

The Weekly Current

Your weekly serving of science awesomesauce. Every Sunday our expert team of science communicators is here to share exciting ocean science and conservation news with you! Let's dive in!



Clams Are Basically Greenhouses

Everybody goes through a stage in life when they have a house plant. It's like a rite-of-passage to gauge one's ability to keep another living thing alive.

If the plant thrives, your confidence soars. But if (cough, when) your plant dies, it can snowball into a mild existential crisis and that you're a flawed

caregiver that is unqualified to home a succulent, let alone a dog, cat or gasp....offspring.

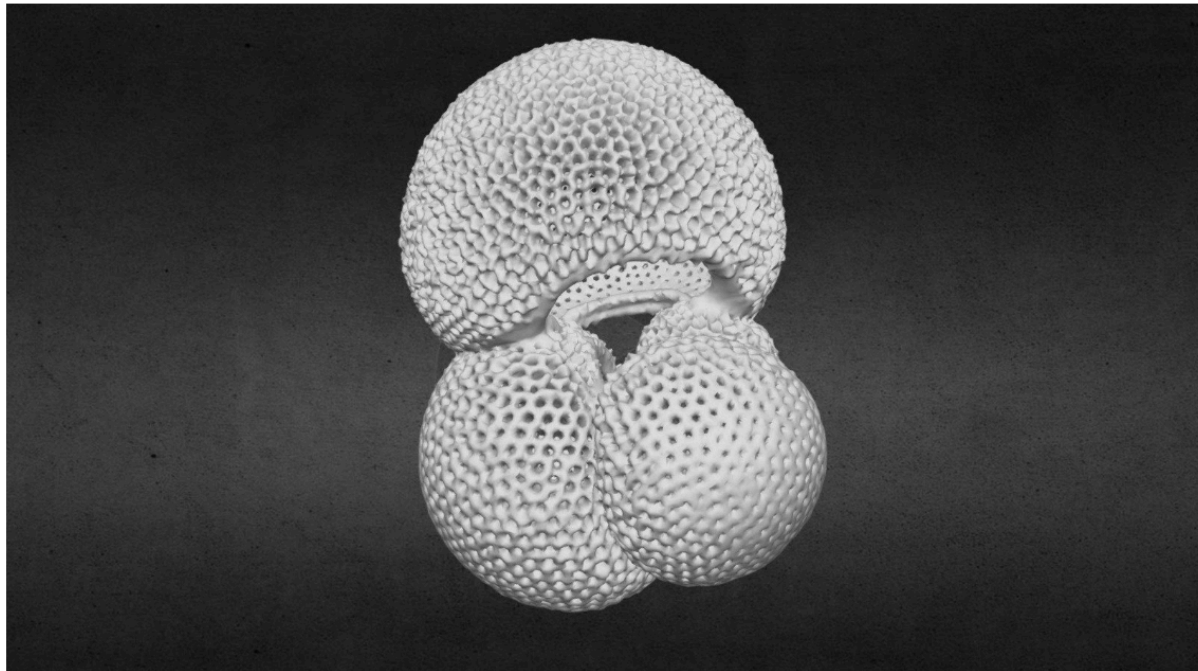
First, throw that negativity into the bin along with your dead cactus.

You've got this! You just need to be more like a clam.

In a fascinating new study, scientists have discovered that the heart cockle clam (*Corculum cardissa*) has developed a truly advanced way of growing house plants!

Like corals, heart cockles house algae within their tissues and feed off the sugars created by the algae's photosynthesis. But unlike corals that bask openly in the sunlight, clams are like tiny homes closed off from the outside world. To get light inside, the clams have developed special structures in their shells, similar to fiber optic cables, that transport and magnify sunlight to their resident algae!

It's a wild adaptation that shows how even modest critters like clams can have amazing survival strategies. Dive into the study [HERE](#) and a summary article [HERE](#)



Marine Snow Magic

As the winter's first snow falls across the northern hemisphere, there is another kind of snow that is making headlines.

[Marine snow](#) is a term used to describe the shower of organic material that constantly falls to the seafloor. Most people have never heard of it, but it's extremely important because examining sediment cores from the deep ocean can tell us a lot about what Earth used to be like. Key critters in marine snow are [foraminifera](#), single-celled organisms that grow teeny tiny shells and float around the ocean. And as it turns out, how these little dudes grow those shells has some major consequences to climate change!

A new study discovered that the foraminifera species *Trilobatus trilobus* grows shells ([calcification](#)) that match the density of the water it is in. Which seems like a smart move if you're a plankton that needs to perfectly float in the water column.

Note, If you need a fun refresher about why things float, we got you [HERE](#)

BUT where things get crazy interesting is how all of this impacts the planet. Scientists think that as the planet warms, polar ice melts, and seawater becomes slightly less salty and dense, the foraminifera will react by growing smaller shells which will leave the surrounding seawater more alkaline. And seawater with higher alkalinity can absorb MORE carbon dioxide from the atmosphere!

It's an important discovery that may impact future climate prediction models and shows how even the smallest, teeniest, tiniest critters can have huge impacts on the global ecosystem.

Dive into the study [HERE](#) and a summary article [HERE](#)

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