

Portuguese Man o' War

(December 2019)

The Portuguese man o' war is often called a jellyfish, but it's not really a jellyfish. It's closely related, though. In reality, a Portuguese man o' war is something called a siphonophore. A siphonophore isn't a single organism—it's a colony of genetically identical individuals, or clones. These clones are called zooids and are attached together. They can't survive on their own and must work together.

A Portuguese man o' war is made up of four types of clones that are grouped together underneath a balloon-like structure that is full of gas. The structure looks much like a bladder and is translucent, but tinted blue, pink, or purple. It can be anywhere from three to 11 inches long and extends about five inches above the water. The man o' war's gas bladder is filled with carbon dioxide, nitrogen, oxygen, and argon. If the man o' war is attacked at the water's surface, it can deflate its gas bladder, allowing the attached colony of clones to safely submerge beneath the waves. It's this distinct gas bladder that gives the Portuguese man o' war its name. That's because the balloon-like body part resembles an 18th century Portuguese warship under full sail.

In addition to the clones hanging from the Portuguese man o' war's gas bladder, there are also tentacles—many

venomous tentacles. Together with the clones, they make up strands that grow to roughly 30 to 100 feet in length. Those tentacles contain tiny capsules filled with coiled, barbed tubes which carry venom. The Portuguese man o' war uses the venom to paralyze and kill small fish and crustaceans. For people, the venom is less deadly, but it's still painful and can leave skin welts. Just ask the 10,000 people who get stung in Australia each summer.

There are a variety of treatments for Portuguese man o' war stings, and not everyone agrees on which are the best. Some people use vinegar while others use an ammonia and water solution. These are followed by shaving the area with a razor that has its blades rinsed between each stroke. The idea is to shave away any remaining barbed tubes. Hot packs are then typically applied to help break down the toxins. No matter what method is used, none of them are pleasant, and they're all pretty painful.

As you've probably guessed, the Portuguese man o' war has few predators. An exception is the loggerhead turtle which regularly feeds on the Portuguese man o' war. Lucky for them, loggerheads have thick skin on their tongues and throats, so tentacles and venom have no effect. Other predators are the blue sea slug and ocean sunfish. This just goes to show that even the most intimidating and scary-looking creatures have their own nemeses—even creatures named after a warship.

Teacher Resources – Vocabulary

Potential Words for Further Study: These words not only help with comprehension of the passage, they also appear more frequently in a wide spectrum of reading, especially in academic text. Therefore, further study of the meaning of these words may be beneficial. The words in this list can be incorporated into subsequent lessons.

Wilson Reading System Vocabulary Level: AB

Words for Quick Discussion: Consider discussing these words as they are encountered to help students comprehend the passage. A quick discussion in student-friendly language while reading the text is best.

distinctive (adj) making distinct; distinguishing from others; characteristic

identical (adj) the very same

structure (n) something composed of interrelated parts forming an organism or an organization

Wilson Reading System Vocabulary Level: B

bladder (n) a distensible membranous sac, usually containing liquid or gas, especially the urinary bladder

clone (n) a group of organisms or cells of the same genetic constitution that are descended from a common ancestor by asexual reproduction, as by cuttings, grafting, etc., in plants

toxin (n) any poisonous substance produced by bacteria, animals, or plants

translucent (adj) allowing light to pass through partially or diffusely; semitransparent

venom (n) the poison secreted by some snakes, spiders, insects, etc., introduced into the body of the victim by bite or sting

***Definition Source:** Collins English Dictionary. Retrieved from*

<https://www.collinsdictionary.com/us/dictionary/english>

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1. Visit the Coh-Metrix Text Easability Assessor website at <http://tea.cohmetrix.com/>. If you do not already have a login and password, create one. It is free and easy to sign up for access to the website.
2. Once you have created an account and sign in, you will be taken to a page with an empty, white text box. Copy and paste the text from this passage into the empty, white text box. Make sure you are only copying and pasting the body of the passage. Do not include the title, date, or any of the resources present in the passage.
3. When you have pasted the passage into the text box, click on the red button beneath the text box that says "Analyze." There will be a short delay and after a few seconds, you will see a bar graph appear to the right of the screen.
4. The bar graph will give you the percentages for several text characteristics including: narrativity, syntactic simplicity, word concreteness, referential cohesion, and deep cohesion.
5. Below the bar graph, the Flesch Kincaid Grade Level is also included for your benefit.
6. Lastly, a paragraph is provided that explains the meaning of the measurements of the text characteristics for your particular passage.
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