

Since 2001, I have been studying the physiology, behavior, individual growth and population structure of the Caribbean knobby periwinkle (*Cenchritis muricatus*). This work has produced two peer-reviewed publications in top journals (Judge et al., 2009, 2011), several conference presentations, and data for additional manuscripts. Notably, I have been following the fate of 327 tagged individuals since 2003. My previous work has shown these snails live at least 13 years, while growth models predict more than 25 to 30-year life span – longer than any other intertidal or terrestrial snail.

The 2017 hurricane season was challenging for the US Virgin Islands. Irma was the strongest storm ever in the open Atlantic and the first category-5 hurricane on record to hit the leeward islands with sustained winds at least 180 mph (285 kph). On 6 September, 2017, Irma traveled directly over St Thomas and St John (USVI). Approximately two weeks later, Maria was a near miss and passed slightly south over St Croix. While the human and economic damage to the US Virgin Islands was substantial (with continuing recovery efforts), these hurricanes provide an opportunity to assess the role of major disturbance on the population structure and survival of a long-lived snail.

In my application, I proposed to re-capture as many of the original tagged snails as possible. I am excited to report that I was able to collect two tagged individuals (one with a clear identifying number) thus demonstrating that these snails can live up to 17 years and confirming the life-span predictions of Judge et al (2009). The previous 13 years of data strongly suggests that these snails cease to grow at 16.5 mm (shell height) even though most snails continue to grow throughout their lives. In addition, I also proposed to survey snail population sizes post-hurricane to compare with previously collected density data. I re-sampled many of the same field sites from 15-17 years ago and am currently analyzing that data. Anecdotally, I will note that I collected a usually large number of small ( $< 5\text{mm}$ ) individuals. My previous growth models suggest these snails are about 2 years old, thus supporting the role of hurricanes on successful snail recruitment.