Dolphin Feeding Techniques: How to Eat an Octopus When you Don’t Have Hands

April 7, 2017

What do predators do when the prey is too big to be swallowed whole? It really depends on the size, texture and shape of the targeted victim, but, generally speaking, it goes through some form of “processing” before being consumed.

Different animals around the world have found clever, interesting and, at times, dangerous ways of handling their game. In the oceans, leopard seals literally thrash seal pups and seabirds to break them down into smaller, more digestible chunks. Shaking and tossing a prey is a well-documented way that Australian fur seals deal with large fish and cephalopods, and killer whales can toss a sea lion or throw the entire body of a dusky dolphin into the air.

Another species that uses the “shake and toss” method is the bottlenose dolphin. In my field research on marine mammals off Southern California, I have occasionally seen both coastal and offshore bottlenose shaking large prey – usually fish, but at times even octopuses – then repetitively tossing them high into the air.

I have always been fascinated by observing and reading about this unusual food-handling technique adopted by dolphins. So, when I spotted a scientific paper by Kate Sprogis, a behavioral ecologist at the Murdoch University Cetacean Research Unit, and her colleagues, describing in detail and for the first time the “shaking and tossing” behavior of live octopuses by a population of Indo-Pacific bottlenose dolphins, I was immediately captivated.
Just imagine catching and eating an octopus: not an easy task if you have no arms! And also a risky task, considering that octopuses have been observed latching onto a dolphin's side and back – dangerously close to the blowhole – attaching themselves to a dolphin's belly (and its genital slit!), and even suffocating attackers with their long tentacles.

Sprogis and her team have recorded the handling technique of octopuses by dolphins, mostly adult females, on 45 different occasions in the turbid, shallow waters off the coast of Bunbury, in southwest Australia. What these researchers discovered was a recipe not so different from that of a chef: First, the dolphin removes the octopus' head; then it's time to tenderize its entire body by shaking it — also ensuring to “disarm” the suction cups with some additional tossing. The final step of the process is the breaking of the prey into smaller, more edible pieces by slamming it against the water multiple times. Voila! The process part of the recipe is done in just a few minutes and the octopus is ready for dinner!
What's the reward for such a simple, but at the same time, dangerous recipe? Sprogis thinks it might be the high nutritional value that these dolphins can't find anywhere else. Regarding the risky business part, well... the danger remains, but the fact that these dolphins catch octopuses in murky waters and during the mating season of their prey (when they are more vulnerable) may facilitate both catching and handling them. Not bad this strategic mind of a dolphin!

Maddalena Bearzi has studied the ecology and conservation of marine mammals for over twenty-five years. She is President and Co-founder of the Ocean Conservation Society, and Co-author of Beautiful Minds: The Parallel Lives of Great Apes and Dolphins (Harvard University Press, 2008). She also works as a photojournalist and blogger for several publications. Her most recent book is Dolphin Confidential: Confessions of a Field Biologist (Chicago University Press, 2012; paperback 2016).

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