

INDIE MAJOR PODCAST

2/5/24 Patrick Murphy

Individualized Major: Paleontology as Outreach & Education

Ken:

This is Indie Major, a show devoted to the wide-ranging stories and visions of individualized majors at the University of Connecticut. I'm your host, Ken Cormier.

I'm here in the studio with Patrick Murphy who is currently an individualized major at UConn. Hi, Patrick.

Patrick:

Hello.

Ken:

Why don't you tell us the name of your major and maybe give us a brief description of what it is.

Patrick:

All right. So the title of my major is Paleontology as Outreach and Education. So as you can imagine, it's mostly centered on medicine. No, it's actually centered on a combination of psychology communications, and any of the disparate EEB, NRE, or Earth Science courses that could even tangentially relate to the thing that everybody loves, dinosaurs. I've taken everything from developmental psychology to communications, communicating earth science, paleobiology, of course, evolutionary biology. The idea is I want to

use this as a means of developing and facilitating programs for the public school groups, for really anybody who wants to use them, basically as a means of framing any kind of educational program around dinosaurs. Dinosaurs are a great way to springboard off into any number of different related subjects, whether it's ecology, evolution, extinction, biodiversity, climate change, or even like for really young kids learning how to spell. Because kids may struggle with spelling the word school, but they have absolutely no trouble spelling therozenosaurus.

Ken:

Very nice. Remind me, paleontology is the study of fossils?

Patrick:

Yeah, pretty much It is directly. It is the study of fossils as a means of understanding the history of life on planet Earth.

Ken:

Okay. And dinosaurs just happen to be one of the biggest.

Patrick:

Oh yeah. They are the palaeontology superstars. If you actually ever take a paleobiology course, you will learn that about 90% of the subject is actually brachiopods and bivalves, but they're not nearly as sexy. My focus generally on, I love me some big vertebrates and they don't come much bigger than dinosaurs.

Ken:

Very nice. Wow, it does sound fascinating. So let me know. How long have you had an interest in this area? Does this go way back or did you get interested more recently?

Patrick:

I'm 30 years old, so I can safely say that I've been into this for about 30 years. I always say that it's prenatal because basically what happened was, you know, Mother and Father knew they were going to have a baby boy. So they bought a bunch of the stuff that a baby boy might conceivably be interested in. You know, toy spaceships and barnyard animals, construction equipment, fast cars. And sprinkled in there were a couple of dinosaur toys. And they brought me home. It was love. At first sight, I went straight for the dinosaurs and never looked back. So I have love them in one form or another for my entire life. If anything, that love has only grown as I have grown, they are just the absolute best.

Ken:

Wow, that's great. So this is really just the continuation of a life long interest in this area. Now that you're doing all these courses and you mentioned for our listeners, EEB is Ecology and Evolutionary Biology, right? Correct. NRE is Natural Resources and the Environment. And the environment, That's right. So you're getting to deepen your knowledge in all these areas and again, thinking about using it as a tool for learning. And I also understand that you just recently went on a study abroad, a trip, was it over this summer and could you let us know what that was like?

Patrick:

Yeah. So as I was designing my major, you know, I was looking for anything that might conceivably fit into that. And just by pure random chance, I stumbled upon a course called NRE 3305, South African Field Ecology. And as part of that course that you spend three weeks at a game reserve in South

Africa, that sounded very exciting. It's very easy to connect that to the major, because dinosaurs were animals that lived in the ecosystems. By studying modern ecosystems, we can understand a bit more about what dinosaurs were like and what their world was like. It was very easy to tie that into the major It without any exaggeration or hyperbole. One of the greatest experiences of my life up until this point. First, there's just the surface level of I knew right off the bat that I was going to come face to face with some of the most spectacular creatures alive on Earth right now. Elephants, and hippos and rhinos and antelopes and crocodiles and all kinds of birds and all kinds of amazing things. Doing very interesting things. Everything from hunting behavior. We saw lions hunting a couple of times. Unsuccessfully, unfortunately or fortunately, depending on your perspective. We saw giraffes, necking two males, engaging in some dominance behavior. We saw a number of babies. We saw baby rhinos, baby elephants. We saw a lot of very incredible things. We met lots of very incredible people. You know, the reserve staff were amazing. My class was amazing. We had 27 of us 27 students, each one of them with an amazing story to tell. And just all wonderful people all around. Our lovely two TA's also were a great benefit to the trip. Our Professor Morty, a fearless leader, if ever there was one, it was just amazing. My plan at this point is to return next year with Morty on next year's trip as part of my senior thesis. Because one of the really cool things that happened there was that the director of the camp asked me to give a lecture to the other students about paleontology. I just very quickly, over a couple of days, cobbled something together relating what we were seeing in the field to what we see in the fossil record. Things about the ecological structure, giant herbivores or partitioning and predators, things like that. The other students really seemed to enjoy it. I figured for my senior thesis, I'll take that basically stretch that into an entire curriculum to use alongside next year's trip, a dynamic curriculum that will focus on whatever it is was seen on a particular day. If we go out and if we do like a birding day where we see a lot of birds, then we'll talk about the evolution of birds from therapod dinosaurs. We do a track and sign day where we look at footprints and dung and things like that. Then we'll talk about echnology, the study of fossil traces like footprints and copper lights and things like that. It's a very exciting idea and I'm lucky to have a lot of support

behind it. My professors are behind it. The tricky part now is just figuring out how to fund it, but we'll cross that bridge when we come to it.

Ken:

Yeah. Funding is always, always that issue, isn't it? Yeah. So that's interesting. So it sounds like you were able to take the program and kind of adapt it to some of your own interests in the major, is that right?

Patrick:

I mean like oh, absolutely, Yeah, bringing in that because the program wasn't necessarily focused on the stuff you're precisely studying or thinking about in your major, but it was adjacent to it for sure. And you were able to kind of develop your own work to bring to the program? Yeah, I mean, one thing that I definitely noticed about the other students on the trip is while most of them were majors like natural resources in the environment, animal science, there were others that were in other departments that don't have as clear a connection. There were some journalism students. There was a communication students, You know, things that don't seem like they're immediately relevant, but if you think about it, you can find connections and you can tie it all together and make it work in a way that works for you and works for your major, and works for whatever it is you're trying to do. Yeah, luckily for me, the connection was fairly straightforward. It's, you know, dinosaurs are animals. Animals live in ecosystems, so here we are, you know. But even if it doesn't seem immediately apparent, whatever you're doing, this could go for any potential study abroad opportunity. If you just think about it and if you talk with people, if you talk with certain advisors, if you talk with the people that are available, they can help you find ways that can tie whatever it is you're trying to do to wherever it is you want to go.

Ken:

Well, that sounds exciting. I do want to touch before we finish up here, I wanted to touch on, I know you have some experience working at the. I'm going to hope I get this right. The Connecticut State Dinosaur Museum?

Patrick:

Dinosaur State Park.

Ken:

Dinosaur State Park in Rocky Hill, right? And so I would love to hear a little bit about, you know, the kind of stuff you've experienced there and then maybe talk a little bit about what's next, all right?

Patrick:

Yeah. So I've been working at Dinosaur State Park as a seasonal employee for 12 years. At this point and goal or my main role there is as an educator. So I give programs to the public, to school groups, to the various people that come through, relating, of course, to any number of different subjects. Some programs are focused on the dinosaurs, but others are more focused on geology or land forms or all sorts of things. I've learned a lot in that time. I've seen different park directors come and go. I've seen the focus of our education shift dramatically. Right now, there's a very strong focus on the next generation science standards. Basically, a lot of education focused less on just talking about stuff to people and trying to get them involved in the process of science itself. A lot of Programs now are about getting people to look at the fossils themselves, make observations. Tell me what you see, Tell me what you look at, and then what ideas come from that? What questions do we generate? How can we explain those questions, different hypotheses? And then how can we test those hypotheses? And it's very successful. And it's a great way to get people engaged. It's a way to get people interested without just you sort of standing there talking at people which is very easy for them to just zone out. I've had a lot of experience working with a lot of different people, both colleagues because it's a seasonal job. So a lot of people come and go,

but also with visitors who come from all over the world who can offer so many different perspectives and so many different stories to tell. I've had a lot of great conversations with a lot of folks, so Yeah.

Ken:

A lot of kids of the Dinosaur Park?

Patrick:

Oh, absolutely. Yes, of course. The number one fan of dinosaurs, as it always will be kids. Not to say adults can't love them too, You know, I'm living proof of that. But that's actually a sort of ancillary goal of my individualized major is while I sort of have a more official goal, my sort of personal stake in all this is I kind of want to learn, why do kids love dinosaurs so much? You know, I have some ideas, I've got some working theories, but, you know, I really want to investigate that further.

Ken:

All right. So. So, yeah, I don't know if you don't mind my asking. I always like to ask people, what is your vision for the future here? What do you see yourself doing?

Patrick:

Well, I'd love to do what I do at Dinosaur State Park. Just someplace full time and with a more sustainable income. So there aren't a whole lot of opportunities out there. One possibility is the Peabody Museum of Natural History, which has been closed for renovations for the last four years. And will be reopening, I think next month. So I have some folks I have some contacts in there that I've reached out to see, you know, because because they're going to be looking for education people. And I can only imagine with somebody in a major titled Paleontology as Outreach and education. I can't imagine that not

being a very attractive prospect. But apart from that, I could look elsewhere in the country. There are a lot of other places, especially out west, that have lots of dinosaur focused programs. Worst case scenario, anybody who's doing an individualized major knows this very well, which is that if you want something done right, sometimes you have to do it yourself. A couple of years ago, in fact, right at the beginning of 2020, which isn't the best timing in the world. But I actually developed my own educational outreach program called Jurassic Classroom, which is basically, I have a whole bunch of fossils at home. A whole bunch of dinosaur fossils. Some are real, some are casts. But the idea is that I can take them to schools, I can take them to rec centers, libraries, you know, wherever. And just give people the chance to look at them, to touch them, to ask questions. I offer both guided programs as well as non guided programs. A guided program is where we actually, it's what it says on the tin. It's a guided program. I lead you through everything, but sometimes all people want is just come to my place with a table with a bunch of dinosaur fossils on it for people to look at. It's like that's fine too.

Ken:

All right. Well, thank you so much for joining us. This was fascinating and best of luck with all your future endeavors.

Patrick:

Thank you very much.

Ken:

Thanks for listening to Indie Major. If you'd like more information about individualized and interdisciplinary studies at the University of Connecticut, please visit our website at iisp.uconn.edu. That's iisp.uconn.edu. We'd also like to thank UConn Enrichment Programs and WHUS UConn Radio for their support of this show.