

M. S. Taylor and M. E. Hellberg. 2003. Genetic evidence for local retention of pelagic larvae in a Caribbean reef fish. *Science* 299: 107-109.

The pelagic larvae of many marine organisms can potentially disperse across hundreds of kilometers, but whether oceanographic or behavioral mechanisms can constrain dispersal over periods sufficient for the evolution of genetic differentiation remains unclear. Here, we concurrently examine larval duration and genetic population differentiation in a cleaner goby, *Elacatinus evelynae*, a member of the most species-rich genus of Caribbean reef fishes. Despite evidence for extended pelagic duration (21 days), populations of *E. evelynae* show strong genetic differentiation: among color forms (1.36 to 3.04% divergent at mitochondrial cytochrome b) and among island populations within color forms (ϕ_{ST} up to 70%). These results suggest that marine populations can remain demographically closed for thousands of generations despite extended larval duration, and that recognition cues such as color may promote speciation when geographic barriers are transient or weak.