

Empty Oceans

- 1 Imagine going to a sushi restaurant that could no longer serve fish. Such a scenario may seem very difficult to believe, but the fish populations of the earth's oceans face severe threats. Like land animals that have been hunted to near extinction, such as buffalo, elephants, and tigers, marine



animals also need to be protected if they are to survive into future generations. Governments **1** (encourage / must encourage) **sustainable** fishing practices and other regulatory guidelines to ensure that the oceans preserve their variety of animal and plant life as well as sufficient fish populations.

sustainable: able to continue to use longer; continuing for future generations

2 The oceans are being **depleted** primarily due to consumer demand for seafood, which creates a financial **incentive** for marine businesses to overfish. As National Geographic documents, "Demand for seafood and advances in technology have led to fishing practices that are depleting fish and shellfish populations around the world. Fishers remove more than 77 billion kilograms (170 billion pounds) of wildlife from the sea each year." Similarly, Pichegru and her colleagues (2012) researched the challenges facing fish populations due to industrial fishing, concluding that "the development of industrial fishing in the twentieth century has reduced the total number of predatory fish globally to less than ten-percent of pre-industrial levels . . . and profoundly altered marine environments" (p. 117). Because of this enormous reduction, many species of fish and shellfish cannot reproduce quickly enough to **compensate for** the numbers that have been removed, which further **compounds** the problem.

to deplete: to use up; to finish all of something

an incentive: a reason or motivation to do something

3 **2** (Despite / What is more), shifting ocean environments have made it very difficult for many fish to find enough prey to feed upon, and without a sufficient food supply, their population growth can be severely limited. Overfishing causes many other problems in the oceans. Changing the oceanic environment drastically multiplies the challenges that sea creatures face, as evidenced by such factors as the **collapse** of coral reefs in oceans throughout the world and other such worrisome trends.

to compensate for: to make up for; to substitute for

to compound: to make something worse

4 **3** (As a result / While) some people may **downplay** the problem of overfishing of our oceans, the statistics confirm its **gravity**. The number of fish is decreasing, and fishermen have to go farther and farther to find fish to catch. Stronger government controls of the fishing industry would help limit overfishing. **4** (Additionally / On one hand), tax breaks could be given to companies that operate fish

collapse: destruction; breakdown

to downplay: to minimize the importance of something

gravity: a very serious quality or condition

farms, which are perhaps one of the simplest solutions to this problem. Rather than taking fish and shellfish from the ocean, fish farmers build unique facilities, such as tanks, aquariums, and other **marine enclosures**, to raise these animals. 5 (Before / While) fish farming may be unfamiliar to many people, the practice dates back to 2000 B.C.E. in China, and its training manuals include a 475 B.C.E. essay on raising carp by Fan Lai (Shepherd and Bromage, 1992, p. 2). With modern advancements in technology, fish farming promises to **revolutionize** how humans fish.

marine: having to do with the ocean

an enclosure: an area or container for keeping animals

to revolutionize: to change in a significant way

- 5 Because the oceans are huge, most people have not thought about oceans without fish. 6 (Because / Nevertheless), the fish in our oceans are in real trouble. In 1992, the United Nations Conference on Environment and Development defined the goal of sustainable development as meeting the “needs of the present without limiting the ability of future generations to meet their own needs” (Caulfield, 1997, p. 167). Without practical responses to the issue of sustainable fishing, including the necessity of **suspending** certain fishing practices and monitoring the health of the oceans, the planet risks losing many species of marine wildlife. By limiting fishing in the oceans and developing commercial fish farms, we can succeed in both raising fish for human consumption and preserving fish for the future.

to suspend: to stop something, usually for a short time

References

- Caulfield, R. (1997). *Greenlanders, whales, and whaling: Sustainability and self-determination in the Arctic*. Hanover, NH: University Press of New England.
- Pichegru, L., Ryan, P., van Eeden, R., Reid, T., Grémillet, D., & Wanless, R. (2012). Industrial fishing, no-take zones and endangered penguins. *Biological Conservation*, 156, 117–125.
- Shepherd, J., & Bromage, N. (1992). *Intensive fish farming*. Oxford: Blackwell Science.
- Sustainable fishing. National Geographic Education. (n.d.) Retrieved from http://education.nationalgeographic.com/education/encyclopedia/sustainable-fishing/?ar_a=1

Building Better Vocabulary

ACTIVITY 11 Practicing Three Kinds of Vocabulary from Context

Read each important vocabulary word or phrase. Locate it in the essay if you need help remembering the word or phrase. Then circle the best synonym, antonym, or collocation from column A, B, or C.

Type of Vocabulary	Important Vocabulary	A	B	C
Synonyms	1. a colleague	a co-worker	a friend	an incident
	2. enormous	fancy	gloomy	huge
	3. alter	change	imagine	vanish
	4. preserve	join	protect	serve
Antonyms	5. a solution	an answer	an opinion	a problem
	6. unique	common	purchase	respond
	7. deplete	need	increase	omit
	8. downplay	emphasize	revolutionize	suggest
Collocations	9. ___ limited	happily	next	severely
	10. a vast ___	entry	family	number
	11. ___ than	essential	given	rather
	12. a ___ incentive	financial	kind	population