

The tiny Alphabet Cone larva, from Sanibel. Shell measures 1.5 mm, or 0.06 inch. photo by José H. Leal

The i-Conic Alphabet Cone

By José H. Leal, Science Director and Curator, Bailey-Matthews National Shell Museum

The cover of this magazine presents a beautiful photo by Melanie Moraga of three celebrated local species, the Lightning Whelk, the Atlantic Fig Snail and the Alphabet Cone. Although all three species display remarkable features on their shells and as part of their life habits, I am partial to Alphabet Cones (*Conus spurius*) for their good looks and some biological traits.

Alphabet Cones have typically conic shells with striking orange or brownish markings that contrast with a pure white background. Their feeding habits involve the use of a complex venom injection system. At the core if this system are harpoon-like teeth that inject "cocktails" of toxic substances to subdue their favorite prey, marine worms (or possibly other mollusks).

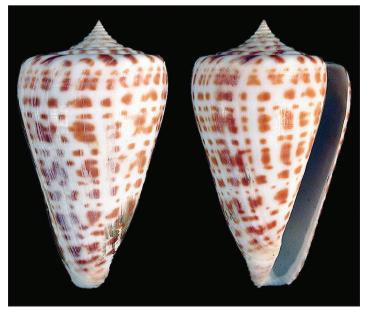
Their mode of growth from eggs to adults is also distinctive. Some mollusks hatch from egg capsules directly as crawling young adults, others yet undergo a relatively long, free-swimming larval stage before settling to the bottom. But Alphabet Cones hatch from egg capsules, swim only for a couple of hours at most, then settle to the bottom as young adults.

The unusual photo of the baby Alphabet Cone in this article was taken at the Bailey-Matthews National Shell Museum. It was published for the first time as part of a 2017 scientific article prepared by Museum staff (José H. Leal and Rebecca Mensch) in cooperation with cone snail expert Alan J. Kohn of the University of Washington in Seattle.

Reference: Leal, JH, AJ Kohn and RA Mensch. 2017. A veliconcha unveiled: observations on the larva and radula of *Conus spurius*, with implications for the origin of molluscivory in *Conus*. American Malacological Bulletin 35(2): 111–118.



Live Alphabet Cone from Kice Island, Collier County photo by Amy Tripp



Alphabet Cone, shell from Sanibel Island in two views photo by José H. Leal



Alphabet Cone, egg capsules from Sanibel

photo by José H. Leal