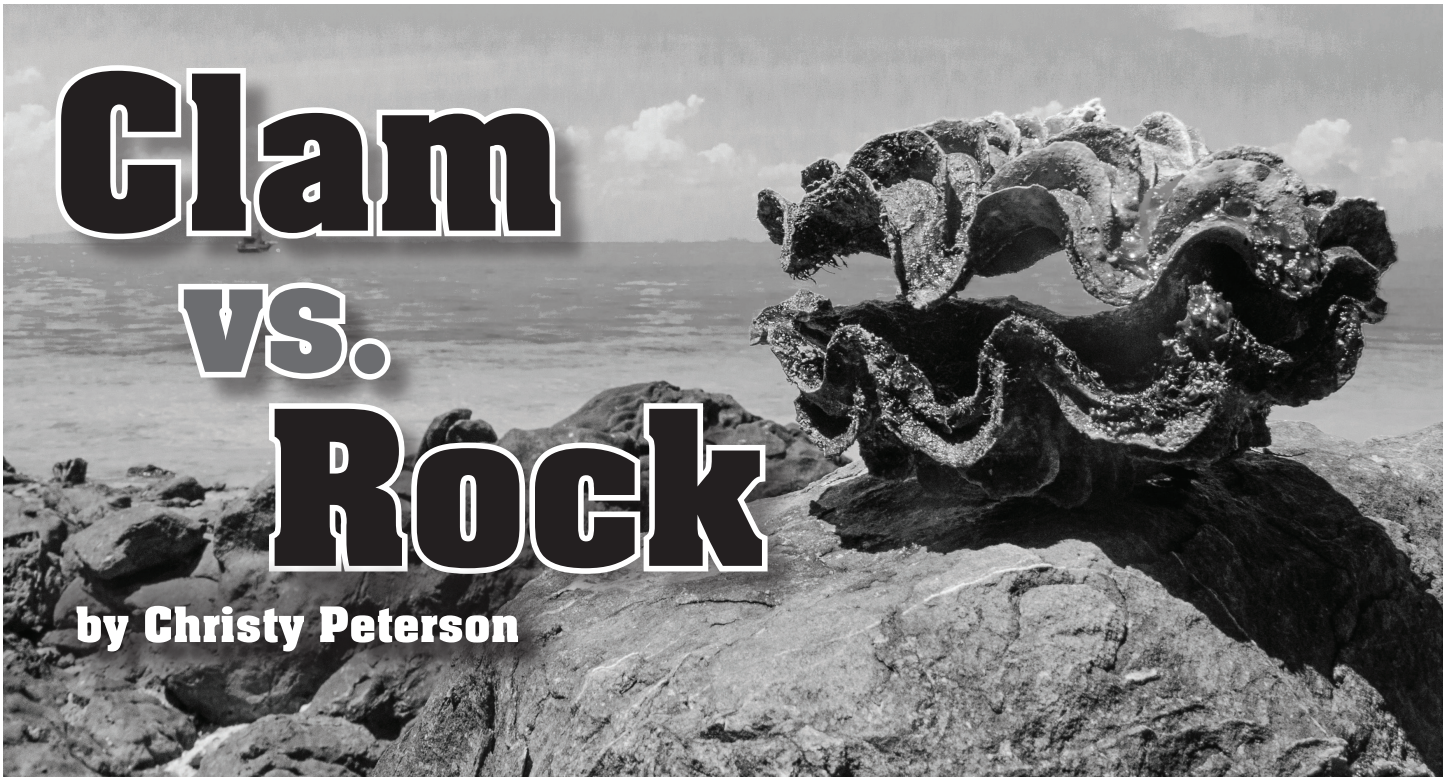


Clam vs. Rock

by Christy Peterson

1 Far out in the ocean, a baby giant clam creeps over a coral reef. Brightly colored fish dart in and out. Something startles a puffer fish. It goes from fish-shaped to a spiky balloon in seconds. In the distance, an eagle ray slowly flaps, flaps, flaps.

2 Many of these colorful animals would like to eat the small, slow clam. It needs a hiding place! The clam finds a small crack in the coral. It's just the right size. The clam slides in. Wedged inside the crack, the clam clings to the hard, rocklike coral, safe from hungry mouths.

3 During the day, the clam opens up its shell and basks in the sun just below the water's surface. Billions of algae live in the clam's brightly colored lips, called a frill. Algae living in the frill gather sunlight. The clam eats the algae, and in exchange the clam provides a safe home and sunlight. Algae make food for themselves and the clam. The clam also sucks in bits of food from the water.

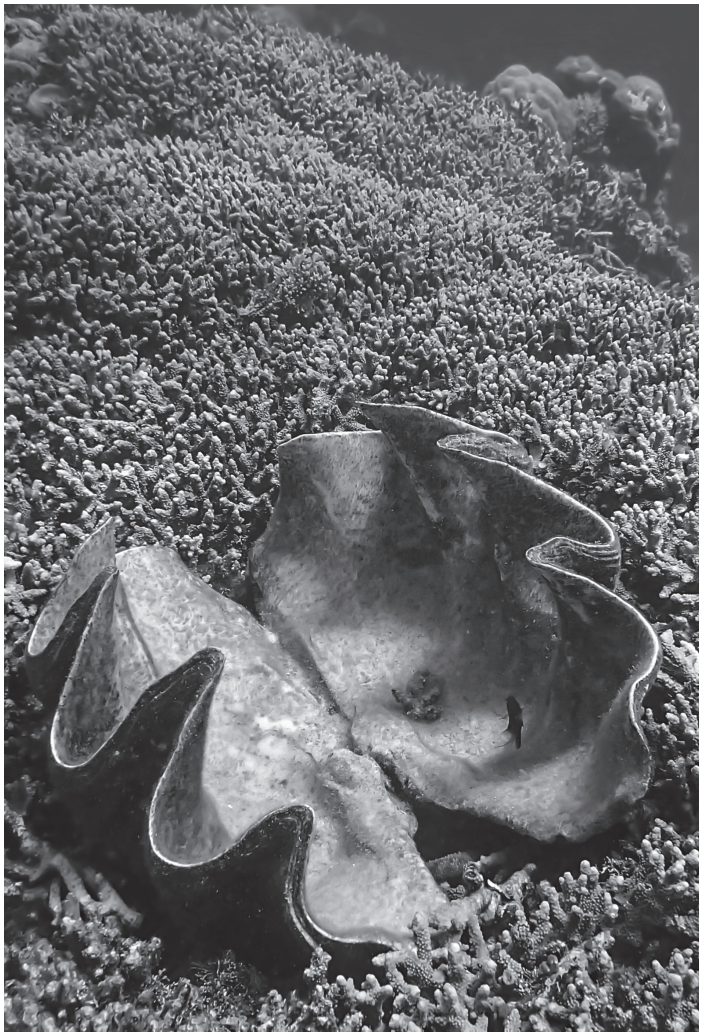
4 A fish swims over the clam's new home. Tiny eyespots in the clam's frill see the movement. Whoosh! The clam pulls back inside the crack. The fish swims away. As soon as it is safe again, the clam pushes its frill out of its hiding place.

5 Safe inside its home, the clam eats and eats. It grows and grows. The crack in the rock gets tighter and tighter. What's a clam to do?

6 Instead of moving, the clam begins to dig. It rasps at the coral with a rough patch on the bottom of its fingerlike foot. And it has another trick—it can dissolve rock. This clam has a soft pad where its shell joins, called the "boring organ." This pad oozes a weak acid onto the coral it touches. The acid dissolves the coral. Gradually, the hole gets bigger as the clam grows.

7 The clam may grow to be as large as four feet wide and 500 pounds. All that time, the clam never has to leave its home. It might live there for 80 years, with only its colorful frill peeking out.

8 Many other burrowing clams have also found homes in this reef. Together, they help recycle old coral back into sand and the seafloor. Shellfish and living corals use the minerals released by the clams to build new shells. So who wins, clam or the rocklike coral? Both!



Some people tell stories of clams being man-eaters. These myths tell stories of clams that lie in wait to trap a passing swimmer, eating them whole. But this is only a story. Scientists tell us a clam closes its shell much too slowly to take a swimmer by surprise.

Clam vs. Rock

Test Questions

Circle the correct answer.

1. What is the meaning of the word *clings* as it is used in the paragraph below?

> Many of these colorful animals would like to eat the small, slow clam. It needs a hiding place! The clam finds a small crack in the coral. It's just the right size. The clam slides in. Wedged inside the crack, the clam **clings** to the hard, rocklike coral, safe from hungry mouths.

a. moves the rocklike coral
b. hangs on to the rocklike coral
c. dissolves the rocklike coral
d. goes inside the rocklike coral

2. What causes the holes in coral to grow?

a. The clam eats the coral.
b. They're caused by acid from the "boring organ."
c. The algae eat the coral.
d. The coral gets recycled.

3. What might happen if clams didn't make their homes in coral?

a. The coral would not be able to breathe.
b. Shellfish would be able to build new shells.
c. The coral would be able to recycle old coral.
d. Shellfish and living coral would struggle to survive.

Clam vs. Rock

Test Questions (*continued*)

4. Is "Clam vs. Rock" a good title for this passage?

a. Yes, because the rock damages the clam. The rock is not a winner.

b. No, because the clam and rock coral do not get along. Nobody wins.

c. Yes, because the clam and rock coral benefit from each other. They are both winners.

d. No, because the clam destroys the coral. The clam is the winner.

5. Why does the clam remain living in one place for most of its life?

a. The clam stays in the coral to stay away from predators.

b. The coral traps the clam and it can't escape.

c. The clam becomes attached to the coral.

d. The coral is just the right size for the clam.