

Wasting-like lesions occurring on California Sea Cucumbers

by Linda Schroeder

While reviewing some dive photos with Karin Fletcher, Karin pointed out some sick-looking Giant California Sea Cucumbers, *Parastichopus californicus* (Stimpson, 1857), that she had been seeing. Between October 29, 2016 and April 4, 2017, Karin had photographed eleven different symptomatic specimens while diving the south side of Rich Passage in Puget Sound, WA. She had not witnessed this on sea cucumbers during the last seven years at this location.

I passed this information along to Michael Kyte, who participates in seastar monitoring to see if he had ever seen something like this. He replied he had seen some years ago, but assumed it was damage from attacks by the Sunflower Star, *Pycnopodia helianthoides* (Brandt, 1835). Of course the Sunflower Star population has been nearly wiped out by the seastar wasting disease and at best only some young juveniles are spotted these days. Karin commented that she had yet to see any return to her dive area, but she does have a few Leather Star, *Dermasteria imbricata* (Grube, 1857), in residence.

Michael further passed along this information to Melissa Miner, a researcher at University of California-Santa Cruz. Melissa indicated that there “had [been] some reports over the past few years of cucumbers with possible lesions, but nothing on the same scale as sea stars.” She also passed along some information from another colleague who mentioned that cucumber disease events had occurred in Sitka, AK and in British Columbia but testing had shown they weren’t caused by the sea star wasting disease (SsaDV). Further testing needed to be done for other viruses or bacteria which may cause echinoderm diseases. We also learned that last fall, in southeast Alaska, more California sea cucumbers were being found with lesions and dissolving tissues. This cucumber is commercially fished in Alaska and apparently many were arriving at the processing plant with these symptoms.

We are now curious if anyone else has been spotting “sick” sea cucumbers and if this is just a sporadic event or a widespread die-off like the seastars. If you have, please pass that information along – where, when,



Above - Symptomatic sea cucumbers show white lesions and fissures across their body. Both photos were taken in Rich Passage. Photo 1 was taken in Nov. 2016. Photo 2 was taken Feb. 2017. (Karin Fletcher photos)

Below - Healthy California sea cucumbers. Typical color is reddish, but they are variable and may be nearly white. Red specimen was photographed in Aug. 2011 in Freshwater Bay, WA. White specimen was photographed Aug. 2014 at Green Point, just east of Port Angeles, WA. (Nancy Elder photos)

