

## **Raccoons Revealed with Dr. Daniel Heath Justice**

Nerdin' About Podcast Transcript, Season 3 Episode 2

## Michael

Hey everyone, welcome to Nerdin' About! I am Space Michael, and with me as always is someone who has her own raccoon handling gloves. She could help some of the major league baseball teams that have been inundated with rogue stray cats invading the games, and that is Dr. Kaylee Byers

## **Kaylee**

Wow, there are a lot of things going on in that introduction. My first reaction was like, keep cats inside. Yes, raccoon handling gloves. I do own them for handling rats. They are very handy for pulling rats out of traps, and then putting them back to where I trapped them. That is something that I do technically own two pairs of. What about you Michael, what do you have two of?

## Michael

Well, I do not have any sort of those kinds of gloves. I was just thinking about a famous incident that happened in the summertime, as we are recording this, where a bunch of New York groundskeepers were trying to chase this stray cat, and none of them were wearing gloves. I thought, this is a stray cat. This is a tough situation, and it took them a while to coerce the cat out of the stadium, it was quite hilarious.

# **Kaylee**

Well, and there's always hilarious things to be had with domestic animals, feral animals, wild animals, and today we're talking about the wild kind, and something that kind of looks like cats, but is not a cat. So today, we are joined by <a href="Dr. Daniel Heath Justice">Dr. Daniel Heath Justice</a>, who is a Colorado born citizen of the Cherokee Nation and Professor of Critical Indigenous Studies and English at the University of British Columbia. Daniel has published several books and his newest book, "Raccoon", has just been released. His works consider questions of Indigenous belonging, imagination and other-than-human kinship. Hi Daniel, how are you?

## **Daniel**

I am delighted to be here. Thank you for the invitation.

# Kaylee

I mean, I am biased, because I spent a lot of time with urban wildlife, I think it will be the best time. Before we dive into your new book <u>Raccoon</u>, which I am excited to talk to you about, I wanted to ask you a bit about your inspiration for this book to start, because your creative works consider questions around other-than-human kinship, and you have published another book about badgers. So, what is it about these other-than-human kinships that interests you?

## **Daniel**

I have always loved animals, but I have always loved weird animals. I was never into the charismatic megafauna. They are great. I am glad they are around, but it was always animals that are a little strange, sometimes the ones that are despised by a lot of humans. For me, that is where a lot of interesting stories come from. Why are these animals often polarizing? Or why is there so much investment in seeing them as problems rather than as co-participants in the world? I did not have many friends as a kid; I was very much a nerd in my very small Colorado town. Animals were very much part of my life and were very central to the way I understood the

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world. There was just honesty in animals, and I found human interactions quite stressful sometimes. I did not understand some of the social codes of the kids I grew up with, and animals were straightforward. If you mess with them, they left you or bit you, but you always knew what was going on. There was not a lot of quile there.

## **Kaylee**

Michael and I talked a lot about childhood relationships and friendships; I think there is some similarity there. So, I found this topic. incredibly fascinating. I am an urban wildlife biologist; I've spent a lot of time thinking about our connection to wild animals. As a studier of rats, I think a lot about our relationship to rats, and how our actions often have negative consequences for the well-being of wildlife around us. So how would you characterize our relationship with raccoons?

## **Daniel**

Very vexed. In a big way, we are responsible for raccoon proliferation. So many people complain about raccoons as so-called trash pandas, but that's because of humans, that has nothing to do with raccoons. In 2016, some researchers did some modeling to show that about 61% of the world is ripe for raccoon expansion into territory that they've never been in before. So, on that level there are more raccoons in the world today than at any time in their evolutionary history. That is partly because they have done well because of us but that comes after we had huge impacts on their populations in the late 19th and early 20th centuries. So, there's a lot of ebb and flow. Even what we might see is a good news story, and even that good news story has a lot of consequences for other species. Part of the reason a lot of raccoons are doing so well in urban centers is because we have had severe impacts on their wilder habitats. A lot of the food they're getting is not good, it helps them breed, and it helps them grow, but it also adds to hypertension and tooth decay. The same consequences that humans have from the fat and sugar rich foods that we eat. Our impacts are diverse, positive, in some ways, quite negative in other ways. That is not counting all the abuses that are inflicted on raccoons, all the traffic fatalities, and all those issues.

## **Kaylee**

Yeah, I think that is an interesting dichotomy. There are so many parallels between raccoons and rats, we'll just have to talk about as we go through, but it is sort of the same thing. As rats do well, because people do well, because we provide food for them. Then often there is this impact of people on wildlife where they are eating junk food, they are eating our McDonald's leftovers, they are not necessarily in good habitat. So, they benefit from having a space where there is lots of food for them, but they also have these health impacts that are difficult to quantify,

## **Daniel**

If we change the way we handle our waste that will have catastrophic impacts on them. If we limit their access, then these huge populations are going to collapse. Now we have so many concentrated populations, issues like distemper can just blaze through an entire city's population with horrendous impacts, whereas in the wild, they'd be more dispersed, and there would be much less likelihood of so much suffering. It is a good news story in some ways, and I do not want to lose sight of that, but it always has a shadow on the flip side of it.



Daniel, you talked about the wilder habitats of raccoons. So, if we were to go out and try to find some raccoons out there, I always wonder where they go, they always just appear around garbage cans, if we were to go looking for some raccoons in the city, where would we find them?

#### Daniel

You would find them in locations where they are going to be able to den easily. In the city that could be almost anywhere. They have multiple den sites, they have limited territories, there has been some interesting studies on the kind of the territorial expansion and females do not necessarily go long distances, males get around a little bit more, a lot more we could talk about that later too. (laughs) Anywhere that they can get to a good den site. Typically, they still like to be near water, water is still significant to them, running water if possible. A place where there is a mix of open transfer areas and places that they can escape, and where they can move without observation. So, you will find raccoons, in any place that has rivers, canals, and streams, they're going to be within ready access of that more likely than not. If you have places with empty lots that have a lot of briar and bramble coverage, they are going to like those areas. They will be downtown, very congested urban areas, too, but they are going to be in places where they can hide, but where they can also get access to food. Females, especially when they are having their babies, are going to be looking for places where there is more security, but there are not a lot of places you will not find raccoons. They can be quite good at being unobserved, but as they become more comfortable in spaces, they won't necessarily be too concerned. As long as there are not ready predators. Like if there are loose dogs, they are more likely to be secretive than if dogs are mostly leashed, and there are no other predators in the area.

#### Michael

You also talked about how humans have impacted their development. So, are there still pockets where there are wild raccoons or have humans pretty much just taken over all of the spaces that wild raccoons used to inhabit?

## **Daniel**

Oh no, there is still many wild raccoons in lots of traditional habitats and expanding into new ones. But they do really well with human interruptions and partly the reason they do well is because we've taken care of their few predators. Raccoons don't have a lot of predators. I mean, things like coyotes and wolves and bobcats and lynx. I mean, those sorts of things, will go after them, but they are a mesopredator. So, they're not as vulnerable as rats would be, for example, any place where we've taken care of their predators, they're going to be pretty readily available. Part of the issue is you are less likely to see them in the wild except at things like campsites where they already know there is going to be some food around because they're going to be more dispersed, but they are quite adaptive. They can do quite well in the wild, they can do quite well in urban areas, but urban areas will often be better pickings for them, there is less uncertainty, in terms of food and predators.

## **Kaylee**

In Nova Scotia, my experience has been that most of the raccoons in the wild tend to be wherever my car is driving. (laughs)

#### **Daniel**

Yes, sadly.



You also mentioned Daniel the name that a lot of people like to use "trash pandas", also one of my favorite Parallel 49 beers, but get into that name.

I don't know if it is derogatory, when you are telling the story of a raccoon, is trash panda an accurate description of a raccoon? Or is that a myth that humans have associated with them?

#### **Daniel**

I see it as a myth. For many, many years, red pandas were considered a relative of raccoons. Although now they're in their own family. So, they are not considered one of the Procyonids. I think because they look like pandas in some ways, especially when they are short and squat, and they are cute. I mean, there is no getting around the fact that they have some adorable, similar features. That trash aspect is one of those terms that is both admiring and condemning at the same time, like, yes, they are cute, but they are really filthy animals. I think it is a really unfortunate name, I understand that people use it, but the issue of trash pandas is the reason they are going after people's trash is because people are not taking care of their trash. It has nothing to do with any kind of malice on their part, or some desire to be trashy. Like there is just a lot that is buried in that. And so, I do not tend to use it except to identify that it is a term that other people do use.

## **Kaylee**

That actually leads into another question that we had, which was around symbolism of raccoons. Again, rats have lots of symbolism: dirt, disease, but also intelligence. What do raccoons symbolize? How has that symbolism changed over time?

## **Daniel**

Well, that's a big part of the book is looking at the cultural symbolism and how that's shifted, in Indigenous traditions, raccoons have a diversity of meanings, just like they do now. There is early Mesoamerican imagery that shows concerns about raccoons being crop raiders, but also honoring raccoons as being attached to harvests. So human responses to raccoons have always been vexed, because raccoons have always pushed against the boundaries of whatever taxonomy was brought to bear at the time. In many of our traditions, raccoons are trickster/transformer figures, they are boundary breachers. They are figures who upend tradition, that upend law and order in ways that can be really important and quite good, and sometimes in ways that can be quite destructive. That carries on into European colonization. In Indigenous traditions, those traditions are still ongoing, it is not like they ended, they are still quite significant in a lot of communities, ceremonies, and traditions. Some communities have clans that are named for raccoons, but there is this kind of accretive process the layer after layer in colonial America. As it is starting to move from a colony into the United States, raccoons are seen as this symbol of native-born wilderness and wild guile and determined backwoods wiliness. Then that gets mapped on to the rise of very ugly anti-Black representations, in the 1840s is when that really starts to harden in American popular culture. Then they start to be seen as sneaky thieves, and that attaches to really ugly, anti-Black stereotypes. Then as more and more people from many different communities start to become urban, and as raccoons start to become more urban, then they start to be seen as both representatives of the endangered wilderness, and of urban adaptability. Again, these all work in tandem, it's not like one completely takes over from the other, they layer on top of one another. Then you always have this narrative of outlaws, boundary breachers, lawbreakers. Of course, it is always about raccoons violating human ideas of what their proper behavior is, rather than raccoons are just doing what raccoons do. Now the dominant narrative is the urban outlaw thing. We will see where it goes from here, but it was an interesting project to look at



those different symbols because it is quite clear how that shift happens, and where that shift happens over time.

## **Kaylee**

You are talking about this complex symbolism of raccoons changing with human perceptions, colonialism, and urbanization. When you were doing your work for the book <u>Badger</u>, do badgers have the same kind of changing symbolism?

#### Daniel

I think part of that is because badgers have tended to be smaller in population, and more furtive. they tend to flee from humans, whereas raccoons are drawn to humans. In a conversation I had with Dr. Suzanne McDonald, who is an animal behaviorist at York University, she talked about raccoons being a "neophilic" species drawn to the new as opposed to most animals who are neophobic who are repelled by it, and that would be badgers. With badgers if you put something new in their territory, they do not like that, because it could be bit quite dangerous. They also have lower birth rates; there is just a lot of pressure on badger populations that are guite different from that of raccoons. Put something new in a raccoon's territory, and it is all over it. Maybe this is food, maybe this is habitat, maybe this is entertainment. So, it is guite interesting to see how the two different species have a lot of similarities. Europeans did not have raccoons, they had no equivalent of raccoons, and so badgers were often one of the animals that was associated. They would say, "Oh, it resembles a badger, but it lives in trees." They did not guite know what to do with it, but they saw some similarities between the two species. That for me was an interesting comparison of the two that humans don't know a lot about badgers, and so we projected a lot into that absence. We think we know a lot about raccoons, and we have projected a lot onto them, but even that is about 30% right.

## **Kavlee**

It is just so interesting to me. I think about rats, so many symbols around rats, pigeons similarly. Is it these animals that we interact with closely? I wonder if it is that closeness with animals that allows us to project or causes us to project so much onto them? Why do we do that?

## **Daniel**

One thing that I thought quite a bit about was the animals that we tend to vilify the most are the ones who intrude on the spaces that we consider ours. Even though we know these are all projections onto them. I think especially in the industrialized West, where kinship with other-than-human beings is not a value. Animals exist for entertainment, for economic value, for exploitation, but they do not exist like other peoples with whom we are in a relationship. In that worldview, animals who refuse to recognize human superiority are an existential problem. Things like rats, coyotes, crows, pigeons, all these creatures who just won't go away. Cockroaches, raccoons, all of these. Part of that is because they put the lie to human superiority. They put the lie to the idea in this Cartesian dualistic framework, that dumb matter is somehow distinct from elevated human significance. They just do not let us be superior, and they are going to challenge us on that. The folks who subscribe to that worldview, I don't think are necessarily thinking of it overtly, but I think it is a deeper psychological issue.

## Michael

So, Daniel, you're a self-professed raccoon nerd. You say you were drawn to the weird animals that live amongst us. So, as you went through writing this book, was there anything that surprised you? That you were drawn to that even though you already were in that place of loving raccoons, and wanting to write about them, but found something new for yourself?

## **Daniel**

Oh, I was constantly surprised. There were just so many things. The neophilia/neophobia frame helped explain so much for me. You can really see that all through history all the way to Mississippian traditions in what is now the southern US. I was really surprised I found out that raccoons as furbearers have had the biggest economic impact of any furbearer from North America well surpassing that of the beaver, and for a much longer time. If you want a fur trade animal it should have been the raccoon, it probably shouldn't have been the beaver. The fact that there are more raccoons alive today than ever. surprised me. That Toronto raccoons are really becoming their own thing. Dr. Suzanne McDonald refers to them as "uber raccoons"; they look like they are on an evolutionary trajectory moving into a different level of raccooness. Everybody who sees Toronto raccoons says, "Wow, they are huge raccoons." They are selecting for size they are selecting for a particular mental acuity. They are becoming a different kind of raccoon, they are not a separate species, but they are shifting. Just constant surprises. One last thing, the Pennsylvania Department of Game or one of the natural resource commissions had a mascot who was called Howdy: The Outdoor Good Manners Raccoon. He was like Smokey the Bear and Woodsy Owl. He is this kind of pudgy raccoon with a red flannel shirt, and a ranger hat, and a mallet and he has these weird bulging eyes with a vacant stare at this mallet, and he is the creepiest looking mascot who ever existed. He is all about "You exercise good outdoor manners or else" He's so spooky, I was able to get a picture of him in the book, I was really pleased with that, but you can look up "Howdy the Outdoor Good Manners Raccoon", and there are some creepy images of him. So, lots of surprises. That was one of the delights of this project.

## Michael

Well, I am going to be watching Blue Jay games now Daniel, because normally raccoons, they're going to hide in the shadows, right? They are not going to jump out into a lighted area, right?

#### Daniel

Oh, probably not, but you never know if they get spooked, I wouldn't put anything past raccoons frankly, they're not likely to go out there. It was actually a little bit funny that you mentioned the Blue Jays because there was a Toronto artist named Rob Collinet who did a version of the Blue Jays logo with a raccoon, and he gave me permission to put that in the book. He called it the Toronto Trash Pandas, and it is beautiful. I would so much rather have that image. They are not likely to be out there, but they show up in the darndest places. They show up in art galleries, they show up on the subway, they show up in Tim Hortons coming through the roof, they will be on skyscrapers and cranes, they will show up pretty much anywhere. So do not imagine that you will not see them someplace.

#### Kavlee

Raccoons in Tim Hortons, it is good to know they have similarly bad taste. (Laughs)

## Michael

So, Daniel, your creative work also explores as your bio says, "Indigenous belonging and imagination". So how does this work with badgers and beavers, how does that intersect with your work as a Professor of Critical Indigenous Studies?



## **Daniel**

Well, I think for me one of the things that is really important is to remember that the person is not limited to the human. That's really consistent in our traditions. We have long histories of relationships with our other-than-humans, neighbors. Sometimes they're very mutually supportive, sometimes they're conflicted, but they have never been creatures who were beneath consideration. In Cherokee tradition, we have an old story about the coming of disease into the world, which is a really significant one in thinking about my work. The story is that humans were very weak people when we first emerged into the world, and it was the animals who taught us how to survive. They gave up parts of their bodies, so that we would have clothing and that we would have sinew for bows and different things. We were quite respectful of them early on, but as our numbers started to grow, we became more arrogant, more avaricious, and more extractive and started to really inflict harm on them, because we could. After a particular period, when the animals had experienced a lot of violence. and senseless destruction, the animal chiefs came into council to figure out what to do with us. The solution that they came up with was that they would inflict disease on us, to repay us for our unkindness, and our lack of gratitude, but also to winnow down our numbers. So, all of the diseases that we have in the world today are a result of curses that were given by the animal chiefs that were in response to our cruelty. We would not exist today, if not for the plant chiefs who were gathered in council around the animals, and who took pity on us. The plants had longer memories and understood that we were very young people. For every disease that was given, the plants gave a cure, if we came to them with respect, and in the right way. For me, that is a really interesting story about animal agency, and also plant agency, but also the ways in our traditions where we did not behave well. We are still paying the price for that, but we also have a redemptive possibility if we show more respect, and that respect is not only for the plants. but it's also a respect that's given to the animals. We also have to understand that there is nobody to help us if we screw up with the plants. Right? So, we had better be good. So, in my work in Indigenous Studies, increasingly, there's a lot of consideration about how do we understand kinship in a more expansive way, with our other-than-human kin, in a time and place where it's very hard to hold on to those particular relational values. How does our understanding of our obligations to our own Nations and our own territories how does that also include our

## **Kaylee**

obligations to our other-than-human relatives?

I love this so much. My work is in this field of One Health, this idea that our health is related to the health of the environment, the health of people, and the health of animals. And that is so much what I'm hearing here. Western science is only now starting to recognize that interconnectedness and trying to use it as this model of disease because for so much what you are saying. We look at animals, and we say, "You have diseases, you make us sick". Well, often it is because our actions have moving habitat, of coming into close contact with them that result in those transmission events. If we changed our actions, if we were kinder, we would not have those opportunities.

## **Daniel**

Absolutely.

## **Kaylee**

Thank you for sharing that. I think we are going to move into the nerd herd questions here really quick, but I wanted to ask you, what is the next book? You have Badger you have Raccoon I must admit I checked Reaktion books. There is already one on rats, but I think it is from 2004, maybe you could write another one. What's next?

## **Daniel**

I think I am done with the Reaktion animal series. I have done these two, and I really enjoyed it, but I am in the early stages of research for the Codex Mustelidae, the Book of Weasels, all of the weasel kin. So, coming a little bit back to badgers, I am interested in a general cultural history of the weasel kin in North America, and to engage Indigenous traditions as well as broader traditions as well. So early stages, but that is my next animal book. I also have a peer reviewed animal podcast that is going to start recording in the fall. Right now, it's called Creaturely Conversations. It is going to be a while before that comes out, but raccoons are one of the featured species in the first season.

#### Michael

Okay!

## Kaylee

Wow, I'm really excited. I'm so excited that even though I edit this I wrote it down. (Laughs)

#### Michael

You know who else is going to be writing that down Kaylee?

## **Kaylee**

The nerd herd?

## Michael

If you want to get in on the Nerd Herd questions, we post them on our social media @NerdNiteYVR, Twitter, Instagram and Facebook. We have two that are we are going to combine here for you. Daniel. First from Alison who asks, "Raccoons are able to get into all kinds of clever mischief because of their nimble hands. Why do they have hands instead of paws? Are there other animals with similar hands?" Then Sandra asks, "Why do they rub their hands?"

## **Daniel**

So they are still paws. They do not have opposable thumbs, but they do have very flexible digits. This is one of those big questions that people ask all the time, and actually, a lot of names for raccoons come from the way they use their paws. The German is "waschbär", for the washing bear. They are an arboreal species, they evolved for living in trees, and arboreal species tend to have flexible digits, right? You can look at squirrels and squirrels' fore paws are very dexterous as well. So that would be the first thing I'd say is that they look like hands, they're not primate hands, we could still call them hands if we want to, but they're fore paws. The reason they're always rubbing their hands, this is a fascinating thing for me, their fore paws have very sensitive skin. They're not quite as sensitive as ours are, but they are connected to a part of their brain that helps them read things. When they're messing with things, their hands are taking in information that vision, smell, and taste alone can't. So, you typically find them messing with things for food value, to assess whether or not this is something they can eat, that mechanism still isn't really well understood. It seems that when their fore paws are wet, it makes them even more sensitive, and helps pull that information into their brain. They can be looking out at the world scanning for threats and get a huge amount of information just from messing with something in their paws. Whereas we would have to look at it rather than touch it, for those of us who are able to see, raccoons do not have it. In many ways, they are reading the object through the sensitive skin on their fore paws.



Oh my god, I am just remembering a TikTok video that I watched this past week, and it was a raccoon playing with this hose of water and it had its paws in the stream of water, and it would go into the stream, and then out of the stream, then rub their hands and back into the stream. Now I'm thinking that that must have been like a wild sensation. It was maybe even enjoying that sensation.

#### **Daniel**

Absolutely. You watch them, and it's fascinating when you understand that this is connected to a different part of their brain. They are getting so much else in it, then you can see they're fascinated, and it's probably got to feel good. It has got to be a fascinating experience. Some of the stuff that they get, you can tell that they are messing with it well, because they're trying to figure it out, but they are not looking at it.

## **Kaylee**

I'm sure you both have seen this video of the raccoon who is washing cotton candy.

## **Daniel**

Oh, it's devastating.

## **Kaylee**

The most heartbreaking thing to watch but now I'm thinking of it differently because at the time I just imagined the raccoon looking at it like "where did it go?", but it's actually taking that information in its hands, and to no longer feel it, to just have it disappear. Oh my gosh.

#### Daniel

That's the neat thing about the fore paws. It is still not entirely understood how this works, they're quite unique in that way. That is why you see them often-scratching things, washing things; this is also why when people do things like put mousetraps in their garden to stop raccoons from walking around - Imagine if your skin is that sensitive to have a mousetrap snapping on it, the pain would be too much, I would imagine it would be exponentially worse. To lose a forepaw either from accident or from predation would be beyond just making it harder for them to get around and to get food, it would actually reduce their sensory input significantly.

## Kavlee

So, we are thinking about raccoon management, we start with managing our environment, and not straight to the mousetraps.

## **Daniel**

Yes.

## Michael

Our last question. I think I know the answer to this, but I would be curious to hear how you answer this question from Alyssa "Are they as scary and terrifying as they look?"

#### **Daniel**

They can be. Absolutely. These are predators, right? I have a really good photo in the book of a raccoon that is yawning, and they have massive canines. So, you take an animal, which is a predator, which is omnivorous, but is carnivorous significantly, that is not particularly afraid of humans, that is drawn to novelty, that can get pretty much anywhere and is strong, you have an

animal that can be quite dangerous. This is one of the things that I find really upsetting about a lot of people's interests in raccoons, everybody wants a pet raccoon. So many people see these little kits and they're adorable, but when you talk about having raccoon handling gloves, raccoon kits are lovely, but when they maturity, they are not so lovely anymore. They are very dangerous. There have be

talk about having raccoon handling gloves, raccoon kits are lovely, but when they hit sexual maturity, they are not so lovely anymore. They are very dangerous. There have been people who have been mauled terribly, children who have had severe facial disfigurement from raccoon attacks. They are smart, they are independent, they have their own ways of being in the world, and they can defend themselves quite readily. There are lots of stories of dogs being dragged and drowned by fully-grown raccoons. So, I think, as with any animal, it's important to treat them with respect. Leave the kits alone, if there is an orphan kit call a proper wildlife rehab person to look after them. Do not try to raise them yourself. It's not good for them, it almost always ends up in heartache, and even when they are, even when they survive puberty, their lives are quite diminished as a result of captivity so I think they can be quite dangerous. They can be quite delightful. They are more delightful when you just let them do their thing, leave them alone, let them be raccoons wherever they are. Minimize the potential for conflict, and just enjoy them in all their raccoon splendor.

#### Michael

Raccoon splendor I love it. It sounds very poetic. Should we nerd out?

## Kaylee

I would love to nerd out.

#### Michael

If you want to get in on the nerd outs, we also post them on our social media you can share with us what you are nerding out about, get at us @NerdNiteYVR. We have one that came in from Kim. She's nerding out about jumping spiders on Vancouver Island. Have you ever seen a jumping spider, Daniel?

#### Daniel

I have not. It sounds fascinating and a slight bit horrifying.

## Michael

I have never seen a jumping spider either.

#### Kavlee

What? I'm sure you have. I saw one on my deck yesterday. They're very cute. I encourage everyone after this to go look up <u>peacock jumping spiders</u> that are beautifully colored and the males do those dances with their arms.

#### **Daniel**

The little, tiny ones?

## **Kaylee**

Yeah

#### **Daniel**

I am thinking of a monster jumping spider. Oh, okay. Now I have seen those.



## **Kaylee**

Okay, they are very cute. They can jump, and they are fuzzy.

#### Michael

Daniel, what are you nerding out about?

#### **Daniel**

Oh my gosh, with the book coming out I have just been nerding out about raccoon stuff. Like that has been the centre of my life lately. So, one thing that I still find amazing with raccoons is that they are an invasive species in Japan. As a result of the Fukushima nuclear accident, there is a whole area where there are wild raccoons and wild boars and their populations have gone wild, but they can't be hunted because of the radiation poisoning. So, there are atomic raccoons riding atomic boars in the Fukushima exclusion zone. They will be part of the raccoon rebellion.

#### Michael

This is a comic book waiting to happen. Daniel, I think this is calling you to write this.

# **Kaylee**

Next book, we found it.

## **Daniel**

Awesome! (Laughs)

## **Kaylee**

What about you, Michael, do you have any radioactive nerd outs?

## Michael

Well, I very well might, I thought that I would share with the listeners and with both of you how my brain works when I get on to something. So, I was having these meandering thoughts. I landed on a central question that took me in a bunch of different directions. So, it started with watching the animated Netflix series. The Midnight Gospel, really cool animated show. There is a scene in the very first episode where zombies are chasing some characters; the zombies bite them. Then suddenly, the zombies turn nice, and they are singing, and it is very pleasant. I started thinking wouldn't that be interesting if there was a parasite that did that, in a lot of ways that is what parasites do, right? Like, they change your world, and you're no longer scared of that thing that wants to eat you. Now, simultaneously, I had been joking with a friend on this side tangent as a sketch, or a sci-fi story, if you could just catch getting pregnant, like it was just like floating around airborne, like a virus. That's how a kid was made in this world in this scifi world. There have been sci-fi stories that get into that, Invasion of the Body Snatchers, probably the most common one. Also, Day of the Triffids, getting into the plant world that is how things are spread. Then the central question came to me, which I don't have an answer to, maybe both of you can help me out here. Is there an ecosystem where the parasite is the dominant species? And would that even be possible? So, I pumped this into Google and up came this paper written in 2010, called the Ecological Consequences of Parasitism by Daniel Preston, Peter Johnson from University of Colorado. Sure enough, parasites are important to the health of biodiversity in an ecosystem, everything from symbiotic relationships to even possibly curing autoimmune diseases or allergies. But it did not really ask the question of if it would be possible if a parasite could be a dominant species. I guess that is getting into the Day of the Triffids. If anyone has read that, they will know what I am talking about. I would be very



curious to find out more about parasites if there could be a planet of just parasites. Welcome to my brain everyone.

#### Daniel

It is an interesting question because I think we then we have to define what we mean by parasite right? Like that starts to question taxonomies completely.

## Michael

So, I guess in the case of the Day of the Triffids, they came from another world, became parasites here taking over from humans who were the dominant species on this planet. Then at some point if the plants won, the story ends before you see what happens, but what would happen to the plants? Would they no longer be a parasite? They would just be the dominant species here, but then I guess, what would their main food source be? And why are they thriving here? I have a lot of questions about that, too. I will continue to ponder this, keeping me up at night, these hot nights.

## **Kaylee**

Pleasant dreams. (Laughs)

#### Michael

What about you, Kaylee? What is keeping you up at night these days?

## **Kaylee**

Something a little bit different. I am officially one-year post PhD. I finally enjoyed reading again. I am really enjoying it. So, I wanted to nerd out about a book that I just finished reading. I heard about this book, through social media on <a href="mailto:oRaven\_Reads">oRaven\_Reads</a>, which is an Indigenous owned subscription box program, including books and gifts created by Indigenous authors and artists. So definitely worth a follow on social media for new book recommendations. The book I want to gush about is "The Barren Grounds" by David Robertson. Have you read it?

## **Daniel**

I have! Yes.

# Kaylee

Isn't it fantastic?

#### **Daniel**

Well, he is such a great writer and such a committed community member too. Yeah, he's phenomenal.

## **Kaylee**

I loved it so much. For those who have not read it, it is a story of two Indigenous children, and they find a portal to a new reality and embark on this journey of realizing their identity and it deals with connection and engaging with community. It is everything that I love in a story; the characters are incredibly engaging both human and non-human, for those other-than-human kinships, and lots of character growth, beautifully written story. There is a second book in the Misewa Saga coming out in the fall that I am also really excited about. I just watched an interview with David Robertson the other day, because I love this book, I wanted to understand a little bit more about that writing. He said a couple of things in this interview that really struck me. The first thing that I think, as writers and Michael, as a science communicator, I think

would resonate with all of us is that stories come to us in many ways. I truly believe that that is true, right? You do not know that you are at the start of a story or if you are in the middle of it. To me, it speaks of the importance of being open to experience and reflecting on experience. The second was that he said that people often think you should write about what you know, which is a mentality that I've gotten into in science, but one that I push back on heavily, because it is very exclusionary, but that he believes that writing can be a way to explore the world in which we live. I love that because it's so much more inclusive, and it's a view of how our written works come into the world, and how our ideas

change as we learn. So, I want to share that especially because we were talking about writing today. So, all in all 11 out of 10, highly recommend, if you are into audio books, the narration of this book is spectacular. It is done by Brefny Caribou-Curtin, so give it a read or listen that is my nerd out.

## **Daniel**

Awesome. Thank you.

## Michael

Everyone find that David Robertson book, and everyone find Daniel Justice's book Raccoon. Daniel, thank you so much for joining us on Nerdin' About today. Where can people go to read Raccoon, and where can people learn more about you and your work?

## **Daniel**

You can find Raccoon at your local independent bookstore. If they don't have it, they can order it in, I am quite actively on Twitter @JusticeDanielH, and I have a website www.danielheathjustice.com

## **Kaylee**

Thank you so much for taking the time to speak with us today. I learned a lot and I had a lot of fun. I 'm sure that this is the same for Michael. Thank you so much, everyone for listening. If you want to hear more from us, you can follow us on our socials @NerdNiteYVR on Twitter, Instagram, and Facebook. This episode was hosted and produced by us edited by me, edited, and audio engineered by Elise Lane. We'll be back in a couple of weeks. But until we meet again, be like a raccoon and check out something new.

Transcribed in part by Otter.ai