



Transcript for *Life in the Ocean: The Story of Oceanographer Sylvia Earle* (Farrar, Straus and Giroux, an Imprint of Macmillan) Preview Video

Preview (0:00 – 6:04)

Hi everyone! It's Colleen from the KU Natural History Museum, and I'm so excited to remind you about tomorrow's Story Book Science! I will be reading the book – let me grab it – *Life in the Ocean*, and this is the story of oceanographer Sylvia Earle. So this book is written and illustrated by Claire A. Nivola, and it's being read with permission from Farrar, Straus and Giroux, which is an imprint of Macmillan.

So this book is about Sylvia Earle, and in the title, we learn that she's an oceanographer! So she is someone who explores the ocean, but she's also a marine biologist. So that means she explores the ocean and studies the living things that live there. Now Sylvia Earle has studied many different living things from whales and coral reefs, but she's also studied algae.

Now normally when we talk about algae, we use the word seaweeds to describe them. But when we say seaweeds, what we're talking about are macroalgae: so really big plant-like structures that live in the ocean. And there are lots of different macroalgae. There's red algae, green algae, and brown algae.

We're going to focus on a brown algae, and that brown algae is giant kelp. Now I have a model of giant kelp, and I want to look at the features of that giant kelp with you. So let's do that together! So this is our model giant kelp. This right here, this is a structure called the holdfast. Now the holdfast is like a root. So this helps anchor the kelp on rocky bottoms of oceans, and that keeps the kelp in place. So it doesn't move around with the ocean current and get carried away. So the holdfast is like a root. And then from the holdfast, growing all the way up, you'll notice that there's a line. And this structure right here, and I'll point it out again, this is called a stipe. Now a stipe is like the stem of a plant, except the stipe – it's really floppy! Do you see how easy it is to move it? Now attached to the stipe, there are these leaf-like structures. And these leaf-like structures are called blades. And you might notice at the end of the blade there are these little, almost like balloon structures, and these are called air bladders. And air bladders, they're filled with air. They're filled with gases. And they help keep the giant kelp upright from the bottom, where the holdfast anchors to the ground, all the way up.

Now it's important for the giant kelp to have all of those features because the giant kelp needs to be able to grow upwards towards the water surface because that's where the light is located. And the light is really important because the giant kelp needs it in order to photosynthesize, or make its food using sunlight.

So the giant kelp has a lot of similarities to plants. It's not a plant. It's a macroalgae; and we looked at all of those features together.

Now like I stated before, Sylvia Earle not only studied algae, but she studied many, many different living things like whales. And we'll read about some whales tomorrow. And also, coral! Like this bamboo coral, which we'll also read about tomorrow. And when we read about all of these things that Sylvia Earle has studied and seen during her ocean explorations, we're also going to get to look at some really awesome museum specimens. And I have one that I want to share with you right now.

So this is a specimen that we're going to look at closely tomorrow, but I wanted to show it right now because I want you to make an observation about it. I want you to look at it and think what this could be, what animal it came from, what its function is.

And I do want to give you some hints, just to help with your observations. This museum specimen, this is part of a much larger specimen. And the reason I only have a part of it is because the actual size probably wouldn't fit in my apartment. It would go all the way from the floor, almost to the tip-top of the ceiling. So this is something from a very, very big ocean animal. In fact, it's from one of the biggest marine mammals! So that means it lives in the ocean, and it's a mammal. I'll let you look at it for just one more moment. And remember what I want you to do is, I want you to think about what animal it could come from. I want you to think about what its function is. So what does it do? And why does the animal need it? And we'll explain what this is and what its function is tomorrow. So join me for Story Book Science in order to learn!

Alright. So I'm so excited for tomorrow! I can't wait to read about Sylvia Earle with you and all of the amazing things that she's studied and learn about, in regards to the ocean. And I also can't wait to look at some more museum specimens with you. So I'll see you tomorrow! Bye!