

Creep into the Deep: Discovering Deep-Sea Coral

SEAMAIL™

TO: Virtual Deep-Sea Science Team
FROM: Mauricio Silva
SUBJECT: Computer Modeling and the Deep-Sea

Hello Virtual Science Team,

My name is Mauricio Silva Aguilera. I am a scientist at Florida State University. I grew up in Chile. I have always loved the ocean. In my hometown, the newspapers would always have articles about the ocean in the month of May. I read the articles over and over. I also got to go to the ocean with my grandparents.

When I got to college, I studied oceanography. I didn't want to study just one thing—I wanted to learn about everything!

I also learned how to use tools called computer models. These models are computer programs that copy something in the real world, like the Pacific Ocean. Programmers write computer code that tells the model what to do with all kinds of information, like water temperature, salt levels, depth, etc.

Remember when I said I wanted to know about everything? That's why I love working with computer models. I get to be a part of all different kinds of research by talking to many scientists to get this information.

I take all this information and enter it into the model. Then I can use the model to tell me exactly what kinds of habitat these coral like to live in and where we might find them next. Other scientists use models for different things, like predicting how warm the water might get in the future or where different fish might move to as the climate changes.

I admit, there are a couple of things that are challenging about my job. First, I had to teach myself computer programming. That's because even though I don't build the whole model,

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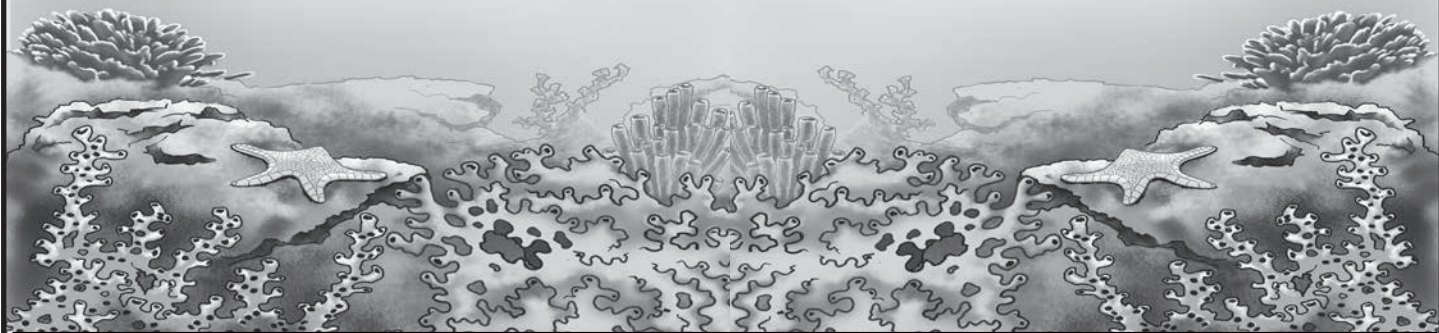


Illustration by Paul Lopez

I have to change the program to fit what I need. And when there is a new program, I have to update all the work I've done. I have three computers and six screens in my office!

Another thing that can be hard is getting the data I need. Scientists throughout the world study the ocean. They collect all kinds of amazing information. You might think there is one place all that information goes. But unfortunately, it is scattered all over. I have to find out who has certain kinds of data and ask them if I can use it.

But even when things get hard, and I might be frustrated, I don't give up. I don't stop. I know that my work will help other scientists learn more about the ocean.

Your friend,

Mauricio

Dr. Mauricio Silva
Deep-Sea Explorer
WhaleTimes.org

Is there a topic you love that is also challenging?
How do you push through until you are successful? I
hope you stick with it!

