



Pages for All Ages:



The Wedding of Seaweed and Fungus



A dramatic retelling of a scientific theory



Some words to know before you read the story:

- seaweed
- fungus
- creature
- crowded
- sunlight
- stretch
- molecule
- earthquake
- photosynthesis
- proposal



Long ago (430 million years), a sad little seaweed lived in the sea. The seaweed loved its home. The water was warm and light. Sunlight helped the seaweed to grow. But the seaweed's home was getting too crowded.



The seaweed lived near the shore. The water was extra salty there. In the old days, the little seaweed had lots of room to grow. Other creatures stayed away. The salty water was too much for them.



But now, big new seaweeds were moving in. They didn't mind the salt. They were coming in and taking all the sunlight. The little seaweed felt sad in the shade. It didn't know what to do.



One sad morning, sitting in the shade, the little seaweed heard a voice.



"Excuse me. I am about to eat you." The voice was from a fungus.



"Why do you want to eat me?" asked the seaweed.



"I'm hungry," said the fungus. "In the old days, I ate dead seaweed in the deep water. But now, new creatures are living in my home. They move a lot faster than I do. I can only move by stretching out slowly. The new creatures have fishy fins and crabby claws. They eat the dead seaweed before I can."



"I have the same problem," said the sad little seaweed.

"I can't get any sunlight. I can't grow. I can't live here any more." The little seaweed cried. "Go ahead and eat me!"

So the fungus did. The fungus stretched slowly across the sea floor. It reached the little seaweed and grabbed.

A fungus has lots of little fingers called "hyphae." (Say: hi-fee.) The fungus poked its hyphae into the little seaweed. It poked very, very slowly. Then the fungus used its hyphae to suck molecules out of the seaweed. It sucked very, very slowly.

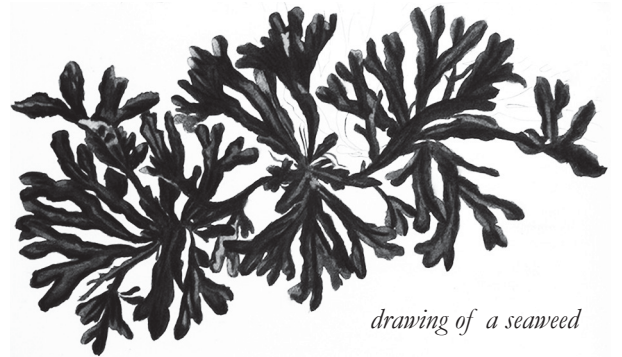
Suddenly, a giant earthquake changed everything. It moved the little seaweed and the fungus to a new home. Actually, it moved the home. Before, the seaweed and the fungus were under water. Now, they were on dry land.

"What are we going to do?!" cried the little seaweed.

"Don't worry," said the fungus. "I'm fine. I can keep eating you. I can drink water from the sand. I can poke some hyphae down in the sand and suck water up."

So the fungus kept sucking molecules out of the little seaweed.

But it was good news and bad news for the little seaweed. The bad news was that the seaweed was



drawing of a seaweed





drawing of fungus on a log

drying to a crisp. It was also bad news to be eaten, of course. The good news was the seaweed was finally out of the shade. It could get the sunlight it needed.

“Hey, little seaweed! What’s going on?” asked the fungus. “You’re starting to taste sweet!”

“Now I have enough sunlight to make sugar,” said the little seaweed. “That’s what I do.”

“How do you do that?” asked the fungus.

“A little trick I know called “photosynthesis,” answered the seaweed.

“Wow! I’ll be sorry when I eat you all up, and you’re all gone! You taste so good!”

“Why, thank-you.”

“Dear, sweet, little seaweed. I have an idea. I want to live the rest of my life with you,” said the fungus.

“I want to live the rest of my life, period,” said the seaweed.

“I know what we can do,” said the fungus. “I can feed you water that I get with my hyphae. I can feed you other things, too. I can feed you all sorts of molecules. All I ask is that you give me all the sugar I want.”

“Of course,” said the seaweed. “What a sweet proposal!”

So that’s what seaweed and fungus did. They spent the rest of their lives together making sugar and eating it.

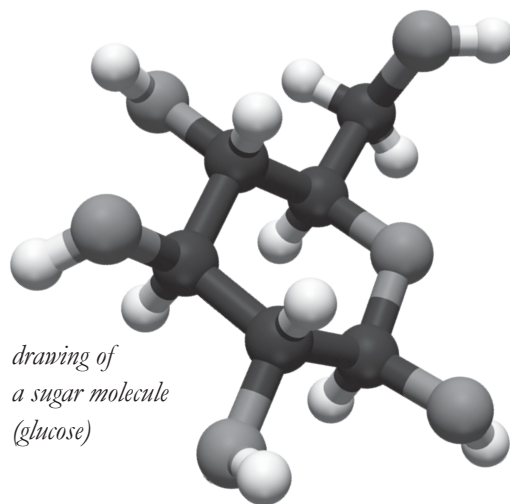
And they had lots and lots of children and grandchildren and great-grandchildren and great-great-grandchildren and great-great-great . . . Well, you get the picture.

Think about seaweed and fungus sometimes when you see land plants – trees for climbing, grass for running, fruit for treats. All land plants might have come from the wedding of seaweed and fungus. ❖

- Tell about a time when you had to do a project with somebody you didn’t know very well.
- How can people with really different ways of doing things make those ways work together?

This story was adapted from “Lucky Little Seaweed,” by Mark McMenamini, in Earthlight: Spiritual Wisdom for an Ecological Age, edited by Cindy Spring and Anthony Manousos, published by Western Friend (2007).

McMenamin’s story was based, in turn, on a common scientific theory concerning the origin of land plants. See, for example, “Molecular Evidence for the Early Colonization of Land by Fungi and Plants,” Heckman, et. al., Science, August 10, 2001.



drawing of a sugar molecule (glucose)

The drawing of seaweed (1844) is by Janus Kops. The drawing of fungus on a log (1789) is by Jean Baptiste Francois Bulliard. The ball-and-stick model of a glucose molecule (2009) is by Ben Mills. All three images are in the public domain.

