BEARing Down on Conservation with Lauren Eckert

Nerdin' About Podcast Transcript, Season 3 Episode 7



Michael

Welcome to Nerdin' About, I'm Space Michael, and with me as always is the hard working scientist, who if she could live on a planet that could decide how many hours there are in a day, she would be on a planet with a 48 hour day, and that is Dr. Kaylee Byers.

Kaylee

Yes, I would. I don't know what that says about me. Like part of me is like, good job. Kaylee, you've got so much to do. You want more hours in the day? Then part of me is like, Kaylee sleep. A reasonable number of hours. What would your planet look like Michael? How many hours of sleep to awake working ratio would you have?

Michael

Well, you know what? I think I would kind of like one of these tidally locked planets. Now tidally locked planet would mean one side would always be in the daylight and the other side would always be in the evening. So, if I wanted to go look at the stars, at any point during the day, I could go and travel to the other side of the planet to be in stars. Then when I want to go play some baseball, I go on over to the daytime side of the planet, I think that would be my favorite planet.

Kaylee

I really like that idea. I like the idea that you can choose when to engage with the light, and when to engage with some evening times. That would be good for our self-care, into the light or into some repose. That sounds perfect. Along with wanting all these hours, my lower back hurts, and I'm aging rapidly, whatever planet I'm on. Well, we're going to we're going to shift gears here, we're going to be back on this planet. Today we're talking with Lauren Eckert, who is a conservation scientist and PhD candidate at the University of Victoria, where she's interested in studying the complex interface of society and ecology, and how an understanding of where people intersect with the natural world can allow us to better coexist. Hi, Lauren, how are you?

Lauren

Hi, I'm fantastic. Now that we are up, and working, and recording. I am also both wishing that I had access to sunlight whenever I wanted, and 48 hours to work for a reason I barely understand and I don't know if it's healthy. So, I'm feeling great and relating heavily to our intro today.

Kaylee

I made a joke recently to somebody who talked about work-life balance, and I was like, "I'm just trying to get work-work balance."

Lauren

What are we doing?

Kaylee

Good and bad life choices and speaking about good life choices. Lauren, you just returned from living in a sweet canvas tent for like six months. What that all about? Where were you up to?

Lauren

Speaking of good life choices was a fascinating choice for transition. I shouldn't say that it was both a good and a bad life choice. One of the lenses I think about

when I think about conservation as a scientist for my PhD is conflict between people and wildlife, specifically, people and black bears here in the gathet regional districts, more commonly known as Powell River and the territories of the Tla'amin Nation, where I'm coming to you from tonight. A multitude of factors led me to do that research based out of a canvas wall tent. The primary one being very short notice for when I was going to end up being able to do my research due to COVID. I was initially planning to start a year earlier, but obviously fieldwork was delayed just as many things in life were. So, my partner and I were on the lookout for rentals here in Powell River, but it is a relatively small community with relatively few of those, and I had to be able to go for research on a moment's notice. So, we ended up in a canvas walled on a friend's beautiful, spacious rural property, which actually ended up quite a joy to run fieldwork from until about October, when it got really cold and uncomfortable. Not a lot of insulation in a fabric house. So yeah, I'm very happy to be coming to you from a walled home with central heating for the winter now.

Kaylee

That sounds lovely, and actually I was living vicariously through you for a lot of the summer.

Lauren

It was really fun in the summer.

Kavlee

In retrospect, I haven't seen a lot of updates recently. Maybe that's because of the cold.

Lauren

I was in survival mode. (Laughs)

Michael

So, Lauren, speaking of life choices, you identify as a conservation scientist. So, I don't know how many cocktail parties there are there in Powell River. But if you were to go to a cocktail party, is this how you would identify yourself as a conservation scientist? Tell us a little bit about that title and what conservation science is.

Lauren

Sure, totally. So, Kaylee, we were talking about long work days. I feel like my work is so much a part of my identity that I'm more than happy to admit to identifying as a conservation scientist, obviously, I'm a bunch of other things. You know, a human, a partner, a settler scientist, I'm a non-Indigenous scientist working often in Indigenous territories and spaces. I bring all sorts of positionalities as to my work as a conservation scientist. But to answer the question, conservation scientist sometimes feels like a very comfortable and non-committal word to use as a scientist with a tiny bit of an identity crisis. I feel a lot of conservation scientists feel this way. We, who work in the sphere of applied conservation often end up using as many tools as we could possibly need, in the scientific realms to accomplish conservation goals or accomplish conservation research. That means I am heavily in the social sciences, in the natural sciences, my background is in ecology, but more and more I'm pulled towards psychology, social sciences, human dimensions of conservation. I see conservation as this uniquely human endeavor that is about caring for and managing and protecting the natural world, which very much includes humans, and managing for human behavior, for the benefit of both humans and



non-human animals, now and in the future, but that as may be obvious is a very expansive definition. So, conservation science means I get to bring all of these different disciplines and aspects of myself to the work and means I don't have to pigeonhole myself into any single discipline, which I am a bit allergic to at this point in my

pigeonhole myself into any single discipline, which I am a bit allergic to at this point in my career.

Michael

So, you have lots of options to take the conversation in many different ways. When you're in that cocktail party, you're a conservation scientist. But then, you know, eventually, like we are here you want, we want to talk about your work and what that looks like for you, on a day-to-day basis. So, what does conservation science look like for you?

Lauren

Sure. As a conservation scientist, I think about the deep rooted conflicts that surround conservation endeavors, these projects we undertake, as humans across values, cultures, borders, to protect our environments, often spark really challenging intractable conflict, whether that conflict is between groups of people, stakeholders, between nations, Indigenous nations, and colonial nation states, between humans and wildlife. We need to better understand people to more deeply understand the roots of that conflict, and to better understand other species in order to overcome that conflict and make sure that our conservation endeavors are successful. In my PhD, I have a number of case studies, individual projects in which I look deeply into one type of conflict, mostly local to British Columbia, and Canada, and try to look at that conflict from all dimensions, social dimensions, natural dimensions to try and unpack them and move towards solutions.

Kaylee

As you were talking, this resonated with me a lot, because when I did my PhD, I looked at urban rats, and health risks, and too took a lateral approach. I was in Interdisciplinary Studies, and it definitely ended up being like, how do people feel about this problem? How do we think about how things interact? One thing that I don't know if this resonates with you, but for me, I often felt like I didn't have the expertise maybe to do any one thing well. Do you ever face that in this?

Lauren

Oh, you're speaking to my heart so profoundly. I hesitate now to use the term imposter syndrome because I don't know if it really exists, or if we should call it that, but this may be the case especially for women in the field, and research shows also for visible minorities in the field, which I am not. This feeling of lack of expertise is really more prominent in women. But my God, interdisciplinary science, I promise you it will make you feel like you don't know anything. (Laughs) Yeah, so this is something I grapple with a lot. It's a really double edged sword because I think one of my greatest joys in my PhD is getting to piece together all of these corners of a problem. To apply pieces of these different angles, in part because of the grace and generosity of experts in those arenas, towards solving these really tricky problems. In some ways, conservation and understanding, for instance, urban wildlife, whether rats or bears, requires looking at it from all these angles, because you can't understand human wildlife relationships without understanding the very complicated human piece of things. But oh my gosh, I mean, for the chapter of my PhD that includes looking at black bear and human conflict, I'm attempting to get ecology, wildlife, camera, traps in the mix, along with human values research, and human behavior research, I'm trying to find proxies, estimations of that behavior that I can study. There are so many pieces of which would take lifetimes to be experts in and I

have this window of a PhD to try and pull it all together. So, I have a perpetual feeling of having no idea what I'm talking about. I think I still wouldn't do it any other way. I feel really lucky to get to peer through multiple lenses to do this

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research. There's a tradeoff, I don't get to spend as much time in any one of them, but it's a fulfilling way to do research, even though it comes with the baggage of constantly feeling like an imposter.

Kaylee

So, thinking about how science does tend to be siloed. I mean, even within the field of ecology or conservation, up until now we've really focused on one particular species at a time or what people are doing, one behavior that they have. You're really focused on the interactions or what we call the socio-ecological landscape of science. So why does that approach interest you? Why do you think that that's a valuable approach to conservation science?

Lauren

That's such a good question. I like asking those questions about how I got to where I got to because it's something I think about a lot. This is also informed by Indigenous knowledge systems and praxis in that we have to do better at considering ourselves in our science. Obviously, we have all of these methods in a western science framework to avoid bias in our research, and those methods work really well, but that doesn't mean that we as humans aren't biased. There are things that lead us towards the pathways we're on. I think from a really, really young age, I was transfixed with animals. Behind me I have two dogs, despite a lifestyle that barely allows it, but animals, non-human animals have always been so incredibly important to me. Until I was nine years old, I rarely accepted the fact that I was indeed a human animal and would play pretend to be just about anything else. I think I had my parents guite worried. So, there's this interest in the relationship between humans and non-human animals that has always been there for me. I think that interest sort of motivated me towards conservation sciences because I cared deeply about wildlife and non-human animals. Interestingly enough, conservation sciences motivated me towards an interdisciplinary world because I first approached conservation with this idea that we just needed more data on wildlife. The reason we weren't making the right decisions about conservation broadly, and this was far before I had any insight into colonial systems or anything like that, was that we needed more ecology data, and that would fix a problem. And of course, as I'm sure you've experienced, it turns out that we actually live in this really complex world where humans are making all of these complicated decisions, and we need insight into people. We are by some accounts, certainly not all, a dominant force on this planet, though there are many other species that far outnumber us in biomass and quantity. So, I'm just really interested in thinking about the narratives we tell about ourselves about our place on this planet. Whether in Western culture or in other cultures, and how we can better understand people towards better understanding the problems we face towards solving them, which is a huge problem that it will not fix. That interest in wildlife turned into interest in science turned into interest in social sciences, because that interplay between people and everything else is the keystone of conservation. So, a winding answer, but perhaps to a winding question.

Michael

Well, I love this winding path that you're taking us on here, Lauren, it's such a big field. When we talk about conservation science, we're talking about all of biology, we're talking about humanities, society all of the interweaving intersections of it all. You just said, here's something that you can't solve. So, let's, let's try to boil this down. I'd love to hear from your perspective of

the things that you would love to try to solve. If there is something within this field that you're working on that you're thinking about some idea that you would love to get into?



Lauren

I like going in this direction, because we can spiral out to the broad scale of any science and get to a global species-wide level. My hope comes from working on the more local levels on things that we can see changes over time, or I can see changes in over time. I love applied conservation science for that. So, in my PhD specifically, I'm really hopeful that by focusing on a couple smaller scale conflicts. I can provide really valuable information to policymakers and to folks involved in those conflicts in terms of how to begin transforming those conflicts into coexistence opportunities. So, I'll give three examples and keep them short. So, the first example of one thing we can all think about individually, perhaps as listeners, or as humans in Canada, is conflict between Indigenous knowledge systems and Canada's colonial nation state knowledge systems. So, for part of my PhD, as I began to think about conflict, I looked at the conflicts that live between these different knowledge systems that inhabit this one landscape now called Canada. We see these conflicts come up a lot, especially in environmental decision making spaces. So, if we think about the Coastal GasLink Wet'suwet'en conflict that's occurring right now, we find that different value systems, different knowledge systems, different legal systems, different governance systems that coexist in Canada, result in very, very different decisions when it comes to something like large scale industrial projects. As Canadians, I think, especially settler Canadians, it's our responsibility to consider the deep roots of the conflict that often occurs between some Indigenous nations and our colonial nation state government of Canada, and to consider our own responsibility in assessing the benefits we have been born into due to violent colonization and continue to benefit from. So, when we see Canada making Environmental Assessment decisions that impact indigenous nations in different ways, it's important to consider the conflicts that arise from those decisions, not just through the framework of reactive conflict, but think deeply about things like historical colonization and the values differences that arise. That is not a project I'll be able to solve, but something we can all contribute to when we vote. When we talk to friends about these issues, that these are really deep rooted conflicts issues not based in reaction, but instead based on fundamental value differences between nations. To more historically approximate conflicts I'm looking at and hope to contribute solutions to our conflicts between stakeholder groups. So, you may be familiar with Southern Resident killer whales in the Salish Sea along the west coast of Canada, and they are a species of concern and really cool species. I could talk forever about how cool Southern Resident killer whales are, but they also have faced environmental degradation, and their numbers have been dwindling. Unfortunately, or fortunately, Southern Resident killer whales depend primarily on salmon for survival. People also depend on salmon for happiness and survival and sustenance. So, conflict has happened in a big way in my community, between anglers, recreational fishers and between folks who want to support the conservation of Southern Resident killer whales, by excluding fishing salmon. As part of my PhD, I'm surveying people on all sides of that conflict spectrum, to try and understand the values they bring to the table when they engage in the conflict over the ways that we could possibly preserve Southern Resident killer whales by limiting salmon. The goal of that is to try and find shared ground. So, while people may have very different opinions about how best to manage killer whales and salmon, I expect to find that people involved in these conversations passionately, and loudly, share a lot of values about these species that call our marine habitats home. So that is underway right now, largely through social science means, surveys and conversations and Facebook comments to try and disentangle the values from what has been pretty hot, high conflict situation where people are really at each other's throats here in British Columbia. Then

the third place I am invested in is in the human black bear conflict, landscape. That is admittedly, usually a very fun one, because I get to learn a lot about local black bears, and where they end up and why they end up there. I also get to put



cameras in people's yards to understand how often bears show up in their backyards. Beyond just looking at their behavior, I'm talking to people about their past experiences with bears, their perceptions of bears, their fears about bears, how they can assess how in control they are of bear-human interactions, their values when it comes to bears. All of this to say that, my hope is that through the research with people here in my home community and understanding more about where bears are and why they're there, we can create sort of like a landscape of priority when it comes to identifying where conflict with bears is most likely to occur, and what is most likely to drive that conflict. So that's one way to transform the situation to coexistence is to focus our efforts as researchers or as organizations who are working towards coexistence, to say this is where conflict is occurring. These are maybe the values that drive it or the behaviors that drive it, from their human sides, this is what we can do to solve it.

Michael

I love that you brought up humans perceptions of bears. When you're thinking about their interactions with them, not just like what's actually happening, but how humans are thinking about bears. I think about when we tell stories of the stars, and we think about different cultures, how there are bears in almost every culture's stories in the stars and how important they are in so many different cultures across the world, not just in North America, but in Europe and Asia. It's fascinating, and bears to me have always been fascinating. I'm curious about your work, and if you have any tips for any listeners out there that once we get back to summertime they're going to be out there potentially interacting with these bears. Do you have any tips about staying bear safe out there?

Lauren

Oh my gosh, so many, and I'm really glad you brought up humans fascination with bears, it is one of my favorite parts about this research. We share such an interesting niche with bears. We eat a lot of the same food bears do. So, it makes sense that we come into contact with them a lot. Our ancestors ate what these bears ancestors did. Just as a sidebar, because it's a super cool science fun fact, and then I will talk about bear safety. A colleague of mine, Dr. Lauren Henson, in collaboration with Jen Walkus and a number of First Nations on what is now called the Central Coast. Their multiyear research project on genetic differences in grizzly bears, and what is now called coastal British Columbia, showed that there were three distinct genetic families of grizzly bears in British Columbia. Dr. Henson was looking for what in the landscape historically or today might have caused that differentiation genetically. The only surface she could find that overlaid geographically with those three genetic groups was indigenous language families.

Kaylee

That is the coolest.

Lauren

It speaks so powerfully to human and bear relationships, that whatever drove differentiation in bears was the same thing that drove differentiation and the ancestors of the humans who still live on the coast today. So very cool relationship research. So, humans end up in conflict with bears, particularly black bears where I live for a number of reasons. The number one reason as far as we can tell is attractants. So, bears can smell better than your dog can smell, and so much better than you can smell. Bears experience the world through their nose. They can smell

in some cases, it appears up to 20 miles. So, if we have stinky, delicious, high calorie food in our yard, or the remnants of it, bears are motivated to travel to find that food, especially late in the fall, when they're getting ready to go to sleep,



and use their fat reserves to stay asleep for much of the winter. So, the number one thing you can do to avoid conflict with bears in your backyard is to manage those scent attractants. There are other attractants, but the smelly ones, in my mind are the most important to consider. That also means if you're camping, you got to be really careful about anything that can smell because if you're in remote places, those bears are out there. Like they don't want conflict with you, but they're going to be excited about good smelling food. They also like novel smells, so even peppermint type smells. They're curious, especially black bears. When you're in the back country, always leash your dogs. Pets often bring bear conflict by being curious and being animals and being freaked out by that dog that's 10 times the size of them. So, leashing pets or having pets with really, really good recall is important when you're in bear country. Then I always carry around, and haven't had to use yet, some sort of noise making device. even if it's your own voice, I will yell "Hey bear" a lot when I'm out on a trail just to make sure I don't accidentally surprise a bear. That's kind of worst case scenario for bear and person. You can bring, I don't normally because of potential problems, something called bear bangers. Basically, they are a device that you can fire long range that will make a very loud noise, as they detonate very far away from you. These can be very useful. The problem is people, if they're in a bear encounter and feel scared, will often aim them towards the bear. The device then flies behind the bear, fires behind the bear, the bear gets scared and runs towards the person. (Laughs nervously) Use bear bangers, only if you have practiced using them appropriately. Usually you fire behind yourself, if you're trying to make a big loud noise. A great alternative is just a loud whistle, bell, or air horn, and then the last line of defense and avoiding conflict with theirs is bear spray. So, this is sort of like a mace based product, you can buy it at most outdoor stores like MEC. There are a couple of caveats with bear spray, you do not spray it on yourself to repel bears, you'll have a real bad time. If you do ever spray it because it smells interesting, bears will come, check it out. So don't like spray it on a rock to see if it works because it may actually bring bears to you. There's research that shows bear spray is very effective if you've practiced using it. So normally at outdoor stores, they will sell like a practice version, a canister without the mace in it that you can practice with, and you basically spray in like an S shape upwards from the ground when the bear is within nine feet of you if it's charging you, so this is sort of like last hope, last line of defense. You don't want to have to use bear spray, but it is good to always carry it with you because you never know what situation you're going to end up in. All of that said, bears are very, very unlikely to want anything to do with people besides to duck out. Usually, your voice will be enough to deter conflict with theirs, but always bring backups.

Kaylee

Shifting gears, a little bit. One thing I would really love to ask you about is this other initiative that you've been involved in lately. So, we were talking earlier about your work and how it hits on sort of broader issues and how a lot of this is linked to colonialism. You've been involved with Hidden Compass, which looks at redefining and reimagining words or concepts in science through a present day lens. I really love that idea because having gone through university in the early to mid-2000s, so much of what I was taught in western science is rooted in colonialism and these words we think of. Like "to discover", or even "expert", words that we use all the time. Why do you think it's really important to have those conversations about the historical context of science?

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Lauren

Gosh, you introduce that wonderfully, and I echo much of what you said about having experienced science in a very specific way that's obscured its heavy

history of violence and colonization and exclusion. I often feel like I still have so much to learn in this arena, particularly as a white person, particularly as a settler and non-Indigenous scholar. I will always be in a position of learning in these spaces rather than leadership. Hidden Compass, which is a women lead, online publication magazine, I highly recommend, it's super cool work they're doing, digs deep in a media landscape that often wants to aim towards clickbait and superficiality. They've allowed me the opportunity to do this series on YouTube where I talk to all sorts of fantastic people about things like the heavy history of science and the words we continue to choose to use in sciences and journalism and beyond. I don't have any answers in that space. I feel like I keep saying that a lot in this conversation. Maybe that's what a PhD does to you, but I think it is so incredibly important, to be talking with a diversity of humans about what we do with words like "exploration" that we may have the opportunity to reclaim, or we may have to leave behind because of their profoundly colonial and violent baggage. I'll direct people towards those interviews to check out different perspectives, a number of Indigenous folks, scholars, teachers have joined on this series and speak to that. They don't think words like "exploration" and "discover" can be reclaimed because of the heaviness the baggage that comes along with them. So, I think as humans who care a lot about building new worlds, I think all scientists are inherently interested in that process of learning and unpacking and disentangling and, for lack of a better word discovering, we're in a really good and important position to consider the gravity of the word choices we use as we engage in these many different disciplines towards new things. I mean, words can exclude words, can invite words. can encourage and so it's been really wonderful to have the opportunity to have those conversations via Hidden Compass. We talk about other things too, you know, like how we can escape our comfort zones to tell stories in new and better ways that are more honest, and more diverse and escape colonial Western paradigms and we talked about the interface and intersections a lot already so far, but that's something else I get to talk to a lot of cool researchers and storytellers about is how we can find these intersections of knowledges or disciplines or worldviews and find new things at those intersecting spaces. So that's been really fun.

Michael

Well, this is amazing Lauren, I don't know if you know, but here on Nerdin About, we also set up a camera that we put up out there and we just spotted something.

Lauren

What?

Michael

The Nerd Herd.

Music

Michael

Alright, if you want to get in on the Nerd Herd questions, we post for them on our hidden camera, it's not a hidden camera. It's right out there on our social media @NerdNiteYVR, Twitter and Instagram. Our first question comes in from Pramodh who asks, "How do we define which creatures are in danger? Do we stop at species level or subspecies?"

Lauren

It may be unanswerable, I mean, the whole construct of species is at times questioned by folks in the scientific community. So endangered species



categorizations depend a lot on country and systems for protection of endangered species. So, I won't pretend to be an expert, but in Canada or the US, the two places I've spent most of my life endangered species policies, endangered species categorizations usually depend on a known number of animal left in the wild and human valuation of that animal. Fortunately, or unfortunately. This is more anecdotal than based on factual information, but one phenomena in Canada is that we have a lot of fish species that from perhaps an objective lens should be categorized as endangered in terms of the number of those animals left. But because either they have commercial value, or maybe they're not particularly charismatic or sexy, they don't make it on endangered species list. So, I'm certainly not claiming that endangered species lists aren't valuable, they're important, they lead to, especially in the US with the Endangered Species beyond just the endangered species that the ecosystems are being protected for. But they are fundamentally, you know, a human construct, and so very imperfect in design and implementation.

Kaylee

One of the things I often find really interesting in this space too is thinking about endangered species, but within the context of a species that we know, right? There are so many species that are out there that have not been discovered. As somebody who used to take feather mites off of birds and then look at their genitals. I spent a lot of time recognizing that I had no idea what species that was, because it just wasn't identified. It is a construct, we've created it, but it can be incredibly useful. It is also political, because it is within the human space, we just can't disentangle it.

Lauren

Perfect example of many intersections, useful, but really complicated. There are tons of species we can't see. We can't measure what we can't see.

Michael

You want to nerd out with us more Lauren?

Lauren

I would love that.

Michael

All right, if you want to get in on the nerd outs, we also post for them on our social media @NerdNiteYVR. Our first one comes in from Em, who is nerding out about ranunculus bulbs. I don't know if I'm pronouncing that right, ranunculus bulbs. Kaylee, Lauren, can you help me out here?

Lauren

I like your pronunciation whether it's right or not. No, I love it. That's definitely it. You said it with confidence.

Michael

Do you know what a ranunculus bulb is?

Lauren

I have no idea. But I'm excited to learn.

Kaylee

I want you to know that I went and Wikipedia'd this, partly because one thing that we need to do better on the pod is doing that when we get these things in. The other is that I've got a friend who's a botanist, who I know will murder me. So, let's see here, what did I find? A group of over 600 species of flowering plants. They're in the family Ranunculaceae, sorry Tim. They are known as buttercups, spearworts and water crow foots. Ranunculus comes from Latin for little frog. Probably because they're mostly found by water, which I thought was really interesting.

Lauren

So cute!

Kaylee

You'd think so! Many species are poisonous, when you eat them fresh. (Laughs)

Michael

It's always the case, right?

Kaylee

So, don't eat them. I think they're also used for medicinal ingredients as well. I did learn that especially for livestock, it can be bad news bears.

Lauren

Yikes. Okay.

Kaylee

Yeah. So that's what I learned.

Michael

I love learning. This is why we do this, because if it's something we don't know about we can dive in and learn more about. What about you, Lauren? What have you been nerding out about?

Lauren

Okay, I'm going to have two answers. One is spur of the moment. The first answer is that I often find myself nerding out about how little we know about everything. Like we can fall into this general feeling of the modern era, humans have so many tools to know so much, but we know nothing. I just learned something very new about 600 species I know nothing about. So, I personally know nothing, and humans know so little. So that always makes me nerd out a little bit in a wonderful existential crisis way. The other thing I'm nerding out about is related to human-animal relationships. I just read an article in The Conversation about human's relationship with their pets, which I obviously think about a lot as a dog mom, and it was literally about pet parenting. So, social research on people who have pets who they put a lot of their energy into, and the researchers were asking the evolutionary question of "why would human beings be so willing on such a grand scale, put so much money and effort and resources and time into animals of a different species". The thesis of the researcher is based on feedback from hundreds of people they interviewed and evolutionary theory about people is that we are a species that evolved to alloparent. So there is substantial evidence that human beings, when we



lived in small groups the contexts in which our ancestors lived, we shared parenting responsibilities. So, there was essentially group parenting over the young of individuals in a group, it was like a family of parents. Our ancestors



young of individuals in a group, it was like a family of parents. Our ancestors would even do things like trade food for babysitters, like we are not that different than our ancient ancestors are. We trade resources for other members of our group taking care of our kids. So, we evolved because that was such a successful trait in our various social groups. We evolved these instincts to parents, even those humans or things that aren't directly related to us because it behooved us to, it conferred all sorts of benefits: food, resources, probably fitness, like probably helped our ancestor's offspring. Anyway, so we parent our dogs, like our kids, because as humans, like a core evolutionary trait is to take care of young things that aren't our own. We live in an era where a lot of messed up stuff is happening. It's just nice to remember that some fundamental traits of humans of our species are to care for other living things at great cost, even if it doesn't benefit our fitness directly, and to cooperate. It's a nice reminder, I'm nerding out about those basic evolutionary traits that are very human.

Kaylee

I love this, and it just made me feel so much better that I spent like \$600 to get Gizmos teeth cleaned. I can't get rid of it. It's in my DNA. Also, this is kind of the level of parenting I'm chill with. Like, this is great, she's sleeping in the chair right now. Perfect.

Lauren

I'm going to send you this article because it basically says, "wow, people aren't having babies, but they have dogs so it's fine."

Kaylee

We could have a whole other podcast about that. It would just be me unpacking.

Lauren

Count me in. Yeah, there's a lot there.

Kaylee

Michael, what are you caring for these days? What's on your nerd out?

Michael

Well, what am I caring for these days? I'm caring a lot for our fellow science communicators. I think about science communication a lot of course, working with Sci-Cats. Just to give you a window into what my day was like today. I get a call from past guest Johanna Wagstaffe who is the on air meteorologist, seismologist and scientist for CBC, amazing go follow her on social media. So, she calls because she has a new science roundup segment she does on the CBC, and she wanted to talk about this new comet that's zipping by the Earth, Comet Leonard, which is such a great old man named for a comet, especially for one that's on an 80,000 year orbital period. The thing is, she's such a bright and positive science communicator, but if you've been following what she's been up to the past couple months, it's been atmospheric river, and it's been floods. It's been dire climate change stories that she's been having to tell. Honestly, she called me and said, look, I just want to do something light and fun to which I was like, Is that a compliment? But then lo and behold. I learned about this movie that's coming out. Don't Look Up. It's actually in theaters right now. I haven't seen it yet, but this is a movie about science communicators, because there is a comet that is heading towards Earth. It's a comedy that's written and directed by Adam McKay, about how the scientists communicate that with the public, and I found that that was so apropos for today to think about that in today's climate. Of

course, at some point, I may be called upon to talk about these real dire things that are going to have everyday impact on our lives. Hopefully not, but it could happen.

Lauren

Listen we're going into 2022 anything's on the table. (Laughs)

Michael

The other really cool thing about this movie is that it actually did involve a lot of real scientists in the making of it including Amy Mainzer, who's one of my favorite planetary scientists. So, everyone's homework for next podcast is to go watch Don't Look Up. I'll watch it. I'll get my ticket right now and then I'll do a review my next nerd out. Kaylee, what about you? What are you running out to go nerd out about these days?

Kaylee

Wow, what a segue. Well, as Lauren just said, who knows what 2022 will bring? The last year has been to be frank, a trash fire. We're coming to the end of the year, this is going to come out in the New Year. I wanted to reflect on something that has brought me some joy, and also has human wildlife, sometimes human-animal conflict, which is something that I've been doing the last year. So, I've been reconnecting with horseback riding and have been loving it. I ride once a week on a little horse named Trig, and she is the sweetest. I've been really enjoying that because it's one day a week that I am outside, sometimes that's less enjoyable than other days, and Trig does not like a puddle. So that's where some of the conflict comes in.

Lauren

What horse likes a puddle? Very few in my experience. (Laughs)

Kaylee

It's just been really fun. One thing that I've realized lately, too, is when I was doing my PhD, I had a lot of anxiety. I also found that I was forgetting things a lot, and I realized that part of it was that I was never fully paying attention to one thing. I was always thinking about something else, which made me feel better about the fact that I couldn't remember anything. I think one of the things that I love about horseback riding is I actually don't have an option to not be thinking about horseback riding. Because she'll take my leg into the fence, like she will do it, because she wants to stop going.

Lauren

Or drop you into a puddle.

Kaylee

For sure, because she hates a puddle. So that's one nice thing that has come out of 2021 for me.

Michael

Kaylee, this whole explanation of why horseback riding, being very mental and having to focus in on it, and it's so beautiful because of these majestic horses, that exact explanation I heard from someone is why they ride a unicycle.

Lauren

Full body focus.





Michael

If you're riding a unicycle like you've got to be concentrating, or you're falling off that thing.

Kaylee

Definitely got to be concentrating on looking cool. I've never seen anybody go by who isn't concentrating on looking cool.

Michael

Do they look cool, though?

Kaylee

That is the ultimate question.

Michael

Well, Lauren, thank you so much for joining us on this episode of Nerdin' About. If people want to learn more about you, your YouTube channel, your podcast, all of the things that you do, where can people go?

Lauren

So, you can find most of my links at <u>http://www.LaurenEckertConservation.com</u>. You can also find me on Twitter and Instagram @LaurenEEckert and Hidden Compass is where you will find the <u>YouTube</u> channel and other links to their magazine. You can find me at the <u>Witch Podcast</u> as well because I do too many things, and that is just @TheWitchPodcast on Instagram and Twitter, on all streaming platforms.

Kaylee

Yeah, you have so many options. Choose your Lauren Eckert adventure. So many options. Thank you. This was a joy. We'll put all of those in the show notes. Thank you everybody for listening. Thank you so much for joining us. If you want to hear more from us you can follow us on Instagram, Twitter and Facebook @NerdNiteYVR. This episode was hosted by us edited by me and mixed by Elise Lane. We'll be back in a couple of weeks but until we meet again, bring a camera, and make some noise.

Transcribed in part by Otter.ai