

Pelicanology with Juita Martinez

Ologies Podcast

June 3, 2020

Oh hey, it's that lady in the park, just staring at pigeons, trying to imagine what's on their minds, Alie Ward, back with more *Ologies* to gulp into your mouth pouch as we explore and just get to love pelicans. So I'm going to keep this intro as swift as I can. I just want to say thank you to everyone on Patreon supporting this show. Thanks to everyone rating and subscribing, sharing the show, leaving reviews. Like this week, Blaze Fowler says:

You're my kind of weirdo. I'm an introvert, and with you I'm vicariously living my best extroverted life.

Also Jorob33, your review about your grandson launching off of a bidet was a special treat. Also, BobbyGooling, I swear I'm trying to swear less often, sort of, but not really. [*whispering*] Anyway...

Okay, Pelicanology. Others have used this word before so we're using it now. So 'pelican' seems to come from *pelekys*, which is the Greek for 'axe' because of the bird's long axe-handley bill. Is there anything more badass than your name being Axe Face? I don't know, I don't think so.

Anyway, I started following this ologist recently on Twitter because of a really, really wonderful movement called Black Birders Week. And Black Birders Week officially kicked off May 31st. It runs through June 5th with hashtags like #BirdingWhileBlack, #AskABirder, #PostABird, #BlackWomenWhoBird. It was launched in part as a reaction to an event that occurred in Central Park on Memorial Day; an Audubon board member and birdwatcher Christian Cooper was threatened by a dog owner who tried to use systemic racism as a weapon, essentially. You likely saw it on the news. It was a pretty painful reminder of the realities that they face in the field. Black biologists and naturalists face racism, threats, and even violence for just enjoying nature.

Black Lives Matter. Period. Black scientists matter, this conversation matters. This conversation has been really prevalent for so long among Black naturalists, and a lot of white folks just had no idea this was even a thing; had no idea how much privilege plays into choosing a job that requires fieldwork, or going out to a park, or on a hike, or birdwatching like Christian was doing. So enter: Black Birders Week. #BlackBirdersWeek. It's amazing. It's opening eyes to birds and to systemic racism - we can continue to try to understand and dismantle. Black Birders Week has already been a huge, giant success. The group who organized it is BlackAFInSTEM. They gained almost 20,000 followers in a week. You can follow them at @BlackAFInSTEM. Follow everyone they follow. There have been write-ups in newspapers on Black Birders Week. Twitter feeds have been a buffet of bird photos, and facts, and new faces to follow.

So I started following this ologist recently, and her pinned tweet is a video of what appears to be tiny, plucked chickens that are dancing, but they are actually squawking pelican infants and I love them. So I messaged her three words in all caps: [*as if over an old phone*] "LET'S TALK PELICANS," as one does in a professional correspondence. And her response was, "I can talk about dinosaur floofs all day."

She grew up in LA, not far from where I live now, and is currently getting her PhD at the University of Louisiana at Lafayette studying Environmental and Evolutionary Biology, looking at habitats and health of the brown pelican, so we hopped on the horn to chat about bird nerds, big bills, saggy sacs,

porcupine espionage, flags, flimflam, sandals, ice cream sandwiches, boats, wingspans, spine illusions, divebombs, and more. So, open your ears and mouth pouches for Pelicanologist, Juíta Martínez.

Alie: Have you ever been like, “There needs to be a pelicanology episode.”?

Juíta: I mean, on the inside, like very deep. [*laughing*]

Alie: Maybe you would know... You're gonna know this better than I would: Are you a pelicanologist? Have you ever used that word?

Juíta: I actually have never used that word, but starting from today, I'm actually gonna change my Twitter bio.

Aside: I checked, and she changed her Twitter bio to read: PhD Student | #DinosaurFloofs = Brown Pelicans + Pelicanology.

Alie: I was so excited to talk about pelicans with you and I went to take a look to see what the genus was of pelicans.

Juíta: Yeah, so actually the genus is *Pelecanus*.

Alie: Okay, oh! Cool. [*laughing*]

Aside: *Pelecanus!* [*boing!*]

Alie: *Pelecanus*. I mean it has a ring to it, doesn't it, though?

Juíta: Yeah.

Alie: How long have you been studying pelicans?

Juíta: This year would be my third year.

Alie: And how did you get into it? Have you always been into birds or has it been wildlife in general?

Juíta: Yeah, so it's always been wildlife, and I'm actually, like, pretty new into the bird world, I would say. I worked with quite a few different species from, like, shrimp, to microbes, and then I switched to frogs, went back to porcupines.

Alie: What?!

Juíta: And then worked with butterflies for a summer, and then I worked with fifth-to-sixth graders with San Mateo Outdoor Ed and then I...

Alie: I like how fifth and sixth graders is just, like, another kind of creature.

Juíta: [*laughing*] Sorry, I did not mean to make it seem like that. I ended up working for Richardson Bay Audubon in the Bay area and that's what really got me into birds. I knew I wanted to go to grad school and I was pretty set on getting my PhD. And my advisor, he's my advisor now, had made this post about brown pelicans and it just clicked. And I was like, “I have to apply.” Honestly, I feel like it was luck because we, like... we both clicked, and then I was really interested in the project and everything that he sought out to do with the pelicans, I had already done prior.

Alie: Oh! Well that's handy.

Aside: So what was the post that she saw?

Juita: It started off talking about restoration, and what restoration means is we're trying to create habitat in a way that it was in the past. And I was currently working on a restoration project, and I had worked on restoration projects prior to that, and it was also using something called camera traps. Camera traps are basically motion sensor cameras that normally hunters would use but we're now using it to, basically, spy on brown pelicans and their babies. And I had used camera traps to also spy on porcupines two years earlier.

Alie: I love that, actually.

Juita: [*laughing*] I know. So nowadays all these things are so, like, common to me. It's my everyday life, so I love telling people and they're like, "Wait, that's not normal, Juita."

Alie: I just love the idea that there's a porcupine who's like, "I swear, someone's spying on us," and their partner's like, "No one's spying on us. You need to calm down!" And meanwhile, you're there, in a bush, just looking at what they're doing and being like, [*whispering*] "We are spying on you."

Juita: Yeah, we get some pretty cool shots of them just looking really weird at the camera. Like, "What is that thing doing there?"

Alie: "Oh, just admiring you."

Aside: So before heading to Louisiana to become a doctoral fellow, Juita got her bachelor's in Zoology with a minor in Wildlife Management from Humboldt State University.

Juita: I was very adamant that I was going to become a veterinarian, up until I really learned what it took to be a veterinarian, how much blood was involved. I realized I'm too squeamish for it, so I was like, "Oh, I have to go down the research route now." And the NSF REU program was the first experience that I had with any kind of science ever and that really was, like, my foundation.

Aside: Okay, if you're like, "Huh?" NSF REU is a National Science Foundation Research Experiences for Undergraduates program, which pairs undergrads with different research programs, and it also gives the undergrads a stipend, and in some cases, assistance with travel or housing. So, that is the NSF REU program.

Juita: And with the NSF REU program – which, all undergrads, I highly recommend out there for you guys to apply - I was basically doing environmental toxicology work, so that was my beginning. But it gave me a really good foot in the door in understanding what I really liked about science, and what I wasn't so interested in but was still really important, such as lab work. I definitely enjoyed the field aspect a little bit more than I did the lab work.

Aside: As a field tech, she gathered data and samples, and studied everything from frog calls to those porcupines, to what lives in shrimp guts, which in one case included antibiotic-resistant bacteria, as she discovered in her junior year.

Juita: Which actually landed me my first publication, which was wild because never in a million years, if anyone told me that that would happen, I would be like, "No, there's no way!"

Alie: That's amazing! How did you celebrate?

Juita: Actually, I'm pretty sure I worked, like, a full shift that day so I don't think I actually celebrated. Like, now that I'm looking back, I don't think I ever... like, I internally celebrated, even though I knew it was a big deal.

Alie: Yeah, you can still... There's, like, no statute of limitations on celebrating. You can get a piece of cake tonight if you want to.

Juita: Well, I guess I have to do it now.

Aside: Okay, I looked it up and this first paper published, remember, still as an undergrad, is called "Exposure of the Grass Shrimp, *Palaemonetes Pugio*, to Antimicrobial Compounds Affects Associated *Vibrio* Bacterial Density and Development of Antibiotic Resistance." It was published in October 2014. It is *never* too late for cake.

Juita: It was a very proud moment for sure. That was when I knew I definitely wanted to pursue this path. I ended up working with porcupines right after that for two years, and then I ended up working with my first, like, restoration project after graduating from my undergrad, and that was with the Island Marble butterfly, and they're endemic to this one little island off the coast of Washington called San Juan. And I got to spend a whole summer on that island, basically rearing butterfly eggs.

Alie: Oh my gosh, that's a dream, like an actual dream.

Juita: It was. It was pretty great.

Alie: What were you like as a kid? Were you like, an indoor bookworm? Were you outside tromping around, getting your feet muddy?

Juita: My parents thought there was something wrong with me because all I wanted to do was watch snails. [*"Slippery little suckers."*] Like, I had a weird fascination with snails, and at one point in my life, I wanted an art farm. I was basically outdoors all the time, trying to... basically, observing wildlife, as many as I could, in Silver Lake, which is not the most wildlife-friendly area, as you know. I had to get really creative with what I could find in the yard.

Aside: So from LA to LA: Los Angeles to Louisiana. From a childhood gazing at snails to getting a PhD in pelicans.

Alie: And now, what about brown pelicans? First off, stupid question: what is a pelican? Is a pelican only the kind that have the purse attached to their face?

Juita: [*laughs*] I've never actually heard someone say that. That is awesome. I love that description of it.

Alie: They do have a handbag for a mouth!

Juita: They do! That is a good one, I love it. Yes, so all pelicans have a purse, which is better known as a 'gular pouch' [*laughing*] and that's what helps them survive. That is how they catch their food.

Aside: *Gula* means 'throat' in Latin, so a gular pouch is a pelican face-purse. That's what it is.

Juita: Brown pelicans specifically, actually plunge dive. So from about 30 feet or so up in the air, they will spot a school of fish, and then just dive down, and use that pouch to basically scoop up all the fish. [*"It's in my purse."*]

Alie: And what do they do with all the water that they also scoop up?

Juita: So, if there are other birds around, such as gulls that try to steal the fish from their mouth, they will just slightly open their bills and let the water, like, seep out until there's just fish in their pouch.

Alie: Why do they need so many fish? This is what I can't understand, because they're kind of big birds, right? But other big birds, they catch a fish, they catch *a* thing at a time. But pelicans are like, *in it*. I feel like they have the best equipment in the game. Why do they need to catch so much fish?

Juita: I would think it depends on the season. So, if they're trying to feed their chicks, they have about a maximum of three chicks. So if you think about a pelican, they're about 16 pounds, which is quite a bit of weight. And on top of that, they have to feed themselves, have enough energy to fly around and catch the fish, but then they also have one to three mouths to feed. They're gonna need quite a bit of fish for that. And these pelicans are born completely naked and with their eyes shut. [*I'm naked, aren't I?*] They're completely reliant on their parents for quite a few months.

Alie: And then what about their wingspan? A 16-pound bird's pretty big. How big are the wings to keep it aloft?

Juita: It's about six feet, which is taller than me. [*laughs*]

Alie: Oh my gosh, that's *huge!* That's like a condor size, right?

Juita: Yeah. It's a good social distancing size. [*both laugh*]

Alie: Oh my god, that needs to be your new campaign! "Everyone Stay One Pelican Wingspan Away From Each Other."

Oh my gosh. So 16 pounds, six feet... Are they all coastal or are they inland too?

Juita: We have two species in North America. We have the brown pelican and the white pelican, and actually the brown pelican is smaller than the white pelican by about 10lbs or so, and the brown pelican stays on the coastline - up and down the west coast, throughout the Gulf of Mexico, and up to North Carolina-ish. The white pelicans on the other hand - you can see them on the coast, but they breed inland.

Aside: How many pelican species *are* there in the world? I looked it up - there are *eight*, in case that ever comes up in a game of pelican trivia.

Alie: Now you call them floof dinosaurs, dinosaur floofs?

Juita: Dinosaur *floofs*.

Alie: Are they really fuzzy?

Juita: There's this middle stage; they're born naked, and then they start getting these little pin feathers. They get their down feathers first, and that down feather is what sparked the hashtag. Down feather is the insulating part of their body, and it's really soft and floofy, so when you're holding a baby pelican that just has down feathers, they're pretty floofy, and I feel very lucky.

Alie: So you've gotten to hold them?

Juita: Yes, we have a project... because Louisiana is losing land at a very rapid rate, because it's sinking and the sea level is rising, these islands that are perfect habitats for these pelicans to raise their young are actually getting just overtopped and completely disappearing. We don't really understand what happens to pelicans once their islands disappear because their instinct is to come back to the same islands that they were born on. So what I've been doing is putting leg bands on these pelicans so future grad students, once I'm graduated, are able to go back and track these bands. Hopefully we'll get a better understanding of where they move to.

Aside: So apparently only 30% of pelicans survive their first year of life! Only 2% make it to age 10 - but *some*, some have been known to live into their 40s. So somewhere out there, there's a Gen X pelican listening to Brit Pop. But how do they tell who's who?

Juita: My lab does orange bands and other labs that study pelicans use different color bands. These color bands are really large so we can see them from really far away without having to disturb the birds.

Alie: Oh that's nice! When I was looking at baby pelicans on your Twitter, I had an impulse to want to give them one tiny kiss on their heads. Is that a normal impulse for a person?

Juita: I would say, yes - but if you ever come down to Louisiana and come out to the islands with me, I think you will be satisfied just by holding them, because I will say, they might be floofy, but they're also very stinky. A hug is as far as I usually want to go with it.

Alie: That's good to know. I know that it is, like, not a good idea to put my mouth on wildlife for the *wildlife's* sake.

Aside: Do *not* put your mouth on wildlife - the wildlife *does not* want you to. Also, I looked up the floofs, and they look like what would come out of the drier in the lint hatch after washing a load of brand-new floofy towels. Picture a lint ball, but with big clappy-flappy face parts! But when they're born, they are *indeed* featherless!

Alie: They look like little alive frozen chickens. So cute. So cute, I *can't* handle it.

Juita: And the gular pouch - the purse - is so tiny on the baby chicks! It gets me every time

Alie: When you're talking about doing restoration work to make sure that they have a home that they can come back to or that they have habitat that they can inhabit, how do you do that if you're up against things like sea levels rising and land sinking? What do you do?

Juita: Right now Louisiana's being restored, but not by me. They actually have agencies such as the Coastal Wetlands Planning, Protection and Restoration Act, and different groups of people that come out here and perform something called dredging. [*"Pardon?"*]

They put in these pipes, basically, under the ocean level and they pump a bunch of sediment from the ocean floor onto these islands. We're basically just building land from the ocean floor, just putting it up. These pipes go for miles. The latest restoration project, I believe, took about five months to complete.

Alie: Five months!? That's fast, right?

Juita: Yes, but there's other restoration projects that took two years, so this was a pretty quick one.

Alie: Five months, man. I have laundry that I haven't done in 5 months! I have home projects that I haven't done in 5 months, and to build whole islands...!

When you are tracking them, can you see on a year-to-year basis any change or improvement?

Juita: Yes. Some islands have been restored and some have not. What my research aims to do is to compare the pelican populations on these two different sets of islands across coastal Louisiana. Our preliminary data is telling us that there's a larger population on restored islands - which means the restoration is *working* [*DJ airhorns!*] and the billions of dollars are not being wasted.

We also found that chicks are more likely to reach that age where they can fly away and fend for themselves on restored islands versus those that are born on unrestored islands, which is really helpful because no one's actually looked at that yet.

Alie: How did you start to discover that? Was there a moment when you were crunching data where you started to say, "Oh wait a second, I'm seeing a difference here!"?

Juita: Yeah. So that was just one of my questions I had because I thought it would be interesting to see how restoration affects these populations, because when you're restoring an island, you're changing the habitat completely; from all the different insects that might be on it and the different plants. When they deposit all this sediment from the sea floor, you're burying any vegetation that was there prior, and this vegetation is very important for the pelicans to build a nest on. My hypothesis was that restored islands would be a better nesting ground for these pelicans, and so far the data shows that.

Alie: That must have been an amazing discovery!

Juita: Yeah, I'm really excited about it. I'm excited for the pelicans too!

Aside: With good reason, this blew my mind.

Juita: This potentially gives them a fighting chance in the future if we know how to save their nesting habitats.

Alie: How are their numbers? When did they start to take a dip?

Juita: By 1963, brown pelicans were completely extinct from the state of Louisiana.

Alie: Seriously!?! Oh, fuck.

Juita: Yes, due to DDT. So, if they keep laying eggs and the eggs keep getting crushed, or if a nest keeps failing, they'll actually leave the area. [*"That's it; I'm outta here!"*] And the brown pelican is the state bird, so for the state to not have brown pelicans didn't really make sense.

Alie: Yeah, that's a bad PR look.

Juita: So, there was this huge push to reestablish the population here, and the way that they did it was they actually brought a little over a thousand brown pelican chicks from Florida. So, for the most part, all of the pelicans in Louisiana right now are descendants of the 1,000 or so Florida population.

Alie: That is nuts. So Louisiana was like, "We either have to change the state bird or we have to get more pelicans in here immediately, people!"

Juita: Yes, and they did the latter, which I'm glad to say that it was a huge success: it took a lot of effort, and I'm so happy that everyone involved did their part.

Right now we're just trying to maintain their population and make sure it doesn't decrease anymore, and they're doing pretty good right now. Their numbers could be a little bit better. It also depends on the fishery. So if there's less fish, less chicks are likely to survive and therefore their population isn't going to grow as well.

Aside: Okay, so what happens if you take a Florida pelican and move it to Louisiana? What if they don't like Louisiana's fish menu? Well, Juita is collabing with the Nelson Lab at the University of Louisiana to figure out their favorite fish, and it turns out their diet is 98% menhaden, which is a silvery, forked-tail, oily filter-feeding fish.

They're also called 'bug-heads' because of a parasitic isopod that eats and takes over for its tongue. The world is crazy. But menhaden are a staple in a lot of wildlife diets, so protecting this fish protects the pelicans as well as other sea and air critters that pull up a seat to this feast that is a school of menhaden.

Alie: How can they see from the sky? I realize they're pelicans - they're very good at this, but... They're cruising along, they have this thing flappin' in the wind, their face is flappin' around - I'm picturing it - but it actually gets tucked, right?

Juita: I don't know if 'tucked' is the word I would use. *[laughs]* It's not necessarily, like, swaying.

Alie: *[laughing]* I'm picturing it like a windbreaker. I don't know why - I'm trying to picture what it feels like.

Aside: Is it like leather? Denim? Skin? These are questions one can ask a pelicanologist.

Alie: What do their bills, or that pouch... Have you ever touched it? What does it feel like?

Juita: It basically feels like saggy skin: extremely saggy and wrinkly skin, and it's really flexible.

Alie: That seems so cute! There has to be, like, an animated pelican that gets it wrong or right. How do you feel about pelicans in pop culture?

Juita: I've seen pic art photos of them, and they try to get the pouch right but it just looks like a U shape. But in Louisiana especially, I think most people really value the pelican. Like, we could find them on our basketball team. *[sportscaster talking about the Pelicans, crowd cheers]*

I really like how the state just really cherishes the brown pelican.

Aside: In case you ever need to brag about the pelican, just know they can divebomb fish at 40mph, and their beaks, unchanged for 30 million years, slice the water to handle that speed and velocity. And that pouch, I read, acts a little like a parachute underwater to help slow them down. So, essentially they're fighter jets. But cooler. And smellier.

Alie: What are their nests like?

Juita: They prefer to nest on taller shrubs because Louisiana floods quite often. So if they're on taller vegetation, the chances of their nest flooding is smaller and they tend to use sticks. They're maybe, like, two and a half feet in diameter - pretty large nests, maybe a little smaller. I've never actually measured a Pelican nest, but they're pretty big. We're currently using drones to see if we can get accurate nest counts, and you can definitely see the nest from a drone shot.

Alie: What is it like working in the field? Do you have to suit up in, like, full rubber waders? What is your gear like if you are a pelicanologist?

Juita: When I first was starting, I refused to wade in from the boat. The minute we have enough light, we get in the boat, drive an hour to our field site.

Most of our field sites are kind of far and we have to park the boat offshore because the tides can go out and then our boat will get stuck on land, which has happened - it's not pleasant - because Louisiana only has one tide. So for your boat to get unstuck, it basically takes 24 hours.

Aside: This is called a diurnal tide! What? Weird! Okay so what happened?

Juita: So we had to call the water sheriff.

Alie: Oh no...

Juita: It gets worse. So the water sheriff comes, he puts the rope on our boat, but his boat isn't big enough or strong enough to get our boat out of the sand.

The sun is setting really fast now, and we're completely out of light at this point, [from *Jaws*: "You're gonna need a bigger boat."] when a tugboat comes. And both of them together got our boat out, but our boat didn't have any lights! And it's pitch black so, one, we had no idea where we were going because we can't see anything. The boat happened to have a hand light, so for about an hour and a half, I had to hold the hand light up so the field tech, who was driving the boat, could follow the sheriff back to dry land.

Alie: How big is the boat? What kind of boat is it?

Juita: This boat, okay... [laughs] This boat was actually 16 feet, and it's the safety boat for a research vessel, so it's kinda not a real boat.

Alie: Oh no! You're on a lifeboat?!

Juita: Yeah, basically. We have since upgraded to a real boat, though, so I'm pretty happy about that.

Alie: Oh no. Oh no! [laughs] Oh my god, okay, so you were like, "I don't want to wade in from the boat," have you changed methods? Are you like, "It's worth it just to wade in from the boat."?

Juita: Oh yeah, so I would wade in, but I would wear waders, versus now, I just go in Chacos. I just don't care anymore [laughs].

Alie: What is a Chaco?

Juita: Wait, sorry? [record scratch]

Alie: What's a Chaco?

Juita: Wait, you've never heard of Chacos before?

Alie: No! But they sound delicious.

Juita: [laughing] No, no, no, they're a sandal brand.

Alie: [laughing] I've heard of Crocs. They're not Crocs, right?

Juita: No, I have to send you a pair of Chacos now. Oh my gosh, you live in Los Angeles! [laughs]

Alie: Oh my god I'm going to look this up. I'm going to send *you* a pair of Chacos, you're the one who deserves them. I don't know what they are!

Aside: [*excited*] Okay, these are like Tevas, but apparently more durable and badass, and they were invented for river sports, and a lot of cool scientists wear them in the field. I went down a rabbit hole on their site, just FYI, just imagining myself in Chacos on a summer evening, trying to distinguish what frogs are singing into the dusk.

Alie: I've never heard of them. They sound like Choco Tacos, which I have had. Have you ever had a Choco Taco?

Juita: No, what is that?

Alie: Okay. a Choco Taco [*through her giggles*] is like an ice cream sandwich, but it's in a waffle shell that looks like a taco, and then inside there's ice cream, and then it's covered in chocolate – it's a Choco Taco.

Juita: Woah. That's a lot. Wow.

Alie: I'm going to send you some Choco Tacos.

Juita: Yeah, I'll send you Chacos the shoes [*Alie cackles*] and you send me Choco Tacos. [*laughs*]

Aside: Sorry this is now an episode on what field biologists wear, and I apologize. I had questions.

Alie: So now you just have an amphibious shoe and you're like, "I'm going in!"

Juita: Yep, they are the hardest shoe. I love been hiking in them, swimming in them, I take them everywhere with me, basically. They last a really long time, and they dry really fast.

Alie: That's amazing. [*"Shoes!"*] So you have now adjusted, where you know how to get in, how to get out... Is summer a big fieldwork time for you, or is it spring?

Juita: We basically work from February through the end of July. It's pretty long, especially if you're taking classes, which... I just took my last class ever, this past semester. Pretty excited about it.

Aside: She will be pelicanologist *Dr* Martinez in about five semesters, or two and a half years.

Alie: We were talking about birding. Now, you said that you weren't necessarily a birder before this, but pelican watching has, kind of, opened you up to the world of birding, right?

Juita: Yes, that's where it basically started. And then, after CoVID happened, I kind of became this amateur birder. Like, I actually go out with my binos and my field guide and I really try to identify these birds. And it's so much fun! I just never did it before because... I don't know what I was doing with my time! [*laughs*]

Alie: I mean, birding is, from what I understand, addictive in the way that a really great game can be.

Juita: Yeah, I actually woke up at 6:30 because somebody on eBird said they saw a painted bunting at this one place, at 6:30. So I was like, "Okay, as long as I go a 6:30, get there around that time and go to this one place, I should totally see it, it's totally going to be there." And it was not. [*Price is Right loser horns*]

I walked around the whole trail, couldn't find it. And two weeks ago I walked the same trail with a couple of isolating friends and my housemate and we found it.

Alie: [*gasps*] You did?

Juita: Yeah, randomly around noon. Not six a.m. It was noon.

Alie: Ah man!

Juita: And it was just sitting there, singing. [*clip of birdsong*] It was the best moment.

Alie: What does that feel like when you realize that's the bird you've been looking for? Like, when you get a win like that?

Juita: I screamed. And scared my housemates. [*laughs*] I ran out to the living room, jumping, screaming, clapping my hands. And it was the best feeling.

Alie: Oh that's so exciting. Do you take pictures or do you look through binoculars? What's the way to do it?

Juita: I do both, but I mostly prefer to take photos because I can definitely have a nice solid ID. And I'm not that great of a birder yet, so I can't just be like, "Oh, it was totally that." So I prefer to take photos so I have some evidence.

Alie: My sister has just started to do some birding and I can tell. Her texts started to be all bird pictures and you're like, [*drawn out appreciatively*] "Nice."

Juita: Oh my gosh, yay! Team Bird over here.

Aside: So my sister Celeste is starting to get into bird IDs, and this past year my friend Sarah [phonetic] has picked it up too. She is @birdygirl_1a on Instagram. She takes great pictures. And as white women, we have a different – and a privileged – experience of birding, that Black people do not, and #BlackBirdersWeek is making that discussion heard.

Juita: Basically, this entire week is dedicated to amplifying, posting on Twitter, Instagram, and even some Livestream discussions. We're trying to showcase that Black people are utilizing outdoor spaces, and these spaces should be safe for everyone, including us.

The event that started this involved a Black birder who was just standing up for the law, and the person that he asked to just follow the rules, basically, utilized his race against him. And we wanted to showcase that there are Black birders, as well as nature enthusiasts and naturalists out there, who utilize the space. And we hope that from other people seeing us out here, that this will just be normalized, and the things that occurred with that incident don't happening the future.

Aside: A lot of birders might worry about making sure that they bring water, or sunscreen, or an extra phone battery pack, but Black birders have an extra checklist.

Juita: Sometimes when I'm outdoors I try to make sure my field guide is visible, so no one thinks that I'm doing something with binos other than looking at birds. Like, "I promise I'm not spying on you, I'm really just looking for this one bird."

Alie: Unless you're a porcupine.

I've heard that from different field scientists, and as someone who doesn't get questioned if I'm in a park or if I'm looking for bugs, that's a privilege that I wasn't aware of until it was

brought up by people who don't have that. It's just such an important conversation to have. I love what you're doing and I love how much you're educating people, not only about your science but also about the social forces that impact your science, you know?

Juita: Yeah, we're really hoping that this event will encourage discussion and dialogue that different cultures and races can really just work together and that we can understand each other's viewpoints. And even though we are underrepresented in the outdoors, we're still here.

Aside: I'm so glad that BlackAFInSTEM organized this Black Birders Week. Look up the hashtag on social media. You will see gorgeous bird photography, just stunning, awesome, rare bird species, spotting tips, there's binocular recommendations if you need them. There are field stories, and of course discussions about making sure Black, Indigenous and People of Color folks feel welcome and included in outdoor spaces.

Now, to start birding, what do you need? Other than, I guess, a smile on a trail and an interest to see birds.

Juita: You don't really need equipment. A pair of binos is great, but you can also see a cardinal, for example, just with your naked eye. I think it's a really good gateway for people to get out there and really interact with the wild spaces around them. And I hope more people pick up birding. Even if it's just sitting in your back yard watching birds.

Alie: Do you have time, do you mind being asked Patreon questions?

Juita: Oh my gosh, yeah! Bring 'em. I'm so excited.

Aside: Okay, before we get to your questions, a few words about sponsors who make it possible for Ologies to donate to a cause of the ologist's choosing. And this week, Juita and all the folks at BlackAFInSTEM decided on BackyardBasecamp.org, which is inspiring Black, Indigenous, and all People of Color across Baltimore city to find nature where they are, and empowering them to explore further.

This organization is awesome, it was launched by Atiya Wells, who is a pediatric nurse with a passion for culturally relevant nature education. She started off with nature walks, just in the neighborhood, and now Backyard Basecamp also offers garden consultations, and educator training, and habitat discovery programs, and more. They are awesome. So check them out and consider donating – that is BackyardBasecamp.org. And that donation to them was made possible by sponsors of the show, who you may hear about now.

[Ad Break]

Okay, your peli-questions.

Alie: There's a lot of pelican questions. Okay, this is a question that I think I got the most. Elle McCall put it well: The spine thing. Out of their throats. Please tell us everything. And Evan Jude, and Angela Mayfield, and Will Plewa said: Yes please. Yes. Yes, I'm dying to know.

Aside: Okay, just to let you know how big a deal this Patreon question was, I'm going to read off all of the people who asked it, first names only cause we've got to make this short. Usually everyone used a lot of exclamation points and all caps. Jenn, Dori, Angie, Adam, Emily, Celia, Angela, Mr. Penguino, Carrie, Grace, Kasia, C, Mary Ann, Caitlyn, Kaitlin, Kaydee, Kathleen, Mari, Carrie, Vincenzo, and Francesca. Carrie McGowan, first-time question-asker,

said: SPINES THROUGH THEIR MOUTHS???? Is that real? And Francesca says: Learning about the pelican spine thing is pretty up there on my list of horrors.

So when a pelican opens its mouth wide, what appears to be an inversion of its spinal column occurs. What?! Yeah. So...

Alie: What's happening with their spine out of their throats?

Juita: Oh my gosh, I totally saw that. *[laughs]* So, it's basically their neck vertebrae. When they're doing that, they're actually just yawning.

Alie: WHAT?

Juita: Yeah, yawning/stretching. While I'm taking my camera trap photos of them, that actually happens all the time. I record it in my data sheet as yawning.

Alie: Oh my God. Wait, what other things are your data sheet? Like, yawning, eye rolling, farting? What do you have to jot down?

Juita: I basically write down any and all behavior that I see. Everything from feeding... you can actually tell when a pelican chick is being fed because they're going to feed straight out of the pouch. So the baby chick's head is in the parent's big pouch, basically, picking out fish.

Aside: And one more thing on that vertebrae coming out of the neck – it's actually just their neck showing through the bottom of their pouch when they yawn or when they sit weird. Corvid Thanatologist Dr. Kaeli Swift recently made a video involving a vacuum, and a coat hanger, and a condom explaining this visually. But essentially, no, their spine isn't coming out of their neck, it's just kind of pushing through the bottom of their pouch. Normal.

Juita: Something else I record is if there is any neighborly conduct happening. They'll sometimes bicker with one another. *[clip from Schitt's Creek: "David, stop acting like a disgruntled pelican."]* They're pretty territorial over their one little nest spot.

Alie: Evan Jude, a patron, asked: Why are they such huge jerks? And I feel like, Evan Jude, what did a pelican do to you? *[laugh]* Are they kind of feisty?

Juita: They're feisty with each other. I will say the adult pelicans are a little feisty and sometimes there's sibling rivalry, but usually I don't see that much of it.

Aside: I looked up video of this and sometimes these little dinosaur floofs use their long bills to bite each other's bills, and it sounds like clacking a bunch of rulers together, but looks like when my sisters and I would fight over barrettes and slap each other like little T-rex bitches.

Alie: Dianne P wants to know: Do pelicans chew their food or do they just swallow it? And what's the largest prey a pelican can eat? Or is it mostly about, like, eating a bunch of jellybeans at once instead of eating, like, a whole calzone?

Juita: They do one big, big gulp. I'm sure if there's multiple fish in their pouch, though, they'll probably do a few big gulps. They don't chew on anything. It's whole fish that they're swallowing and regurgitating for their young to eat.

Alie: When they regurgitate it, is it like a slurry?

Juita: No, it's actually a whole fish.

Alie: Oh. Dang. Okay. I thought that was going to be like a fish smoothie, but it's just, like, "bloop," like taking a granola bar right out of your own stomach.

Juita: Yeah. *[laughs]* Basically.

Aside: This next question was on the minds of Patrons Casey Sisterson, first-time question-asker John Kruse, Ashley Curtin, Dianne P, Adrienne Hollister, first-time question-asker Zoe Wang, Gary Jungling, Madeline Anderson, and Nat Matthews-Graves, who phrased it: Could they fit a whole human person in those beaky beaks? Everyone wants to know, how big a snack can it snack on?

Alie: What's the biggest thing that they can eat?

Juita: As long as it fits in their pouch, they can basically swallow it. I saw a photo, and I can't remember who took this photo, but there was a flounder in a pelican's pouch.

Alie: Those are the big flat ones, right?

Juita: Yeah.

Alie: Oh my God.

Juita: Yeah. Pretty big. It, like, encompassed the whole pouch. And I'm really sorry to the person who took that photo that I can't remember their Twitter handle.

Aside: PS. of course I found this photo for us, and the credit goes to professional photographer and Twitterer @marktakesphoto. It is a head-on photo of an open-mouthed pelican, its face purse is occupied entirely by a halibut, kind of like if you stuffed a subway sandwich into a loafer. A 12-inch subway sandwich. Spectacular.

Alie: Kathleen Sachs asked if they move their spines to their mouths to cool off? Is that a yawn or is that a thermoregulation thing?

Juita: No, it's not a thermo-regulating thing. It's definitely a yawn, and it's just their neck vertebrae showing through their pouch because they move their heads backwards. They actually thermoregulate by just going into the water.

Alie: Oh.

Juita: Or they stand-up. That's how they help their chicks to thermoregulate is by creating shade.

Alie: Oh, that's so sweet of them, 'cause they're kind of big, so they can do that, right?

Juita: Yeah.

Aside: This next one was asked by my pal, Greg Walloch, and Meagan Walker, William Andrews, and Laura Merriman, who referenced the 1910 limerick by Dixon Lanier Merritt, an ornithology enthusiast and a professional humorist. The limerick so goes:

A wonderful bird is the pelican,

His bill will hold more than his belican,

He can take in his beak

Enough food for a week

But I'm damned if I see how the helican!

Get it? So, fill vs. gastric capacity. Can a pelican's beak hold more than its belly can? Probably can.

Alie: Have you ever heard that?

Juita: Yes! We used to tell that to our fifth and sixth graders when I was a naturalist back in the day. So, its beak can actually hold more than its belly can, if counting the water volume.

Alie: Oooohhh, right. And then it just squirts it out, and then it keeps the fish.

Juita: Yes.

Alie: That's a good way to remember it. Jeffrey Bradshaw wants to know: Why are there pelicans at my very, very inland lake? And that's where they nest?

Juita: I'm assuming those are white pelicans and yes, they are nesting.

Alie: Oooh!! Hollis had a question: Do their throat pouches lose elasticity as they get older?

Juita: Oh! I would assume so, right? That would be my assumption, but I actually don't know for sure.

Alie: I wonder if they get jowly like the rest of us. I wonder if there's any Botox for pouches. I hope not.

Juita: I wonder if there's a study on that? That would be cool.

Alie: I'll look it up!

Aside: Okay, I looked this up for more time than I'm willing to admit, and finally, finally, I turned a corner to stumble upon the paper, "On the Gular Sac Tissue of the Brown Pelican: Structural Characterization and Mechanical Properties" [*whispering*] I was like, "YES!"

In this paper, they say, "Bird age was found to affect the pouch's material mechanical response significantly. Supporting earlier musing that age brings more distinct anisotropy in the gular skin." And, I think 'anisotropy' means wrinkles, from what I can gather via a google.

And let me tell you how lucky you are that I found this paper, because you were about to get some data about testicular sagging for comparison, in human males that probably no one wants to hear. But now I know that scrotoplasty is a thing. [*shoulder shruggingly*] Get it if you want it. I do regret clicking the before and after links, though.

Alie: Oh, Ashley Herbel had a question: Are pelican disproportionately affected by the pollution in our oceans due to the way they scoop up prey with their beak, and water? Does that happen?

Juita: I don't know about disproportionately, like worse than any other sea bird. In the event of an oil spill, they can definitely ingest oil in that way, potentially at a higher rate. But most sea birds are affected by the same thing, pretty much across the board.

Alie: Now, you said that they can get feisty with each other and their neighbors, but, not usually others. Julianne Gibson wants to know: Do pelicans ever attack surfers? I like to stare at them and swim towards them when surfing, thus, I'm wondering my chances of an attack.

Juita: I have actually never been attacked by a pelican, and I doubt that they would, because they always fly away. It's the terns and the skimmers that you have to watch out for.

Alie: Really?!

Juita: They always dive bomb, and I know it's coming, and I flinch every time. They get so close.

Alie: [*chuckling*] Oh, no. So yeah, don't worry about the pelicans.

Juita: It's the little ones.

Alie: Meagan Walker had another question about their flippy-flappy neck pouch: Do they ever get holes in their neck pouch?

Juita: So, unfortunately, fishing line and hooks is what I personally see pelicans die from the most in my field sites. If a hook does get a pelican's bill or pouch it will rip it, basically, and then they can't feed.

Alie: [*so sad*] Oh, no. I wonder if bird rescues... are they ever able to repair it?

Juita: So, if I found them in time, yes, but I usually don't.

Alie: Oh, my gosh. That's so sad.

Juita: I know.

Alie: I didn't even know that could happen.

Aside: Okay, I was like, "I wonder if there's anyone *really* good at pelican gular sac surgery?" It turns out, yes! Dr. Rebecca Duerr, at the International Bird Rescue facility in San Pedro, California, has surgically repaired well over 100 snagged sacs, including that of a brown pelican named Pink, who in 2014 was found having been knifed. There was a \$20,000 reward for info on Pink's injuries, and what happened and who did it, and it went unclaimed. No one ever found the assailant. But the good news is, that Dr. Duerr stitched Pink's bill back with hundreds of sutures and she was released back into the wild! And I hope she's just thriving in the sky, and just takes the chance to drop gluey fish poop on people as much as she wants.

Alie: Thomas N Wyndham wants to know if pelican chicks toss their siblings out of the nest.

Juita: Not usually. I have never seen them in my cameras, but there is sibling rivalry in the sense that if there is not enough food to go around, the youngest chick tends not to get fed.

Alie: Oooh, okay.

Juita: The order in that they were born is the order that the parents will generally feed them.

Alie: They can remember? But aren't they, like, ten hours apart, like how soon they hatch, kind of?

Juita: It's more like a day or so, and it's not that the parents remember, it's more that the older chicks are louder, they shove their siblings out of the way to get to their parents first.

Alie: Do you have any siblings?

Juita: I actually have four siblings.

Alie: What's your birth order?

Juita: I am second oldest.

Alie: Oh, really?

Juita: Yes, but all of my siblings are taller than me. I'm the shortest. I don't know what happened.

Alie: Your parents must have regurgitated more fish into their mouths.

Juita: I know! I'm like, "Did I get less food than everybody?" *[laughs]*

Alie: Zoltán Szászi wants to know: If a pelican cutting its own chest to feed its young... does this happen?

Aside: Okay, this is a hot topic, and Angela Mayfield, Kata Zarándy, Amber King, Skylar L. Primm, Melissa Hannon, and Juliana all wanted to know:

Alie: Is it a symbol of sacrifice or is it just Medieval flimflam?

Juita: Oh, gosh. Okay. So, that image is actually on the state flag.

Alie: WHAT!!!

Juita: Yes.

Alie: Of a pelican bleeding itself??

Juita: Yes, it's actually a white pelican.

Alie: Oh, my god.

Juita: It's supposed to show, like, caring and nurturing of all of the citizens of Louisiana.

Alie: Okay. Do they do that?

Juita: No, no. I promise it doesn't happen in real life.

Alie: So, they used a myth about a pelican on the pelican that is not endemic to the state? Am I getting this right?

Juita: It's just not the state bird.

Alie: So, they used an image of not-the-state-bird, doing something pelicans don't do, to symbolize the ethos of the state?

Juita: Yes.

Alie: *[exasperated whisper]* Oh god. They needed to phone up a pelicanologist before they did that.

Juita: I hope no one comes for me.

Alie: It's not your fault that it is so erroneous. That's some erroneous vexillology!

Juita: Yes.

Aside: I googled this, and the Louisiana flag is a blue banner with a bigass bird on it, feeding chicks from, like, a blood boob, which is just erroneous all over the place. Now, for more on weird flags, you can see the Vexillology episode from September 2019. A lot of freaky flags out there. But not in a cool freak flag kind of way; in a, "Why?? What?? Why??" kind of way.

And also, a white pelican? Not even the state bird, doing something helpful, that's actually a myth??

Alie: Okay, Meagan Walker: How tough are their insides, and do the fish die right away? It seems like a fresh floppy fish would do some damage to the insides.

Juita: So, just like our stomachs, their stomachs have pretty high acid content. I'm not sure how fast the fish actually, like, stops like moving inside there, but I would assume that it's pretty fast.

Aside: Okay, I looked this up, and apparently it's pretty acidic in there. And fish are not long for this world once in a bird belly. Also, never feed fish scraps to a pelican. I just read that the jagged bones can tear their face purse. The only kind of sac surgery that really needs to happen is, hopefully, just elective.

Alie: Miranda Martin, first-time question-asker, wants to know: How are their populations doing due to all the environmental challenges, and which issue is impacting them the most? Miranda says: I read that they stand on their eggs to incubate, but some of them were breaking, due to DDT, which we talked about. Right now, is it the habitat loss that's the big one?

Juita: Yes. Losing their nesting sites is probably the biggest problem they face on a wide scale. But I would say, on a small scale - and this study hasn't been done, but it's just from what I've observed - fishing line is pretty bad. Basically, human pollutant, plastic for the most part, and fishing line.

Alie: Oh. Amber King has a question: Why do they get that weird bump on their beak during mating season? And then Elizabeth Rich says: What is the deal with the horn? Is it for courtship? Is it a tool? What kind of horny beaks do they have going on?

Aside: Juita says that this only happens on American white pelicans. And I looked this up, it's kind of like a semi-circular fin that grows from their upper bill. By the way, most ornithologist are like, "Beak or bill; either is fine."

Anyway, they get this humpy-horned thing during breeding season. Then it kind of dries up and just sloughs off in one ridged chunk near the nest. Did I stumble on the blog of someone who collected them like horny sand dollars made of giant fingernail clippings? I sure did. And I loved it.

Juita: Once the white pelican lays their eggs it falls off.

Alie: Oh, is that just to say, like, "I'm available,"?

Juita: That they are 'fit enough to breed'.

Alie: [*sexy voice*] "Mmm, I've got this beak hump in case anyone's wondering if I'm down to [*fornicate*"]. Observe my beak hump." [*laughs*]

Alie: Okay, Allison Bray says: I already know too much about pelicans because my husband is a zookeeper, but please ask about pouch lice. LOL What is a pouch louse?

Juita: Okay, so there are lice found on pelicans, and they have to be in a habitat that already had the lice, and they can make their ways onto the pelicans. It's not really good if they have really high abundance of lice.

Alie: Oh. Eww. I want to see what these pouch louse looks like.

Aside: Pouch louse, Allison Bray, why did you do this to us? I looked this up. Just imagine staring down the fleshy barrel of a pelican purse to see dozens of bedbug-looking horrors, just clinging to the skin, which in some cases, can malnourish our pelifriends. I want to get in there with tweezers and just delouse them. I just want to help out. Also, I'm a gross person and I like gross things.

Alie: Okay, Juliebear: How many pelicans are in a typical orgy? I mean a breeding colony. Is it that kind of party?

Juita: No, they usually just have one mate. On the biggest island in costal Louisiana, we have about 10,000 breeding pairs. [*“Ten thousand?” “Ten thousand.”*]

Alie: McKaylee Eggett, first-time question-asker, asks: Why do they have those terrifying red eyes? Do they have red eyes, and are they terrifying?

Juita: Brown pelicans actually have these blue-hazel eyes.

Alie: Oohh!

Juita: They’re actually really pretty, in my opinion. Adult breeding pelicans, I should specify, have the prettiest eyes.

Aside: Side fact: white pelicans *can* have red eyes, kind of like that weird bronco statue at the Denver airport. Also, as breeding season comes and goes, a pelican's eyes can change color. So can their gular sac! It's so flirty!

Alie: Ronan, last question, says: The brown pelican is my mom's favorite bird, which is amazing, and I asked her if she has a question. So, Ronan's mom wants to know: Do pelicans migrate? Or do they live in the same temperate location year-round?

Juita: In Louisiana we do have brown pelicans that hang around all year, but some of them actually do travel down to Central America.

Alie: Oooh! And that's wintertime?

Juita: Yes. Outside of February through August, they can be somewhere else.

Alie: I love the idea that they're just, like, little snowbirds, just having some fun. They're on vacation, they have a timeshare.

Juita: I know. I'm so jealous. They get to leave but I'm stuck in cold Louisiana.

Alie: And you're just waiting for them to come back!

Juita: Yes, that's literally my life, actually. [*laughs*]

Alie: Do you have any advice for anyone who has a feeling in their heart, like, maybe they are a birder but they're not quite sure how to get started? I have a feeling in my heart that I might be a birder, and I have a friend who I've known since we were 12, and just in the last year something happened, and she is a capital-B Birder now. And I'm like, "I get it." What do you think is the best way to start? Do you get a local field guide?

Juita: So I just got this recommended to me, and if you're a tech-savvy person, there's a Sibley app, version 2, for \$20, that you can download so you don't have to carry around the really big field guide. And in this app, you can actually compare birds, which is really helpful. I think that's a really helpful tool, just to see a side-by-side comparison, which you *can* do with the book, but you're just flipping around and the bird might fly away by the time that you reached the page that you have to get to. So, I highly recommend this app if you can afford the \$20, as well as just going out there and seeing what's around you.

Aside: Safety in the outdoors is very important, and recognizing Black Birders Week is a great way to celebrate Black naturalists and just let them know they are seen and supported

in the sciences and in the outdoors. And Ologites, I hope you can be allies, and find allies, and maybe find some birding buddies out there. I have never been birding myself, and this initiative has made me pretty eager to dust off my binoculars and go. So, for a novice birder, is it better to go with a group who knows what to look for, or is it better to go in smaller groups so you don't scare the birds – if you feel it's safe to do so? How does this work?

Juita: I like both, actually. Hanging out with a big group of people, there's more eyes looking around, and everyone can share their experiences, and just point out different things that you may not have seen or known about. And then sometimes I like to go out on my own because it forces me to really learn and hone in my skills. I think both options are awesome.

Alie: How is your vision?

Juita: I have astigmatism. *[laughs]*

Alie: You do?! I was wondering, because I feel like... You know when you get a new contact or new glasses prescription and suddenly you're like, "Oh, my gosh, all these leaves I've been missing out on!"

Juita: Oh, my god. Yeah! For me it's the blades of grass. I'm like, "Whoaa, there's so many blades of grass! Who would've thought?!" *[both laugh]* So yeah, it's not that great, but I just gotta remember to wear the glasses.

Alie: Yeah! Whenever I get a new prescription, that's always the thing that I notice. I imagine that it must make you want to make sure you got the right prescription. You can see so much more.

Juita: Yes! For sure.

Alie: What sucks the most about pelicans? Or about your work?

Juita: Okay. I think the worst for me is the boat. I am terrified. I'm not terrified of the boat, I'm terrified of damaging the boat, losing the boat, or getting it stuck again. I didn't actually ever lose a boat, but somebody else did. *[laughs]*

Alie: They lost a boat??

Juita: Yeah. What we have to do is, you toss the anchor, and you try to make sure the anchor is actually in, *[laughs]* because if you don't, the boat basically drifts away. And so this person, you know, tossed the anchor, went on their plot of land, whatever their field site was, and when they came back, the boat was gone.

Alie: Noooo.

Juita: Yeah, this, like, half-a-million-dollar boat.

Alie: Did they ever find it?

Juita: They did *[laughs]* Thank God they were in cell service areas; versus me, I don't work in an area where there's cell service, so if I lost the boat, I'm not sure what would happen. That's probably my biggest fear.

Alie: Oh, noo!

Aside: Juita messaged me later to say the boat was probably actually around \$100,000. Which, hello, is like losing a brand-new Porsche, just out to sea, bobbing in the dark water. Now, can she just pop a GPS tile on a boat? She had a better idea.

Juita: I should put a Louisiana state flag on it, so I can see it.

Alie: That's a good idea!

Juita: That's what I should do.

Alie: Can you put a note on the bottom of the flag being like, "Pelicans represented may not actually ever do this. Or be our state bird."

Juita: Disclaimer! *[laughs]*

Alie: What about your favorite thing about pelicans or your work?

Juita: The fact that I get to be so close to these birds is wild, because very few people get that opportunity. And being surrounded by 10 thousand nesting birds, specifically pelicans, it's a wild experience.

Alie: Are they loud?

Juita: Pelicans are actually not that bad. It's all the other birds around them, from the terns, to the skimmers, to the laughing gulls, they're super loud. But that's why I love taking volunteers out there when a pandemic isn't currently going on, because I get to see my field site in a whole new light and remember, "Oh yeah, most people don't get to see that happening." It's the coolest thing.

I just went out into the field for the first time yesterday and I took one of my committee members and another grad student, both of whom have not been on the islands. And I know they're Team Fish, but I'm just going to say that they were smiling from ear to ear.

Alie: *[laughs]* From one side of their pouch to the other!

Juita: Yes!

Alie: Aw, that's so exciting. Well, you have given me a new appreciation of pelicans, and pelican babies, and their floopy skin pouches, and their face purses!

Juita: I'm going to call them face purses from now on. I love that! *[both laugh]*

Alie: "Just digging around in my handbag! Look at this, another fish! Ya never know!" I'm so glad I got a chance to talk to you. Next time I come to Louisiana, I'm gonna look you up, I hope it's in field season. I'll come out with my Chacos!

Juita: Oh, my god, yes! We have to have this happen. That would be awesome!

Alie: Eat some Choco Tacos, go pelicaning, we'll wear Chacos. I promise not to lose the boat!

So ask smart pelicanologists flappy, saggy, sappy, silly questions, because they love pelicans. And now so do you! Look at that, you love pelicans. And Juita. You can follow her on [Instagram](#) or [Twitter](#) @JuitaMartinez. I will put a link to those handles and to her website in the show notes.

You can also join in and enjoy [Black Birders Week](#), check that hashtag. You can check the [@Ologies](#) Instagram for more hashtags and follow some really incredible, new science friends from that. And

the account [@BlackAFinSTEM](#) is also awesome, they organized Black Birders Week. Stay tuned for a bonus episode in your feeds this week. I'm very excited, I'm rushing to put that together, which is why this episode came out a teeny bit late, but it's so worth it, I'm so excited!

Okay. We are @Ologies on [Twitter](#) and [Instagram](#), I'm [@AlieWard](#) on [both](#). And [OlogiesMerch.com](#) has totes, and shirts, and bags and such, and thank you, Shannon Feltus and Boni Dutch, they are sisters who host the comedy podcast called *You Are That*, for managing merch. There have been warehouse delays due to CoVID-19 but we're going as fast as we can! Thank you to the wonderful Erin Talbert who admin's the [Ologies Podcast Facebook](#) group. There's also a SubReddit, if you're into that.

Thanks to all of the Ologies transcribers and Emily White for working so hard to make transcripts available at [AlieWard.com/Ologies-Extras](#). Caleb Patton, for making the bleeped episodes that are safe for kids, they are also up at that link. Kelly Dwyer, for website updates. Noel for keeping me on top of my schedule. Thank you to assistant editor Jarrett Sleeper of the mental health podcast *My Good Bad Brain*. And of course to everyone's peli-can-do guy, Steven Ray Morris, who hosts the podcasts the *Purrrcast* and *See Jurassic Right*. Nick Thorburn wrote and performed the theme music.

And if you stick around until the end of the episode through the credits, you know I tell you a secret. And today's secret is that I went to my friend's house for a socially distant hang – by that I mean I was sitting on the curb while she was sitting on her porch, like, 12 feet away, BYO kombucha – and I realized I had to pee, and rather than go inside and touch all kinds of knobs and handles, I just peed in her backyard, with her blessing. Nature calls. “Hi, I'm here!”

Transcribed by:

Margot Pitero

Mickey McG.

Elinor Austin

Scott Metzinger

Emily Stauffer

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