

Down in the foreboding deep sea world, and up in the colorful coral reefs, there are many amazing creatures. But one in particular may stand out. Juxtaposed with the coral whites and reds or the sandy plains a mile down, the nudibranch is known for bright, vibrant color patterns. What makes these evolved ancestors of the snail especially fascinating is that no two are alike; the differences of each individual nudibranch are as vast as the ocean in which they live.



Photo by David Doubilet, National Geographic

Getting their name from the feather-like gills on their backs, “nudibranch” means “naked gill”. With about three thousand known species of nudibranch (and a scientific estimate that only half have been discovered) there is bound to be some diversity.

But the diversity found is

mind-boggling. From toxic to nontoxic, from nocturnal to diurnal, from under an inch to close to a foot in length, these gastropods* define variety. While a few nudibranchs can swim freely, most slither along with the speed of a slug, oozing a trail of slime behind them. Those who don’t move during the day tend to have brilliant camouflage to blend in with their surroundings. The species that move during the day to forage for food are decorated with incredible



bursts and swirls of color: a warning to any hungry animals that these mollusks ** are toxic. Some smart, nontoxic nudibranch, however, can copy the color patterns of those who are toxic, and are left to live another day. While some poisonous nudibranchs create their own toxins, others attain them from the food they eat. Other nudibranchs take stingers from animals on their menu, such as anemones and use them as weapons. No matter how they get their defense mechanisms, these tiny animals pack a punch.

Few species can handle what the tiny gastropods have to offer, with the exception of a few fish, turtles, and crabs. When the poisonous glands are removed, people in Chile, Russia, and Alaska are known to boil or roast them. Others just snack on them raw. This is also a habit of the nudibranchs themselves; when an encounter between them does not lead to mating (nudibranchs are hermaphroditic), they will eat each other. While few have teeth, many nudibranchs rely on enzymes to eat their prey.

The nudibranch is smaller than many animals in the ocean, but also stronger. The fascinating life these creatures lead lasts about a year. Nudibranchs may lead a slow life, but it is a life as incredible and vivid as the creatures themselves.



Photo by David Doubilet, National Geographic

* A gastropod is a class of mollusk that tends to have a shell, a muscular, flattened foot, and two head-mounted sensors. Snails and slugs are examples of gastropods.

** A mollusk is the genus group that gastropods are a part of. Mollusks have no backbone and a soft body, like octopi or snails.

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