). Kelly R. Dwyer works on my website and is available to work on yours if you need her, she's linked in the show notes.

Steven Ray Morris and Zeke Rodrigues Thomas of Mindjam Media work on *Smologies* which are classroom-friendly edits of our classic episodes that come out about every two weeks or so. And lead editor and primary husband is Jarrett Sleeper also of Mindjam Media who has been wonderful, literally hid my phone and texted all my friends and family to let them know I was in the ER with a concussion. I wasn't supposed to look at screens which is what I'm doing right now... I'm doing my best here folks. Nick Thorburn by the way, made the theme music.

If you listen through the credits, I will tell you a secret and this week's secret is that I had been having an easy time since last Thursday, been like, resting a lot, head feels okay. I have been staring at screens all day just to put this episode up and I have a headache and I'm really tired. So... I also tried to line up a concussion expert, so we'll see if we can get that in the hopper for you for next week. Either way, I'm literally going to go back to bed now. Okay, berbye.

*Transcribed by Aveline Malek at TheWordary.com*

### **Some links you might enjoy:**

Hannah J. Griebing, MSc on [Twitter](#)  
[animalcognitionlab.org](http://animalcognitionlab.org)

Kelly E. Lane-deGraaf, PhD on [Twitter](#)

Jessica M. Andersen on [Twitter](#)  
[blueridgewildlifectr.org](http://blueridgewildlifectr.org)

Lauren A. Stanton, Ph.D. on [Twitter](#)  
[laurenastanton.wixsite.com/cognitive-ecology](http://laurenastanton.wixsite.com/cognitive-ecology)

Jessi Knudsen Castañeda on [Twitter](#), [Instagram](#) and [YouTube](#)  
[animalwonders.org](http://animalwonders.org)

Jennifer Colbourne on [Twitter](#) and [Instagram](#)

Donations went to: [Center for One Health](#), [Blue Ridge Wildlife Center](#), and [Animal Wonders](#)