



MLA-031-Rise of - Cephalopods-World's Oceans

[Join us to save coral reefs](#)

Vic Ferguson

The World Federation for Coral Reef Conservation 281.971.7703 P.O. Box 311117 Houston Texas 77231
5/25/16

Rise of the cephalopods! Octopuses, cuttlefish, and squid booming in changing environment



Melissa Breyer (@MelissaBreyer)

Science / Animals



© Giant Australian cuttlefish (*Sepia apama*)/Scott Portelli, Wildlife Photographer,

@scott.portelli



MLA-031-Rise of - Cephalopods-World's Oceans

[Join us to save coral reefs](#)

Vic Ferguson

The World Federation for Coral

Increased ocean temperature and depleted fish stocks, among other changes, appear to be good for cephalopods.

I've marveled before at the extraordinary ways of the octopus, a creature so "other" it's almost impossible to



fathom. They have camera-like eyes, camouflage tricks worthy of a CGI studio, and not two but eight arms – that happen to be decked out with suckers that possess the sense of taste. The arms can execute cognitive tasks even when dismembered. Octopuses can conquer mazes, solve puzzles and unscrew jar lids. One notorious cephalopod fugitive, pictured below, recently **escaped from his aquarium tank**, slinked his way across the floor, and slithered to the freedom of the deep blue sea through a 164-foot long drainpipe.

YouTube/Video screen capture

Just because they don't have opposable thumbs doesn't mean they're not wildly advanced. They probably snicker about human's insufficiencies, what with our measly two arms and inability to make our skin look like rock or algae in a matter of seconds. (Exhibit A, below.)

So is it any wonder that these highly adaptable animals – soon to be our tentacled overlords, no doubt – are not suffering, but rather proliferating, under the conditions of a changing environment?



MLA-031-Rise of - Cephalopods-World's Oceans

[Join us to save coral reefs](#)

Vic Ferguson

The World Federation for Coral Reef Conservation 281.971.7703 P.O. Box 311117 Houston Texas 77231

Such is the conclusion of a **recent study** from the Environment Institute at the University of Adelaide in Australia. The researchers found that cephalopods' numbers have increased significantly over the last six decades. As a class of mollusks, cephalopods include octopuses, cuttlefish, and squid.

"The consistency was the biggest surprise," says Zoë Doubleday of the University. "Cephalopods are notoriously variable, and population abundance can fluctuate wildly, both within and among species. The fact that we observed consistent, long-term increases in three diverse groups of cephalopods, which inhabit everything from rock pools to open oceans, is remarkable."

Previous research has found that cephalopod populations are highly responsive to environmental change, with ocean warming an especially plausible driver of the observed increase, notes the study. "Further, it has been hypothesized that the global depletion of fish stocks, together with the potential release of cephalopods from predation and competition pressure, could be driving the growth in cephalopod populations."

The study included 35 cephalopod species or genera representing six families. The data show that cephalopods, of many different stripes and living all over the world in numerous environments, are on the rise.

And while I may be secretly rooting for the octopuses, cuttlefish, and squid – call it some kind of strange misplaced cephalopod schadenfreude – the truth is the ramifications are bound to be complicated. You can't just have significant population increases without the possibility of ecosystems going wonky.

"Cephalopods are voracious and adaptable predators and increased predation by cephalopods could impact many prey species, including commercially valuable fish and invertebrates," the researchers write. "Conversely, increases in cephalopod populations could benefit marine predators which are reliant on them for food, as well as human communities reliant on them as a fisheries resource."



MLA-031-Rise of - Cephalopods-World's Oceans

[Join us to save coral reefs](#)

Vic Ferguson

The World Federation for Coral Reef Conservation 281.971.7703 P.O. Box 311117 Houston Texas 77231

There is no crystal ball that can predict where this trend will go, but Doubleday says that they are now looking to confirm the specific factors that may be behind the cephalopods' proliferation.

"It is a difficult, but important, question to answer, as it may tell us an even bigger story about how human activities are changing the ocean," she says.

*Vic Ferguson
The World Federation for Coral Reef Conservation
Executive Director
P.O. Box 311117
Houston, Texas 77231
vic.ferguson@wfcrc.org
www.wfcrc.org
281.886.7428 (office)
512.986.1902 (cell)*

The only thing necessary for the triumph of evil is that good men do nothing"....Edmund Burke