



Smithsonian

Color-Changing Cephalopods



Doña Herweck Rice

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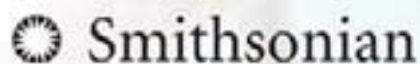
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Vanished!

In the deep blue depths of the ocean, two divers explore the shimmering world around them. Through their masks, they look closely at the plants and animals below the surface. Each creature is more interesting than the next. And they have heard stories from other divers that octopuses live in the area. They hope they will be lucky enough to find one.

Just then, one diver spots a rocky outcrop below and signals the other diver to come explore it. Breathing through their scuba equipment, the two divers swim down. As they turn the corner, they see just what they hoped: an octopus! The happy divers turn to each other and grin, high-fiving each other. They quickly turn back to the octopus. But it has vanished! The divers have a wide-open view of the sea around them, and it seems impossible that the octopus just disappeared. Where could it be, and how in the world could they have missed it?



An octopus defends itself by inking as it flees from two scuba divers.



Cephalopods, such as octopuses, have long arms and complex heads. The word *cephalopod* comes from the ancient Greek words *kephale* (keh-PAH-leh), meaning “head,” and *podos*, meaning “foot.”

Hiding in Plain Sight

It is possible the octopus did not go anywhere at all! If the divers know where and how to look, they will see it right in front of them. The octopus, like other cephalopods, can blend with its environment. It can hide in plain sight. It does this through **crypsis**. This is a set of methods by which animals change themselves to avoid detection. They may change their texture, shape, posture, or color. Through a combination of these means, they can hide from predators or surprise their prey.

A day octopus changes its color and texture to blend into a dead coral reef.



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