



Transcript for *Redwoods* (Square Fish, an Imprint of Macmillan) Preview Video

Preview (0:00 – 8:50)

Hi everyone! It's Colleen from the KU Natural History Museum, and I just want to remind you about tomorrow's Story Book Science, here on Facebook Live at 10am. We are going to be reading the book *Redwoods* by Jason Chin. This book is published by Square Fish, which is an imprint of Macmillan, and we're also reading it with permission from Square Fish. So thank you to them for the permission to read this book!

Now when we talk about redwoods, we want to think about what we mean when we say redwoods. And redwoods, they are a group of trees. And we're going to be talking about one redwood species in particular, and that is the coast redwood or *Sequoia sempervirens*, as you can see on the wall. Now, just to give you a little close up, this is what a coast redwood looks like. They're pretty tall. Can you tell from that photo?

Now before we talk about the height of the coast redwoods, I do want to give you some idea of where you would find them because you don't find them everywhere. They're a very unique tree, and it's very special where they grow. So here is a map of California. This green part, this represents the coast of Northern California. And that is where you find the coast redwoods! So you find them on the coast, which makes sense. And if you look a little closer at the map, you even see that they go just a little bit above the border of California into the very southern coast of Oregon. So this is where you find coast redwoods.

Now coast redwoods, as I said, they're really tall. In fact, they are the tallest trees in the world! A lot of coast redwoods can be measured to be at least 367 feet tall. So they can grow these really enormous heights, and the tallest coast redwood is measured at 379.1 feet. That is amazing! I actually have a really hard time thinking about how tall a coast redwood is because 370 feet, and even greater, that's just so much height! So to better understand how coast redwoods grow and their height, I want to do a scale drawing.

Now a scale drawing helps us better understand the actual size of something by either shrinking it or making it really big. And since a coast redwood is already really tall, we're going to shrink it. So when we do a drawing of a coast redwood, we are going to have a scale that for every one inch we draw, we're representing 37 feet. So, right here, this is where we're going to draw our scale drawing of the coast redwood. So let me grab my marker, and I'm going to draw first, one inch. Alright. So here's one inch for our coast redwood scale drawing, and that equals 37 feet. Now the coast redwood we want to imagine is 370 feet tall. So we're going to have to draw a couple more inches because this only represents 37 feet. So we still have a bit of a ways to go! So now we're going to draw another inch, and that represents, now, two inches or 74 feet. We still have quite a ways to go with our scale drawing, don't we? Because we need to represent a 370-foot tree! So we need to add quite a few more inches. So we want to make sure that our scale drawing has 10 inches to represent 370 feet. So I'm going to draw those, and it will take just a moment. But now what you'll see with our scale drawing is a 10-inch line, where each inch represents 37 feet. So this scale drawing represents a 370-foot tall redwood tree.

Now this is a great scale drawing, but it's still kind of hard for me to think about just how big a coast redwood is. So I want to do another scale drawing to compare the height of that scale drawing with the redwood. So I decided that I was going to use the height of a six-foot tall person. Now if we wanted to draw a scale drawing

of a six-foot tall person, we need to make sure we're using the same scale we used for the coast redwood. Now our person's only six feet tall, and if we draw an inch, that represents 37 feet. That's much taller than our person, right? Yeah. So we need to make our drawing smaller than one inch. So we need to divide our scale. So if I divide one inch in half, that's half of an inch, and that means I'm also dividing what the inch represents by one half. And half of 37 is 18 and a half feet. That's still too tall to represent our six-foot tall person, right? Eighteen and a half is still much bigger than six feet. So we need to divide by an even greater number. So what we're going to do is we're going to divide this one inch by six. So we're going to have one-sixth of an inch. And then that means we're also dividing 37 feet by six, which will equal roughly six feet to represent our six-foot tall person. So I'm going to draw that on our scale drawing, and it's a little mark, but you can see that we have a scale drawing of a six-foot tall person.

Now let's look at our scale drawing of the person compared to our scale drawing of the coast redwood. Look how small that person is. That's how huge these coast redwoods are! They're so tall that a six-foot tall person standing next to it looks very small. So I hope that doing the scale drawing helped better explain just how tall these coast redwoods are because they are so large! And it's very impressive how tall that they can grow.

But one of the things I also want to talk about is not just the height of the coast redwoods but what coast redwoods and the forests they grow in can support. You can find so many different animals in a coast redwood. You can find birds like the marbled murrelet. This marbled murrelet, it is a seabird, but it nests in old-growth coast redwood forest. So these forests are full of some of the oldest coast redwoods that can be up to hundreds of years old! And that is where you would find these birds nesting high up in the trees.

You can also find banana slugs: yellow mollusks that have a muscular foot that helps them move around. And they leave a trail of slime behind them as they move on that muscular foot.

We also have some other animals that you can find in the coast redwood forest, and I'll share some museum specimens of those animals tomorrow. But I don't want to tell you what they are just yet. In fact, I want you to think about what those animals could be. So I'm going to give you a hint. Some of the other animals you can find in a coast redwood forest, they are many-legged arthropods. Any ideas what type of animal I'm talking about?

I'll have some museum specimens to share with you to represent those many-legged arthropods tomorrow, but you need to join me for Story Book Science in order to find out if what you're thinking is correct! So I'll see you tomorrow, here on Facebook Live for Story Book Science at 10am, where we'll read *Redwoods* by Jason Chin and talk more about these super impressive, ginormous trees! I'll see you then! Bye.