

## **Transcript of Melissa Grey, Paleontologist**

The coolest part about my job is that I get to work with things millions of years old and I'm the first person to ever see them!

I'd like to dispel the myth that all paleontologists study dinosaurs; we don't. I actually study small things they tend to be clams or a little thing called ostracods, which are actually related to shrimp and lobsters.

Fossils are actually really important for us to reconstruct past environments. And we know from looking at fossils and rocks from over millions and millions of years that the world has changed over time; and at Joggins about 300 million years ago we know that this area was actually a tropical sort of rainforest. So very different from the climate and conditions that we experience today.

So discovery is the first step; and when we find something new on the beach it's either new and exciting or it could be just a really nicely preserved specimen that we decide we need in the collection. So that is the first step, we bring it off the beach. We have a permit to collect; everyone needs a permit to collect fossils in Nova Scotia—and so we have to apply for that. And then we bring them back to the lab and study them. So sometimes they might need to be worked on so you can view the specimen a little bit better, and that's there you have to chip away rock or you have to wash the fossil down. And then we work on it in whatever capacity we want; so we have to determine what it is, and how we catalogue it, and then it goes on to be researched.

Studying paleontology or studying ancient organisms or ancient life; so biology is very important. Mathematics is very important because you need to be able to quantify what you're looking at and see how statistically things change over time or model things. Chemistry, understanding how things grow and change, so you definitely want to keep all of your sciences. Physics in there as well to keep all your options open; because you never know what area of paleontology you are going to be interested in; and there are lots of different areas that you could work in.

I think that I definitely made a good choice and I wouldn't have it any other way.

My advice for you is to keep your options open in high school and when you find something that you're passionate about to go for it, to study it, and to just be enthusiastic.