Kevin: There, folks. It's Kevin Madison, here at Dragonfly, and just wanted to welcome you to another podcast or video, depending on how you're watching or listening to this. So welcome. We're gonna talk about ecospots, for biology in the age of technology. And I actually was able to get a hold of 2, students in the program, Alicia Singleton, who is in the AIP at Cincinnati Zoo and Botanical Garden, and Beth Keske, who is in the global field program.

Both of them took, biology and age technology last year and are now student leaders in the course and were willing to spend part of their Saturday morning talking about their process for making their EcoSpots. As I mentioned in this, in the, conversation, we realized Ecospots are a bit of a task loading, endeavor in that you are learning about the content you wanna talk about, then you're learning the technology of how to portray it. You're learning about, use of photos and video and how to lay things out depending on what technology you're using. So we realize there's a lot to this, and it can be a challenge. But we know you guys can all, accomplish it.

And as Beth says in the end, get at it. You can do it. It does take time, but just get at it. So if you wanna jump ahead, the actually, we start talking about, Beth's, ecospot at about 11 minutes and about 11 minutes, I would say. And we talk, look at Alicia's at, about 20th minute.

If you wanna jump ahead to those. One sort of thing I wanted to mention is that Beth's ecospot does show show some images of bushmeat, creatures caught for that and, killed in the jungles of Papua New Guinea, which was the area she was investigating. So if you're sensitive to that, I just wanted to give you a heads up, but it is kind of an element of that situation there where people need to find ways to make income, and make a living. And so it it is a sort of a tough situation, certainly to some of our western, notions of conservation. But anyway, that's it.

I hope you enjoy it, and feel free, Alicia and Beth both said you can contact them if you have any questions. Some of you may have them as as your student leader, but if not, either way, you can reach out. And finally, there are some other examples of, EcoSpots that you guys will see in the biology and age of technology workshop under the to do entitled, EcoSpots project ideas. So, the two examples we talk about here are not the only ones you can look at. Alright.

That's it. Enjoy, and, take care. Alright. Welcome to, this podcast with NVIDIA, I guess, talking about ecospots and, projects in biology and age and technology, we have Alicia Singleton with us, who is a student leader in that, and we have Beth Keske, who is also, student leader in that. And my name is Kevin Madison.

I work as associate director with Dragonfly. So, it's great for us to connect via Skype. Thanks for joining on this Saturday morning. We were just talking about all the things we're balancing in our lives on Saturday mornings. So, anyway, we're gonna talk a little bit, but maybe, Alicia, you wanna share just who you are, where you are, and, which program you're in and that sort of thing?

Alicia: Sure. So I am located in Hamilton, Ohio. I'm part of the AIP program. So kind of my home base is the Cincinnati Zoo and Botanical Garden. I started the program in the summer of 2018, and I will graduate in December of 2021.

Kevin: Cool. Thanks. And, Beth?

Beth: Yeah. My name's Beth Keske. I'm a student leader, as you mentioned, for BAT. I'm part of the global field program, and I am located in Minnesota currently. So I started in 2018 as well, and I plan on graduating December 2020. So

Alicia: Yay.

Kevin: Awesome.

It's coming up quicker quicker than you might Oh, yeah. Realize, I'm sure. So cool. So, so, you know, one one of the things we're just trying to reach people in different formats. It's great that in Dragonfly, people can asynchronously you know, they can read all the posts and but seeing actual people and hearing voices, we're realizing more and more whenever we can do it is really important.

And especially with the projects like the EcoSpot, it's it's, I think, a challenging project to, like, wrap your head around, especially if you're not, like, super into technology. So in a little bit, I wanna show your both of your projects, and you can walk through it. But maybe just we could start with, like, how you started, like, the process and how you came up with the ideas for your ecospots. I don't know. Alicia, you wanna start with that?

Alicia: Sure. When actually, I had a hard time figuring out exactly what I wanted to do. I think because I hadn't quite reached that point where I knew exactly what my master plan was going to be while I was in BAT. Like, I had a general idea, but I didn't exactly know what direction to go into. So I kind of tried to pick a broad category that I knew I was interested in but that would, I could tie in later when I really narrowed down kind of what my master plan was.

So I I wanted something that could express kind of something about my local hometown and with interest in biodiversity. I just focused on local biodiversity, which many people think of kind of hot spots and rainforests and barrier reefs, but even here in Hamilton, Ohio we

still have some kind of unique species, that I think are important to conserve. So I wanted to express that and finding kind of a platform was tricky. I kind of rolled the idea around to use Tumblr and then a couple other websites, but basically through trial and error, I ended up, kind of building the website. So

Kevin: Cool.

And just as a teaser, because I think it was kinda interesting on your website, the 3 endangered or rare species in Hamilton County, Ohio, Ohio, which I had heard of let's see. One of them was a mussel, maybe?

Alicia: Yeah. I have a mussel. Yep.

Kevin: Yeah. Which makes sense. And then you had one was another one a bat? Or

Alicia: Yes. One's a bat, and then the other one is a clover.

Kevin: Right.

Alicia: Yeah.

Kevin: You do not think of this being endangered or rare. Right? But

Alicia: Right. Right.

Kevin: Not not a typical lawn, red clover or white clover. Right? So

Alicia: Correct. Yeah.

And I tried really hard to find one, and I could not, because I I took a lot of my own pictures, but, definitely couldn't find a picture of an endangered or threatened species put on there, which was sad, but that's kind of how it goes. That's why they're considered threatened and endangered.

Kevin: Right. Gotcha. Cool. Alright. And, yeah, Beth, what about you?

Beth: So my ecospot kind of went, in a little bit of a different direction. It was definitely, something that was focused in on a particular community, of course, but it wasn't my own personal community. And so one of the major things that really kicked off my EcoSport because after I got done with my, TPR project, I was like, I have no idea what to do for my EcoSport.

Like, it was it was very overwhelming. And I did know and so I started taking some time to reflect on what sort of work I'd done in the past, what I was going to be doing. And I had, recently, been, chosen to go to the Borneo project or the Borneo EE. And I didn't really know a

whole lot about Borneo. And, ironically, at the same time, about well, when I was doing my Eco Spot, my boyfriend had returned from Papua New Guinea, and he had been working, with some of, like, the natives there.

They were doing some, logging. It was this natural gas company. And while he was there, he had started taking some pictures of a lot of different, biodiversity. And I told him, okay. I know you're going back.

Take as many pictures as you possibly can. Because he was he was showing me tons of pictures, and I had heard there was a lot of deforestation happening in Borneo. And so I decided to kind of take my audience to my future class, my future e class. And that was one of the major kickoffs was I had just a lot of really amazing photographs that my boyfriend was sending me, and I wanted to be able to use that to tell their story. And so I'm really into storytelling, mapping, and that was kind of some of the ways that I started to knit together my EcoSport.

And then, once I kind of started getting my Esri map figured out, I suddenly was like, this is this is really cool. I'm really getting excited about this. And then I found myself kind of going further and further down the rabbit hole wanting to figure out, well, how do I add this button? Or how should I put this on a blog? Or how can I put this in a website?

And it just sort of, started to start as, like, a little ember, and then suddenly I ended up with my project. So it was definitely overwhelming at first, but, ultimately, it started to kind of iron out my master plan, which is been inspired by this actual class. So I love that. It is one of my favorite classes that I've been able to take. And so, I think this is a, I think they can see the Yep.

Kevin: Yeah. So since you were talking about all the beautiful pictures, and I was like, I didn't had no idea that these were not, like, professional photos. So, yeah, your boyfriend's got some some skill with a camera, I guess. But

Beth: Yeah.

Kevin: So maybe I'll just scroll down and since we're talking about it and if you wanna share anything else.

So this is the platform is ArcGIS. Don't I don't know if they can see that at the top here. Arcgis.com. And they have, like, a storyboard kind of setup. It's not.

Can you can you talk about, like, how this works?

Beth: So they have different templates you can pick from. And, eventually, I did kinda start playing around with other templates that they had because I really thought it was, really cool platform to use. And so I just use one of their more simple scrolling ones where you can just kinda drop in pictures. And I really like that I could type in there and kind of make it more of a story.

Because I personally feel that a lot of people learn by personal story, And so that was some of the, inspiration behind that. So, yeah, it's definitely a great platform. I I really enjoyed making making this. So

Kevin: Look at that rain in there in that picture, from that cloud. It's just incredible.

And then somewhere down here, I think oh, yeah. Look at that. It's great.

Beth: Yeah. This white spider is is wild.

I was like, what is that?

Kevin: I know. I saw that. It looks huge. I don't know how big it is.

It's hard to tell the scale.

Beth: Right. Right. It's, gosh. I don't think it's I think it's smaller than your hand.

I'll I'll give you that.

Kevin: Mhmm.

Beth: They actually, while they're out in the bush, they caught this. And, the, the guys that he was with, they actually ate that.

Kevin: Wow.

Which is And so that's one of those hard things to judge. Right? Because I think our western mentality, we're like, oh, that's, you know, it's bushmeat. I have no idea how common this particular type of looks like a monitor lizard is. So I don't necessarily wanna judge, that practice if it's a part of the sort of indigenous culture and if it's not a rare species.

But, yeah, that that's those kind of experiences are always challenging to navigate, I guess, a little bit.

Beth: Right. So the local group there, they they live out in the jungle and this company hires them out. And so they all, they they

speak a, like, pigeon, and so they will live off the land. So when they were kind of chopping through the jungle, he would just they would they would catch things and they would eat them because they were, like, living off the land while they were out there.

They did, the company did provide this meat, but it was all packaged, and it wasn't very good. And so that was one of the things that they did. And so there's kind of a picture of Papua New Guinea and, in the in the Esri maps.

Kevin: Okay. And and what is what is Diwa Diwa Diwa? What is it?

Beth: That is, that's tree tree tree or, if I can remember correctly, yeah, tree tree tree. And so whenever they would go out into the jungle, they would kind of do this type of logging where they would cut down little, sections of the forest. And then as the trees were falling, these, men would would yell that. And so, the kind of the whole message there is it's kind of a it's a really complicated topic, actually, actually, when you really get into it because, you know, you have deforestation happening in, Borneo, and it's putting a lot of their species at risk.

And then on the other hand, in P&G, which has also got a ton of wildlife. It's a lot different than Borneo, mostly because they don't have the river systems that, Borneo has. And so logging is not as easy in Papua New Guinea.

Kevin: Mhmm.

Beth: But there's just kind of a site there.

And, you know, one of the things I wanted to kind of impress with this is you've got this amazing forest. There's companies going in there. They are, you know, looking for natural gas and things like that. And, while it's not in the same situation as Borneo, it definitely could become similar. While it does have a different geology, it's it's just something to kind of, like, keep in, you know, our radar.

We have these hot spots around the planet that, you know, we go into and we learn about, but, I mean, it's, essentially, it's happening everywhere. And so these are just some pictures of the camps that they would put up. And these these men would literally make these camps out of nothing, and then they would this is a a poisonous snake actually that, they encountered on the on it. And so it was it really is quite amazing. And they these, these men, they work for, gosh, hours and hours and hours.

Like, long long like, all day. They just work in the heat. And so, yeah, it was it was definitely a unique experience that my boyfriend was there. He was the paramedic on-site that was required by the

company. And so he would literally go out with these men, and they would sleep in these tents.

And he said the nets were too small, and so the bugs would get in.

Kevin: Mhmm.

Beth: And he said there were some miserable nights that he spent there, but it was it was pretty pretty incredible, I think. And so it was just something I really wanted to capture, this story of, kind of what's going on there, kind of more about what's going on with the men there, especially as I was heading out into Borneo, which is, near there and very different, but in a lot of ways similar. So

Kevin: Right.

Yeah. You know, it's like the content of what you're talking about in and the message and then there's the actual, like, how you put this all together with the photographs. And I like the way, you know, you start with these great photographs and then you kind of move in and you go into culture and you go into the maps and the conservation elements. And then also those very difficult things of these species, again, the Western sensibilities of like, you know, killing a venomous snake, well, that's a pretty dangerous thing for the for the folks out there and kind of seeing it from their point of view, which I think in conservation, it's often not really looking at, from the standpoint of the people working in these industries. It's more just, that's bad.

Beth: Right.

Beth: I feel like you're kind of giving a voice to the people that for various economic, social reasons, they have to work in these in these settings and telling that story. And then you have your citations, which is great. Makes makes graduate graduate school in Miami very happy to have all that too.

Beth: Right.

I will say one thing with this final project that I had was I was lucky to have photos given to me, by someone who was like, yeah, you can use these, you know, you've got permission. And so I, you know, I I listed his name on the on the bottom. There is, there is definitely a lot of, issues that I did have when I was doing my TPR in the whole photos thing. So I would definitely say that was one of the challenges I had when I was going through and trying to figure out how to make the proper annotations to photos. I was lucky lucky enough in this scenario, but, yeah, that was a challenge kind of learning kinda how to navigate that when I was going through my TPR.

So just maybe to remember that when you're doing any

Kevin: Yeah. I know I know there's if if someone's listening to this, it's like, oh, that's great. She had, you know, her boyfriend had all these amazing pictures and it made it, you know, somehow but, yeah, the point is, I think everyone has maybe some connection with their family or friends or someone you know that maybe has a tie in that you can connect with. So, it's not just like you're on your own or, you know, there are the stock photos, there are the Creative Commons photos. There are places you can find these things.

But also just thinking outside of the box of people, maybe even doing like an oral history, who knows of how your grandparents or your mom and dad or other family people or elders have felt about different natural resource issues and maybe trying to document all that. So I kind of like that it's connected with your boyfriend and that there's, you know, it kinda became this this project that you were able to build off his experiences and obviously was a perfect precursor for you traveling to, Borneo, I would think so. Very cool. Alright. Well, let's jump to closer to home for most people that are and jump over.

Alicia, are you still there?

Alicia: Yeah. I'm still here.

Kevin: Alright. Cool.

Alicia: And my picture is definitely not as pretty and as awesome, but I kind of had the same scenario. I looked through creative commons and and looked for pictures that I could use, and I really just couldn't find that many that I liked. So I ended up going out and taking my own pictures, which was a whole another, like, another technological, kind of step that I had to take because I didn't have a fancy camera. I took all the pictures on my phone and then transferring those to the computer and editing those and all of that was kind of another aspect, I feel like, of technology that I learned on top of how to build a website. So everything kind of piled together and you learned more and more as you go.

Kevin: Yeah. And I I should jump in and just say, you know, you don't have to have awesome pictures for your Eco Spot. Like, it's great if you do and that's part of your storytelling because we do know people respond to that. But if you wanna do just something with audio or just something with text or just something with, you know, there's a lot of different ways you guys can do this. But in this case, yeah.

Well, these are great pictures, that you pulled together for the site. And then you have some cool so your focus, it looks like it's on weebly.com. So that's just a free, right, web hosting and web site maker.

Alicia: Yeah. There's also, wix.com, which I tried, but I felt like Weebly was just a little bit more user friendly for me.

I've never made a website before, so I leaned towards that one. But there are several free options out there.

Kevin: Cool. And then, I like these source courtesy of the author here for your picture of a butterfly, and you have a picture of a a toad or something or a frog here on the right. So you did you did go out and get not only the landscape photos, but some wildlife photos and and sort of looks like your focus is on biodiversity in Hamilton County.

Right? So you wanna talk about how you came to that and what you were hoping to achieve with the website in general?

Alicia: Sure. Sure. So, kind of leaning back to my master plan was very open in general.

So I didn't know what direction to go into, but I wanted something, kind of close to home and something local. And I decided that I really don't know a lot about what kind of offerings that we have in in Hamilton, which is Butler County. I grew up in Oxford, which is also Butler County, so I was a little more familiar with that. But again, I didn't really know, what endangered species do we have, if any. Are there any that are at risk?

Kind of what's, you know, what's right around the corner from me? So I wanted to explore that and find out what kind of green space and natural spaces that we had. So I went to, different websites and looked at all the parks that were available, found out a little bit more again about that lovely clover that I could not find a picture of, right? That's endangered. And a couple other species.

There's also a, rattlesnake species, that's at risk and threatened as well. But I really just wanted something that my audience, I guess I could say, was more just the general public and maybe people with families who are trying to be a little bit greener and learn a little bit more about conservation, and maybe teach their children a little bit more about what's kind of right in your own backyard and what do we have right here. Because we always think about those lovely hotspots and and Papua New Guinea and Borneo and, different rainforests and other areas as well, but we still have a lot to do right here at home. I my original plan was just to have a blog that was kinda family focused, and had activities that you could do with your kids or different offerings that were happening throughout the county that you could become involved in and attend. But that kind of spiraled into an entire website with lots of information.

And and hopefully, it will at least get people to click on some of the links and and learn a little bit more about conservation and become, a

little bit more environmentally friendly. So, yeah. That's kind of how I ended up there and how it evolved. Of course, looking back at it, I guess, almost a year later, I I still see areas that I wanna fix and that I wanna kinda tweak or little typos here and there as well. So I think it's the nice thing about the EcoSpud is I feel like it's a project that I can keep using.

So it's not like I spent all this time making it for the program and I can't use it for anything else. I can potentially add that into my master plan or be able to use that for another purpose.

Kevin: Right. Yeah. No.

It's it's and it's it's hard to realize how much time it takes just to organize these websites and get all these pictures, all these videos you got, get the formatting right. I mean, it it really it's an artistic endeavor. It's a scientific endeavor. It's a writing endeavor. It's, like, a lot of different skills you're using to get this all to work right.

And you load in, you know, a picture and it, like, doesn't fit or it looks grainy and what you know, whatever. And so, anyway, it's really impressive. Have you linked this anywhere, or do you or do you know traffic levels? Because that's I mean, I think it's a great experience to do these things, but then it's like, does the website or the the creation just kind of become another small drop in in the Internet that's not really getting viewed much. You know?

Alicia: Right. Yeah. On Weebly, they do have tracking mechanisms. So you can go back and you can see how much traffic you've had. You can see what links have been used.

I have not had any traffic online, but until you really get the traffic, it doesn't show up in kind of a Google search. So right now you can search, biodiversity in Butler County, Ohio and the website will not pop up for you, just because, you know, I don't have other people that are really visiting that. Eventually, I think the goal would be if I can continue to build on it and find a really good audience, to have it linked through maybe a park website or another, organization's website somewhere, throughout the county. And then that would build kind of an audience and I could continue with the blog. And that's that's the ultimate goal, but

Kevin: Right.

Alicia: Obviously, there's too.

Kevin: Yeah. I mean, most academic training and, like, graduate school stuff, like, you're kinda just creating things well, this is the traditional philosophy. It's like you're creating for practice, and

that's it. I think some people can create these things, and based on their career, they might actually be able to, like, extend an existing website or build a product that is going to be utilized right away.

And other people are in a position of like, you know what? I just want to try all this out and see if I can do it well, and then it becomes a skill on your resume or your that you can extend further. So So I forget, Alicia, what kind of work do you do? Does has this connected with your work at all?

Alicia: No.

I I am a I'm a laboratory manager at a histopathology lab. So I basically work with tissues all day, and do a lot of management kind of things. We are kind of using a lot of new technology there, and our company just went through a merger. So we have a new website that we're utilizing, and and we're working on, connection tools because now instead of being a company in one location, we're actually an 8. So some of the things that I think I've used through school, maybe not just in BAT, but just as being a grad student, I'm able to use in order to connect to other people.

So that's been kind of nice. And I have helped a little bit on our website, which I think my website using Weebly was much easier than what the platform that we have at work. But I I did get to kind of use a little bit of those skills. I think it's nice to have that kind of under my belt though. I'm I'm probably not the traditional age of most grad students either.

So I felt a little bit behind the technological times coming into school and I feel like I've been able to catch up and BAT was one of those classes that really kind of, forced my hand, but at the same time, was a great experience in order to catch up on a lot of different things that are out there.

Kevin: Cool. Yeah. And and you you Beth, you can see I I dropped out of our sharing the screens, I think. So we're we're back.

Sort of just in loose conversation mode, and maybe we can start to, you know, have some additional thoughts or closing thoughts or anything that you're thinking about. But, Beth, I mean, I just curious, like, did did your website or your, ArcGIS I guess it is a website product. Did that tie in anything to your work as a teacher or sharing any of this stuff? Or

Beth: Yeah. So I definitely shared this with, my students for sure.

And they were they were fascinated. They were, like, wow. You know, and especially since I had, like, a personal connection to the photographer and could kind of share that story. And it was a really

good way to actually start kinda talking about issues that are happening in the world, climate change, etcetera. I did, eventually take this, as a remap, and I did put it into a blog.

And then, I think I used Blogger, and that was kind of the way that I got, some of the analytics on it. And then from there, I actually stuck that I embedded that blog into my, website. I was making the Google site that I started in the very beginning, and so it's kinda cool to see how it's all sort of fitting together. One thing I also wanted to mention that I really liked about, the other, eco spot here is sometimes we kind of get into this, we need to change the world kind of mentality. And the one thing I really like about, that other eco spot is the fact that it really does focus in on, a personal community.

Right? So mine was definitely looking, you know, like, to the other side of the planet and what's going on the other side of the world. But I think there is something to be said about really focusing in on your own community and trying to figure out ways, that you can kind of engage those around you because, I mean, that's really, that's really powerful. But as far as, you know, using mine in education, it's really been useful for, like I said, starting those conversations and being able to talk about, you know, when you when you graduate, especially to my students, like, what are some of the things that you're passionate about? What do you wanna, do with yourself?

And how do you wanna live your life? And and so it's really kinda helped in that aspect. So so yeah. Just some of those thoughts.

Kevin: Yeah.

I did I didn't we didn't plan this to have sort of, like, a local Ohio kind of project, with Alicia's and Beth years being global and wanted, you know, AIP and GFP and teacher and more in in a tech science lab kind of field. But it just worked out that way, which is kind of cool to see the different things that folks different directions folks can go with this assignment.

Beth: Right. And I would definitely say I was not. Even though I have a lot of, you know, exposure to technology as an educator, I wouldn't say coming into this, bad course that I was by any means, you know, proficient at any of it.

It really took me, like, focusing in and just kind of following the idea that I had and that's ultimately what's gonna create the eco spot. So I think a lot of, students feel that way. I think there's some insecurity there and just just just go for it is really my advice.

Alicia: Yeah. You really you have to try out different things to

figure out how things work, and I think that probably took me more time to really decide what platform I wanted to use and how how can it even do what I want it to do.

And if it can't, what other platform can I use? So really trial and error and just looking at what's out there and what's available. It's not like I sat down and said, okay. I'm gonna do my EcoSpa. Here's my topic.

I'm gonna use a website, and it's gonna look like this. That never happened. It was kind of an an evolution. Right? Like, oh, I think I might do a blog.

How do I even do that? What options do I have to make one? And then that evolved into this massive, website. But, also, you know, citations take a long time. Finding the right words and and how to fit everything in takes a long time, so it's definitely time consuming, so don't wait.

I encourage the students to start early, but start with a small idea. And if it gets bigger, that's great. Otherwise, if it doesn't, you're you're probably still gonna have something great to share.

Kevin: Cool. Yeah.

No. I think it can be frustrating when you, like, go into one website creation or one platform and you start to do it and you're this doesn't work, and you're like, oh, there's couple hours gone or whatever. So I do think sharing ideas, maybe if you already do feel comfortable with certain like, you've maybe started a YouTube channel in the past and you never did much with it, so maybe extending on some things you've been learning is a good way. And then also, like, this is a 100% task loading that we've done here with this project, in educational circles. You know, we just you're learning the technology.

You're learning the content. You're learning the outreach methods, the photography, the all the elements that might be going into your project, or if you're doing, like, interviews, like, how to manage an interview. Right? So, we recognize that it's not always explicitly said, but, this is challenging for sure. So, you you know, thanks for doing your best, I guess, is what I would say for folks.

Okay. Well, well, I think maybe we'll leave it at that unless either of you have anything else you wanna throw in there.

Beth: I guess it's I mean, I would just say, just get after it. It's gonna be great.

Kevin: Cool.

Okay. Well, thanks again to both of you for spending a little of your Saturday morning together talking about this in this kind of new format. And for anyone that's listening and watching down the line, we're we're thanks for joining in. You can always email me if you have thoughts at madiskc@miamioh. It's matteskc@miamioh.edu, because we are just trialing this stuff out.

So if you find it useful or you have suggestions, let us know. And then I think that's it. So thanks again to both of you. Have a great day, and, take care, folks.