

Jody: Earlier this year we attended the FPEA homeschool convention in Orlando, Florida, and our most favorite class was a hands-on workshop that taught us how to make busy bags. The power house lady leading the class was a fountain of practical information. As the people in the workshop asked questions, she just poured out awesome ideas one after another and we knew we had to get her on the podcast. So today we continue a series on nature study. We are picking her brain for ideas on how to incorporate it into our homeschool experience.

Jenni: Well, Jody, I'm so excited that I get to introduce our speaker today. She is an author and a speaker, Cheryl Bastian. She encourages parents to embrace the education and training of their children as they journey through life together. She herself is the mother of eight children ages 4 to 30 including four home graduates. She is a frequent speaker at the FPEA convention in Florida, a regular columnist for Homeschooling Today and the author of "Celebrate High School," and her newest book "More Than Credits: Skills High-Schoolers Need for Life." Cheryl has practical tips, teaching tips and free resources available at her site, [cherylbastian.com](http://cherylbastian.com) and we'll be sure to link to her website and all of her social media links in the show notes including a private Facebook group that she hosts. Welcome, Cheryl and thank you so much for being with us today.

Cheryl Bastion: Well, thanks for having me on the podcast. I really-- whenever I can encourage parents, I'm just thrilled. I appreciate every opportunity to do so.

Jenni: Well, we are excited to hear what you have to say today. So let's jump right in.

Cheryl Bastion: Okay.

Jenni: From the class that we took with you, we found out that you are super practical in your approach to homeschooling. Can you offer some hands-on way to incorporate nature study into homeschooling?

Cheryl Bastion: Sure, absolutely. And honestly, all of this has been learned by mistakes. Having been a parent for 30 years, and actually an educator for 35 and I don't want that to intimidate everybody, 'cause I'm still learning. Every child is different. And so I learned something new with every child that I'm, that I have the opportunity to interface with. And the other thing I want your listeners to know is I am not a scientist. And honestly, I really didn't like science or thought I didn't like science when I, um, in my younger years, because of the way I was taught science in school. Um, I was not your stay-at-the-desk type of a learner. I probably would've been diagnosed with learning disabilities of any kind if that was available-- if those kinds of things were available at the time that I was a young tot. But, um, so yeah, it came out of that. I wanted to make learning fresh for children, um, and help empower them. So taking that along to nature study, what does that look like? Um, it looks like just being with things that kids care about and love and are curious about, which is anything that's real, anything that's in the real life, especially the really young kids. And so that can be a leaf they found on the ground. That could be a spider web they see. That could be, um, watching

birds build a nest. That could be, if you don't like to be outside. I am not a particular person. I don't like the heat. Like it's hot in Florida, especially right now. Either way, it's not my ideal.

Jenni: No. Us, either.

Cheryl Bastion: So, I'm always looking for ways to still incorporate nature study, um, or ways that I can spur my kids on to fuel our curiosity, but not necessarily be out in the a hundred degree heat. So that might look like just even getting an ant farm, I found one of those and clearance one time and you send away for the ants and they come and that was a week full of just absolute enamoration with these ants and what they were doing. And growing sweet potato, sprouting a sweet potato with toothpicks and a little jar. I put a little water in and it grow-- it can grow literally all over your kitchen. Um, and even just caring for a pet. I think sometimes, in homeschooling, whether it be nature study or math or whatever it is than homeschooling, we make it so difficult. We try, well we try to make it difficult, but it's really simple. Like caring for a pet, um, is something that happens in your everyday life if you have a pet are open to that. But it also incorporates nature study for your kids, whether it's a hermit crab or a fish or tadpole or gerbils or something they found outside that they've just created a habitat for. So I think there's real practical ways, but I think we need to remember with nature study as in any other things that we're trying to teach our kids. If we keep it real and relational, meaning with people of significance, people they know that are gonna listen to them and hear their questions and, and, and appreciate their ideas, um, those are the two key things. That's why my tagline is keeping it real, intentional, and relational. Um, because we found that those, if you've got those things whether it's nature study, math or English, whatever it is, uh, those are golden.

Jenni: I love that. So it's real, intentional, and relational.

Jody: Or real intentional.

Jenni: Yeah.

Cheryl Bastion: And the "relational" part.

Jody: Exactly.

Jenni: Cheryl, what do you see as some of the benefits of having kids interact with nature?

Cheryl Bastion: Wow. Well, I think there's a lot, first of all, that's where kids want to be. They want to be outside. If you've got little kids, you know that. And honestly, I don't think that ever- that doesn't ever end and being in nature, they, they, they gain a healthy respect for living things as they're observing them and watching them work and watching how living things kind of work together, um, in the

environment. And again, that then brings the spiritual aspect as they see and catch a glimpse of God's infinite creativity and the interconnectiveness he's made with the world around them. That, that in itself is fascinating to children, but it often gets crowded out by our busy days. Beyond that, the experiential component of nature study just, it lends itself to be a part of whatever you're doing and to experience and put your hands on and feel it and smell it and whatever. That gives the kids the foundational hooks in their brains so that when later they sit down and read something about, you know, an ant or a grasshopper or sand and water in a book, they've got the experiential hooks to hook it back on. "Oh, I remember when I put too much water in that hole, the sides collapsed." Or "I remember when that grasshopper sat in the sun for too long, he kind of cooked himself." You know, and those are the things you want to teach your kids, obviously, because you want them to respect the natural things that they're loving and enjoying and observing and learning about. But you also say, "You know what, if we keep that grasshopper too long in the sun, um, that's kinda like, you know, cooking some eggs on fire. It's not going to fare well with that, with that grasshopper." So the other key points I think, especially for young children that we forget about is that it gives them opportunities to use their motor skills when they're not necessarily thinking about it or stressed about it. Cause we all thought "Oh, let's go to the playground. We've got to do the cross crawl up the rock wall." And we, we make everything up the checkbox. And when kids are out in nature, you know, they're automatically digging holes with-- And so they're, they're, they're um, gaining core strength or they're out there fishing through the sand with their fingers, building their fine motor skills or they're running across the beach, which is great for their, their large motor skills. So they're actually doing things when they're learning in nature. So it's, it's got a lot of health benefits of mind, body and soul. Um, those are components of nature that we don't necessarily think about.

Jody: You're so right. I grew up out in the country and I have to tell you, well I had 40 acres behind my house and I just, we went out. I mean, I had a neighbor friend and her and I, we're the same age and we went out in the woods. We were literally out there until we had to come back. We couldn't find our way back home we needed to have a flash light and we had trails that went all through there. I mean we were building, I hate to say, but we had toilets out there made out of dirt. Like we had houses and she would have a house and I would have a house and we played for, you know, days. But, how do you come up with topic ideas when you're doing these types of studies? Because I have to tell you, we live in the city, we live in a subdivision, and I'm thinking, how am I going to take kids outside? What are we, okay, let's study the grass. Well that doesn't sound like fun.

Jenni: Cause we don't have 40 acres behind our house.

Jody: We don't. No. It really, you know, it's like, "What do we do?"

Cheryl Bastion: Well, there's two-- You've asked two questions. So I want to back up and I want to parse them out because I don't want to, I don't want to ignore one and spent

a lot of time on another. Um, so you said about the topics, um, how do you come up with topics? I think you touched on it right there with that 40 acres. Um, kids are going to naturally be inclined to do and want to learn things that are about living things. And that doesn't mean they have to be on your 40 acres. If you've got a cockroach in your house, they're going to be interested in that cockroach. Um, it's not necessarily something you're gonna plan. Obviously none of us planned to have a cockroach.

Jenni: I might freak out, but I don't know.

Jody: Get that Palmetto bug outta here.

Jenni: I don't know that I'll have the presence of mind to that moment to say "Let's learn about this bug." I'll be screaming "CALL THE EXTERMINATOR!!!" You're right.

Cheryl Bastion: ...to be like "I want to catch it!" So if you get a bug catcher around, they'll catch it. So you're working yourself out of a job and they're going to learn about that cockroach and he'll be in a safe little container, where he won't touch you.

Jody: This is true, this is true.

Cheryl Bastion: So I think there's, there are opportunities for us, every day, to incorporate some kind of nature study and it doesn't necessarily have to be planned. And I think that that's what I learned is that I thought I had to plan, "Okay, we are going to do this fabulous study on polar bears." And my kids were like, "I don't really care about polar bears. I never saw one. I don't think they'd coming out here in Florida." And yet I'm like, "Oh, but you're not going to believe this lapbook I've got or you're not gonna believe this activity with Blubber!", And the kids are like "Blubber? I don't really care about that." And so then I was frustrated and disappointed that the joy was knocked right out of my sails. I was thinking, "Why did I sign up to be this homeschool mom anyway? I'm not going to be able to help my kids even love nature." And then I realized it was perspective. If I realized that my kids could enjoy the cockroach, right, then I could say, "Okay, yeah, sure. You catch them and put them in your little book container. Make sure the lids on tight. And then, next time we go to the library, I'll show you by typing in 'cockroach' into the catalog that's online. Now, you got spelling, but you're also saying, okay, now here's all the cockroach books they're on, whatever the decimal number is for that 674 so let me show you where that is." You get to the shelf and you're like, "Oh wow, look, there are six or seven books on cockroaches!" And then they're like, "Yeah, and then there's a book about spiders right next to it." You have now opened up, not just a world of understanding about cockroaches, but you've, you've empowered them to look for information and to be a lifelong self-learner in the process. So it's way bigger than just the cockroach or just the grasshopper or whatever it is they've got at the moment.

Jody: I'm thinking a butterfly would have been a better example for me. I'm just saying.

Jenni: Every time she says "cockroach", I'm like "EEEEWWWWAAAAHHHH!!!!"

Cheryl Bastion: Okay, butterflies are good. But see, that-- Okay. That brings us back to, what if I'm in, what if I'm in the city, right? And I don't have the outdoors or I don't live in Antarctic for the polar bears. Um, but you do have things. They're are things online, like nature's friend or um, educational innovators. They've got tools for you like owl pellets and you can order butterflies online or the, the little caterpillars or the, that little chrysalis is, and then you do whatever it says on the directions when they come and you're all inside. You don't need to be out in the heat or you, if you're in the city, you don't necessarily have to have 40 acres, but there are ways that you can, dolomite is another, that's a rock that grows crystals. And then you just add like food coloring and things to it. So look for things on like Carolina Biological Society or nature's friend or nature's workshop. There's websites that are, and we can put those in notes.

Jenni: Yeah, I was just gonna say, we'll put all those in the show notes, too.

Cheryl Bastion: Right. Marbles and magnets. Like you can get those things. I now spend my money on resources that I know were going to be intriguing to my kids or that they come up and say, "Mom, do we have any magnets?" "Well, no, you know, we don't, but let's go online and see- there's lots of different kinds of magnets. Let's see which kinds that you might be interested in." And now we live in a world that you can have magnets on your doorstep and the next day. I'm not saying that's a good or bad thing, I'm just saying that's reality. But then you can go based on the interest of your child. There's engagement, there's curiosity, you're keeping the wonder alive and you're empowered. You're spending the time with your kids versus being on the Internet all night till midnight looking at Pinterest and other things that maybe will return void and you'll get frustrated and feel like, "Why did I sign up for this job anyway?"

Jody: Right.

Jenni: Yeah. Well, I think that if our kids are, are interested, I think it almost is like has, it's a great feedback loop. Like Pinterest can then fuel our excitement and, and if parents can give themselves the freedom to do that, you mentioned, I think it was you said earlier, people get caught up in checking these boxes. Right? And the problem is if we're getting too caught up and checking the boxes, we're not able to really allow that natural process to happen. So that's really good.

Jody: What are you doing to have for your kids who aren't interested, though? What do you do with those?

Jenni: That's a good question.

Speaker 2: Well, I always tell him I say- that is a great question and that's not just for nature study. You know that being parents, um, you're like, well they're not interested in math or all they want to do is be on the computer or you know, whatever it is. And I, and I, again, it's perspective. My husband always says come back to the possibilities instead of the problem. All kids are interested in something. It may not be what you think they should be interested in or what you wished they were interested in at that time. But there is an interest there. And so maybe that interest, let's just go with the screen thing, 'cause that you know,

Jenni: That's a good challenge!

Cheryl Bastion: ...always is on the screen. But if you show them how the screen can be a resource, a tool for them to learn something for it to be, to cultivate their curiosity about something. Like there's constellation apps and nature apps and things that they can actually then use their screen in a positive, productive way. Um, that might be a way to kind of take the interest that's the screen and, and kind of turn it a little bit towards something else. Not easy and it's not gonna happen overnight. We're, we want, you know, we live in, like I said, the magnets can be on your doorstep in a-- the next day. We live in a, in a society where we think we can turn it around in a day and it's probably not going to take a day. It's going to probably take months because habits are hard to break.

Jody: Yeah.

Jenni: What about the mom who's not interested? What about the mom who is like, "Ah, I don't want to do nature study. I think my kids should, but I don't want to do it."?

Cheryl Bastion: Well again, remember I said I was not a mom who was interested in science. Um, and so I had to reprogram my brain, the science. I had to ask myself what is the science that I was interested in? And it was fishing with my dad. It was looking at-- finding crayfish under rocks. It was being in his woodshed and gluing and mixing saw dust with water and planting in his garden. So I had to change my perspective of what science was. It doesn't have to be this boring thing that you pull out in a book. I think the other thing we don't-- that shy-- it keeps us away from science or at least me, is that I feel like I have to, it has to be this elaborate thing, but really it just has to be simple. Go sit under the tree with a blanket and a drawing pad and before you know it, there's going to be something or even a math book under the-- under the tree. And low and behold, something will come into your environment or go take a picnic to the park and while you're there, nature will happen. So keep it simple. It doesn't have to be elaborate. And the other thing is to provide the space. Um, there was a time and you, and you talked about this city, so here's another way that maybe you could adapt or kind of adapt your environment to, or be conducive to a nature study is what I call porch science. And I have a blog post on porch science. It's kind of, it kind of evolved at our house. One kid went out and collected tadpoles in a puddle, so the tadpoles were on our porch and everyday the kids were like, "Let's go check the tadpoles!" And then somebody else said,

"Hey, there's seeds in my cucumber." "Yeah." You know, the "How do you like that?" Aha moment. "Oh, there's seeds in my cucumber. I'd never realized that before, but there's seeds in my cucumber. And so do you think they'll grow mom?" I said, well, "I don't know." Whenever I say "I don't know" that that gives them an opportunity to ask questions. They will, "I think I could do something about that." So they've taken the seeds out of the cucumber and guess what, "Mom, do I have any soil?" "Sure. We have soil in pots. Let's go look through the garage for that." So then, then we're at, now we got cucumber seed, you know, plants growing on our porch. The next thing I know somebody had caught three lover grasshoppers and that was on our porch in a critter cage. And, and the porch has just kind of evolved, but all I had to do was provide the space. It didn't really require anything of me except to provide the soil and the space. Um, and then, um, and be able to, and, and being, wanting to deal with mess. I mean that mess is inevitable with kids. It's just, it just happens. It's part of a, it's part of the learning process. Um, the other thing is sometimes it's providing a model. I am not necessarily the best drawer in the world. I like to be creative. But if I sit outside and we're doing something and say, you know, we're all kind of, I don't know, sometimes we'll take learning outside and put it under a tree on a blanket just because it's, it's better than always being on the couch or at the table. And if I just start sketching something, I don't say to them, "Okay, now guys, we're all gonna sketch that squirrel over there. But if I just start sketching, it's interesting how my kids just kind of say, "What are you drawing mom?" Well, it's kinda sorta drawing them that squirrel. Um, and they're like, "Oh, I could draw the squirrel!" I said, "Yeah, I bet you could." I mean, the other thing is asking questions. We are not a society that asks questions, but questions invite relationship. And just by you saying, "Wow, I wonder what the ant is doing with that big leaf that he's carrying." "Oh, I wonder what that bird's going to do with that twig." So you don't have to have the whole plan of the bird study or the ant study. All you do is ask a question and it keeps their minds curious. And so therefore you don't have to be a scientific expert to bring science to your kids.

Jenni: You just hit the nail on the head. You said keep their minds curious. And that's something that- you're right. It isn't really cultivated readily in our society, but it's something that we as homeschool parents have the opportunity to cultivate in our own kids.

Cheryl Bastion: Absolutely. But we're not, because what I'm finding, we are homeschool evaluators and we, we've done that for 25 years, and I've seen a huge shift towards just bring in school home and, and we're missing that just because, oh, let's just go get the next second grade curriculum or let's just go get the next whatever. And I understand in some seasons that's, that's needed and we need that some days just to make our days work. Well, I totally get it, but we have to realize that when we bring a second grade science book, we have now put a ceiling on the learning. Like we're only gonna learn about grasshoppers at a second, you know, second grade level. And we're only gonna learn about the skills that somebody thought a second grader should learn. But what about snakes? And what about, you know, that grasshopper as far as you could learn,

you can learn high school level stuff with that grasshopper if you've got a kid that's really into it and then decides, I want to go library and get some more books and then they're going to read some more in their mom. What else could we read? And you know, it just, it just, it just kind of develops as it goes along, and there's no ceiling on that.

Jody: Well, and you're right, we have defaulted to this shallow learning system instead of becoming experts in an area because our curiosity leads us, and you know, curiosity is what- where inventions come from.

Jenni: Yeah.

Jody: You know, and solving problems. So I mean it, it's really interesting that- you're right. I never thought you said something so profound that those textbooks, you're right, they put a cap...

Jenni: ...on what we're going to learn about -- Me either. That was so profound. Wow. I feel inspired. I'm letting it roll around in my head.

Jody: I know, it's so good!

Jenni: One of the things that Jody, you and I always say is let the textbook be the guide and not the goal.

Jody: Right.

Jenni: You know, let it, let it be a starting point to spark an interest in. But I think you're right. We have to model that to some degree because otherwise it's so easy for kids to fall into that pattern of like read the material, answer the question, move on to the next piece of material.

Jody: It's so dead.

Jenni: And not really...

Cheryl Bastion: Well, and, and like I said, I'm not, I've learned this over years of time. It's not like I sit and had an "Aha!" moment yesterday. Like I've learned this and I've exp-, not experimented, but I've, I've taught kids for a really- a lot of kids for a really long time and I've seen that there's some common threads. So I have vantage point, so to speak, that other parents maybe don't have, because I've seen longevity like we're now doing evals for a second generation of homeschoolers, meaning we did the kids and now we're doing their kids. Um, and so we've seen just go full circle. And then as a homeschool mom, like I didn't know about some of these, the scientific geniuses of our world, Thomas Edison, like he was kicked out of school and he came home and what did his mom do. She allowed him to have a chemistry laboratory in the basement. Um, and then he wanted to buy more chemicals. So what did he do? He had to, he figured out a way to go sell

newspapers so that he could fuel his chemistry addiction. Well, I don't want, it's not an addiction obviously, but his interests, he needed to find money or funds to do that. So that created a whole nother problem for him to solve. And you look at like the Wright brothers, the mom spent time with them out at the pond watching birds take off and you know, land and take off. And that's where I think it was Orville, I think Orville, but one of the boys said, "Ma, I think the nine-year-old boy can fly." Now, that's a profound thought when at a time when no man had ever been in flight. And she said, she didn't say, "You're crazy, son." She said, and again, there's no ceiling on that comment. It's, I think a boy could fly. I think a boy could fly someday. And she said, I thought this was genius. She said, "If anybody could figure it out, I know you can." Oh, my. I was like, I want to be that kind of mom. I want to raise kids who are constantly thinking, not necessarily who are trapped in my very finite understanding of what and how the world works.

Jenni: Woo. I'm still reeling from that one.

Jody: I know.

Jenni: It made me tear up.

Jody: Me too. I know.

Jenni: Okay. So, switching gears for a second here, Cheryl, you have a lot of kids and so I imagine that you understand, cause I have a lot of kids too, how sometimes this can be challenging like herding cats. Do you have any suggestions or tips for the big family who has lots of different kids outside at the same time?

Cheryl Bastion: Well again, it's a perspective, right? Like I have to realize like I w- I can waste a whole lot of time trying to herd the cats. Right? Whereas if the cockroach shows up in my house or the grasshopper shows up in the garden, the cats will go herd themselves.

Jody: Yeah, you're right.

Cheryl Bastion: We'll all be like...

Jody: "What's going on?!"

Cheryl Bastion: "I don't see the grasshoppers!" So all of a sudden you've got four kids running out and math gets left behind and everybody's running out to see the grasshopper. And that could be the four-year-old, the eight-year-old, the 10-year-old and even maybe the middle-schooler, right? And they're all out there and now you've got kids four through middle school, four years old to middle school, all out there together, all collaborating, all saying "Look at his legs!" "Oh my goodness, I've never seen antenna close up!" "Why is he all those colors?" "Why is he so huge?" "Why is he eating our plants?" And then you've got

everybody's ideas of, "Oh, that's why our tomatoes are now eaten. The lover grasshoppers are probably taken over the garden." You look at all the questions, right there, that were thrown out into space for these kids to mull over and talk about and question. And now what are they all wanting to do? "Mom, we got to learn more." So now they're, they're herding-- The cats are herding back into my house. And they're like, "Mom, where's the field guide, we got to find that book on grasshoppers. Do you have anything about grasshoppers?" "Yep." And "Mom, where's the Magiscope?" The Magiscope, the Brock Magiscope is, is a tool or resource that we have purchased 25 years ago. There's a lifetime warranty on the thing. It's metal, it's indestructible. You can put live specimens. We found a dead lubber grasshopper one time and put him under there. No slides needed. You just put the grasshopper under there and you can look at him right there and all his glory. I mean, I don't need to be a whole lot of science loving mom to just provide the microscope. And then you know the outdoors pretty much. Um, or the indoors if you live in the city, provide opportunities, like just buying a couple of owl pellets and maybe, um, some field guides and the microscope. And now I've got myself a multilevel classroom, laboratory discovery center, whatever you want to call it. And they're feeding off of one another.

- Jody: So do you ever have like one kid kinda take over and delegate to the other ones? Like, "You go look this up, you go find this." Do they delegate to each other?
- Cheryl Bastion: Um, yeah, they will. Um, but again, it's on their terms. So anything that's really on their terms, their idea keeps the curiosity alive but also helps them own it. And whenever they own it, they're, their attention span, their curiosity, their wonder, their-- It just, they got all, it's just, I can't even replicate that. Like if I were to have this glorious, wonderful plan, okay, four-year-old for a middle-schooler, we're going out to look for grasshoppers. They'd be like, "Are you kidding me? I just want to play with my LEGOs than look at my screen."
- Jody: Yeah, I think it's so cool, because, that's like, there's project-based learning right there in your own kitchen.
- Jenni: I'm thinking, too, it also helps cultivate a leader and someone who learns independently as opposed to a consumer of information. It changes their mindset about learning, I think.
- Cheryl Bastion: Oh, absolutely. For sure.
- Jenni: Um, so not to make this too schoolish, but do you think that families need to document what they've learned? You're an evaluator. How would you encourage a family to document what they've learned without making it too school-y?

Cheryl Bastion: Oh, um, great question. And we get that a lot. Um, but I will tell you, here's the other thing. We have seen families do unbelievable things when they open up to the ideas that their kids have. And we have a kid right now propagating banana plants and like species of bananas I never knew even existed on this, on the planet. And, and he's like, he's, he's not even, I don't even know that he's a middle-schooler, I think he's about 10 years old or 11 years old and he knows more about banana plants than probably, you know, a high school level kid or maybe even a college level kid cause he's learned it on his own. So how does he document that? Well, he decided on his own, which I thought was phenomenal. I let your kids sometimes say, "Oh man, this is a great project." But you know, when we go to the Bastians, like what should we take them so they know what we learned so they could see the progress? Because that's what they have to, by law, determine and they'll come up with ideas. This kid made us a video tour of his bananas.

Jody: Oh, my gosh! That's so cool!

Jenni: I love that.

Cheryl Bastion: ...so awesome. Now, when he comes, he's excited about coming. Right. And he can't wait to tell us and he's dealing with recall like, and he's comprehension. Like you've got so many higher level skills than just writing in a log box propagating bananas. Okay, great. That's awesome. That's a great skill-. That's a great, you know, that's great content. But him being excited about sharing his video that he took, you know, um, with fantastic take pictures, let them take the pictures. We've had kids, we had one boy one time. He was literally eight years old. He bought a Gecko and decided that he wanted to breed Geckos. So his mom said, "Well, okay, we'll have to figure out how we're going to buy another Gecko. That turned into buy two Geckos, which then produce more Geckos. And he literally had four generations of Geckos, which by the way, he brought to our house, he brought, he brought one Gecko of each generation to our house in boxes for his evaluation, 'cause that's what he wanted to bring. And um, and then had his, he chronicled the whole thing through pictures and then he told his mom because there was so much to write. And, of course he's young, but he had so much information in his head with vocabulary words he wasn't able to spell that Mom took the dictation. I mean he told her what to write, she wrote it, and then he copied it and he was little, he basically made a book about breeding his Geckos. And I mean it was amazing. Probably middle-school level or above and only being an eight-year-old. So again, coming alongside your kids, hey, if this is too much for you to write, I'd be glad to write it. You just tell me or you voice-to-text it and then we'll, you know, we'll put it on paper so that you can print it out and you can draw the illustrations. Then you've got a book that you can actually bring to evaluations. Take the pictures, like I said, or um, brochures. If you're in the city and you're going to museums or you're going to arboretums, you're going to planetariums or you're going to a nursery event or whatever, find the brochure that you've collected or the ticket that got you into that event and stick it inside your portfolio. Those brochures and tickets will help be, um, talking points for your kids when they come to the evaluators. So

you don't necessarily just have to have like a paper trail of everything, 'cause you're not going to have a paper trail of all these amazing things when the cockroach comes through your house. You can take a picture of it, you know, take a picture of the kids looking at a microscope or whatever it is that you're doing and still take that to your evaluator.

Jenni: Now, we talked about earlier, like, you know, kids might not be interested in learning about the polar bear because that's not part of their environment, but what about the kid who wants to study glaciers but lives in Florida?

Cheryl Bastion: Ah, great point. The first thing I always do when I don't know what to do or I have no idea how that, that need is going to be met is I start praying. And I'm, I'm honest with my kids, man, glaciers, that's really awesome. Like we don't have glaciers here. How would you like to go about, or how did you think would be best to go about this study of glaciers? One, they have probably ideas about what they want to study...

Jody: Yeah, a trip to Alaska.

Cheryl Bastion: ...and how they would go about it. Totally. Okay. You know what? You, we all laugh about that. But let's, let's, let's realize that we have a big God and I have seen kids, my own son. We got the opportunity, God gifted us through my parents at the time who got, um, some free trips to Rome. He was 18 and he loved history and he loved to travel. We were not going to be able to afford trip to Rome, but it was literally said, "Hey, would you three want to go to Rome?" "Oh, my goodness, yes, we would!" So I believe that it goes, it shows our kids, "Hey, I have something I want to study that I'm interested in." Either A - we can start praying about a way to, to, to learn that if it is go to Alaska, you know what, he's a big God. He could provide that. But if we can't go to Alaska or if in the meantime we are- 'till we go to Alaska, what could we, how could we study it? I mean the Internet now you know there are YouTube tutorials, there are online- there is Google Earth. There are so many things that we have and you know, I don't know what, I don't even know about Google Earth. Like I don't, I don't know what it's about. I don't know what it's it, how it can be used, but I, in those situations, say, "I don't know anything about this, but I know it's a tool we could use, how about if we figure it out together?" Then we're learning together and it doesn't become so intimidating to me as a mom who really doesn't know how to use some of this stuff or care about some of that stuff, because we're walking alongside life and learning together.

Jenni: I never thought of um, incorporating prayer as part of a way to reveal God in the midst of our nature study. But yeah. What a cool, what a cool way to incorporate God into our study of his creation. What are some other ways that we can, um, incorporate God in his word with nature study?

Cheryl Bastion: Oh, great question. Well, I, um, here's some things that I remember. Um, Psalm, let's see, 19, 19:1, um, says "The heavens declare the glory of God. The skies proclaim the work of his hands." I can't, I can't replicate that. Like the only way

that my kids are gonna see the vastness or understand how big God is, is to get out there and experience it. Like I can't, the books, books can't show that. They literally have to get out there and experience. The other thing is I talked to my kids about how it's that the rocks cry out. Like we are... Nature bows to God. Like they realize the Creator and we- they recognize the Creator just as much as we recognize the Creator. So as I'm, we're looking at things, maybe it's the colors of a butterfly or maybe it's how one butterfly's so super small and another you got the big Blue Morpho, which my kids actually just got to see this summer. Um, it's like, "Wow, isn't God creative? Like, I wouldn't have even thought it- look at the colors. Why do you think God made the colors that way?" And my kids are like, "Well that's because they live in the brown forest and they have to be camouflaged." "You're right!" That was, it just shows that there is an infinite, um, Creator that, that already thought this stuff up. And it helps them to marvel at just His ability to have all that together as He was creating this, just this fast earth. Um, it gives them a respect they're thinking in all. Um, I will sometimes go into scripture, but I don't try to, like, I'm not one of those moms that have always tried to artificially like put the Bible into everything. I more naturally tried to make it a part of what we're- our day. It is a part of- a natural part of our day. Um, and 'cause that's how--

Jenni: That really makes it-- That really makes it feel like a relationship, too.

Cheryl Bastion: It is a relationship.

Jenni: Right. Right, but when we try to insert it, it feels very institutional. It doesn't, we-- doesn't communicate that relationship when we're forcing it into the subject.

Cheryl Bastion: Right. Which goes back to the prayer. You know, like my, my daughter prayed for a dog for a long time, and I just was bent, like, we are not, I don't like, I got kids. Like having animals is like more children, and they shed and they poop and everything else. And I'm like, "That is just not, I can't put my focus on that right now." But she prayed and said, "Mom, but I really want a dog. I really want a dog." And I said, "Well, okay, we can pray about that because I figured I'd put it in God's hands." And interestingly, I did put it in God's hands and I was like, "Well, but it's gotta be potty trained. It's gotta, you know, can't shed. It's gotta be small." Like I had about 10 things that I wanted. And lo and behold, two and a half years later, I mean, God dropped a perfect dog in our lap because family, a family needed to adopt their dog out because their child was allergic to it and it, I kid you not, we found out about the dog the day before my daughter's ninth birthday. And I just knew at the time, I'm like, "Okay, this is the answer the prayer." Like it or not, right. This is what we've been praying for. And we went to look at the dog and the family said, we just feel like you'd be the perfect family. We said, okay. And we brought it home to her that day and showed up in the driveway and she came running out "Where, were you guys?" And I'm carrying this dog. Well, actually, Mike was carrying the dog and she, I just, as a mom, to know that God would care about my children so greatly. One, he had

to move me out of the way. But two, he met every single thing we had prayed about.

Jenni: Wow.

Cheryl Bastion: And he did it the day before her birthday.

Jenni: Oh, my gosh!

Cheryl Bastion: I can't replicate that as a-- She knew who God was in her life at that moment and that he cared about the things that she loved and the things she was interested in and the things that she desired. And realize that mom and dad can't always supply everything for our kids. There's got to be a higher entity above us.

Jenni: I'll tell you what, that has gotta be more powerful than any pre-canned Bible lesson our kids could ever sit down to listen to. All right, well gosh, you have given us so much, Cheryl, I have one, one more question for you. Do you have any favorite books or reading material that we can share with our listeners, um, to encourage their nature study?

Cheryl Bastion: For sure. We'll start with a really good set of field guides and there's many out there. Um, we love the Take-Along series. Now it's not a biblical worldview but, and it's not photographs, but there, I love the way they convey the content in the materials. So they are the Take-Along guides and they have everything from caterpillars, bugs and butterflies, leaves, trees, and bark. If you don't, if you want something that has a more of a photographic type bent to it, like actual field guide, look at Peterson's or the Florida's Fabulous if you're a Florida family. Other non-fiction reads that we've looked at are Gail Gibbons. She has books on almost every topic. Again, not necessarily a biblical worldview, so you're going to find millions of years in there. But again, that offers something for you all to talk about as a family. We just read, we just read the "Berry" book the other night and were captivated by that. The other ones are the "Let's Read and Find Out Science" books. And that's from tadpole to frog, a caterpillar to butterfly, a nest full of eggs. What's inside a shell? So that would be your non-fiction ones. Oh, and also "Snowflake Bentley" by Jacqueline Briggs Martin. Amazing book, about a real person who solve real scientific problems. That's why I like to, is to be able to incorporate biographies. So my kids see there are people who think scientifically and they solve problems and they, this is how they went about it to solve the problem, but it also changed history. So "Snowflake Bentley" is another one. And then outside of that, like your fiction reads picture books that are science-topic related. "A House For a Hermit Crab", that would be "The Grouchy Ladybug," "The Very Busy Spider." Those are all Eric Carl's things. "Ms. Rumphius" by Barbara Cooney. That's the planting the lupine seeds. Um, and then "Roxaboxen" one of my absolute favorites. When you talked about the 40 acres outside your yard, I thought about "Roxaboxen." Great story just to cultivate, um, um, uh, scientific thinking. Um, because it's a, it's a pattern.

Curiosity and questioning and finding solutions is a way of thinking. It's the scientific method.

Jenni:

We will make sure that we link to all of those in the show notes so that people can, can have, um, a whole curriculum really at their fingertips. Cheryl, it's been so much fun talking to you, and we are super grateful and we will go ahead and put links to you in the show notes so people can find you and connect with you. And, and of course we'll stay connected with you and want you to come back again.

Cheryl Bastion:

Oh, I love that. I always love to encourage, thank you ladies.