

Porifera – Calcareous sponges

UNDERWATER FIELD GUIDE TO ROSS ISLAND & MCMURDO SOUND, ANTARCTICA

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Photographs: Stacy Kim, Norbert Wu



The National Science Foundation's Office of Polar Programs sponsored Norbert Wu on an Artist's and Writer's Grant project, in which Peter Brueggeman participated. One outcome from Wu's endeavor is this Field Guide, which builds upon principal photography by Norbert Wu, with photos from other photographers, who are credited on their photographs and above. This Field Guide is intended to facilitate underwater/topside field identification from visual characters. Organisms were identified from photographs with no specimen collection, and there can be some uncertainty in identifications solely from photographs.

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rubber sponge *Leucascus leptoraphis*

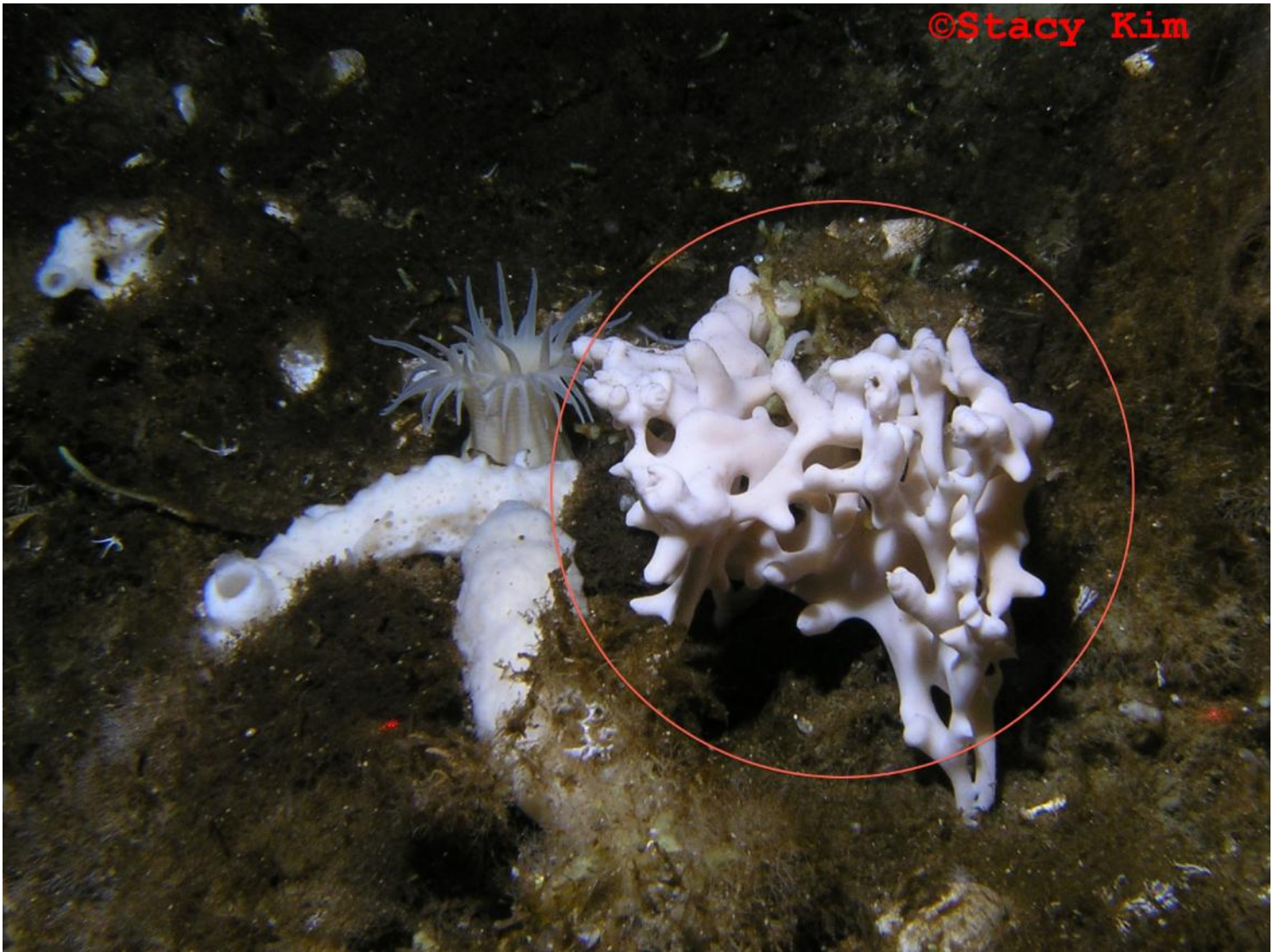


Leucascus leptoraphis is found in Antarctica and the Falkland Islands, South Georgia Island, and Kerguelen Islands, from shallow depths down to 450 meters [1,2,3,6,7,8].

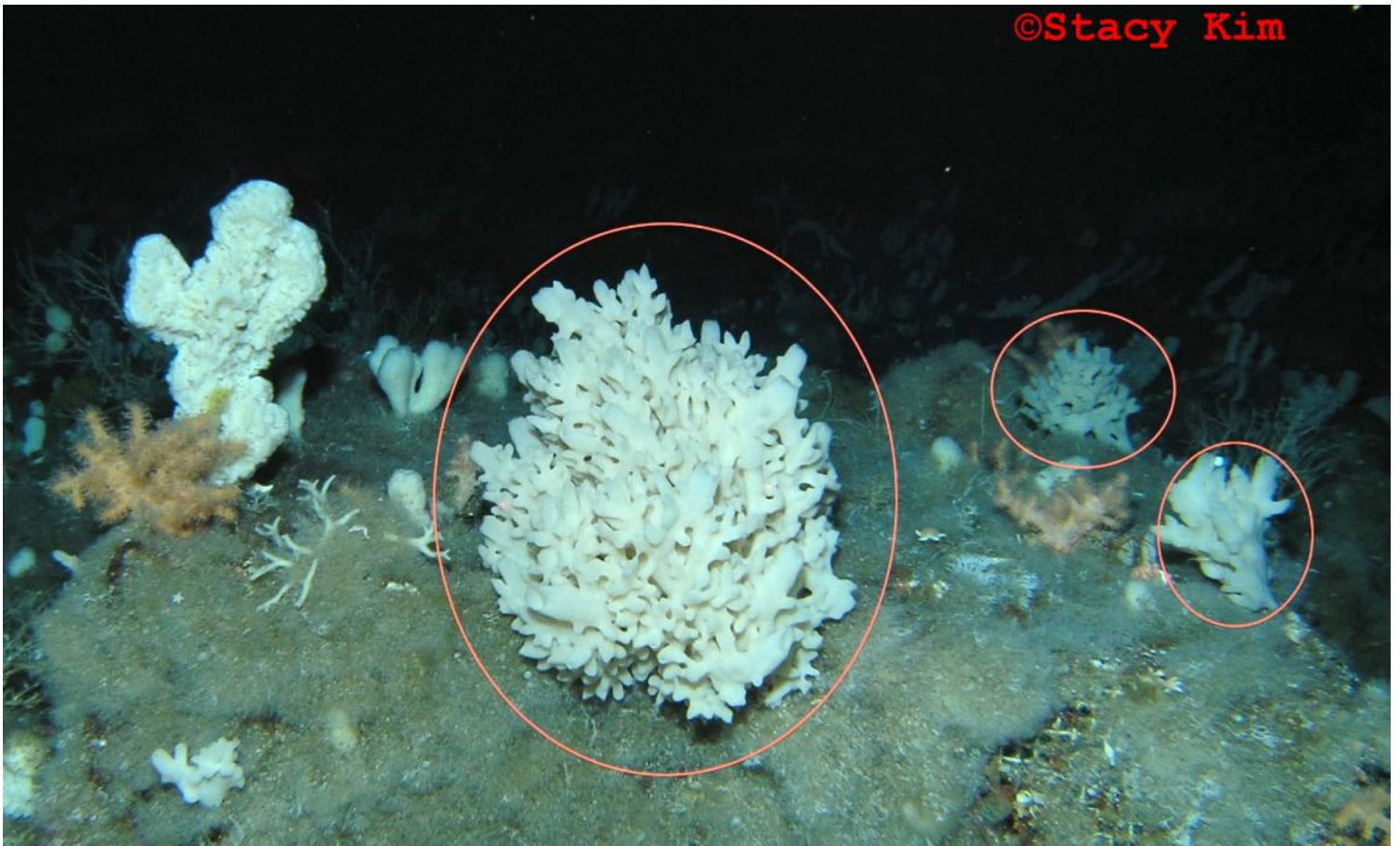
The color of *Leucascus leptoraphis* is light tan, greyish-white to olive-green, and (rarely) pink, and has a soft consistency [2,3,4,5,6].



Leucascus leptoraphis is less commonly seen, being 0.2% of the benthic surface cover and 0.04% of the sponge biomass at a Cape Armitage site [2].



Leucascus leptoraphis may be found attached to the valves of *Limatula hodgsoni* or small rocks, and is usually found in the third benthic zone below 33 meters at Cape Armitage [2]. *Leucascus leptoraphis* grows quickly, and may reach 30 cm asymptote height [4].



Taxonomic Note: Common name taken from Dayton et al, 2016 [4]. First described by C. F. Jenkin in 1908 [5]. Species assigned from *Leucetta* to *Leucascus* in 2013 [6]. Sometimes the species name is misspelled as *leptorhapsis*.

References: **1:** Hooper, JNA & Wiedenmayer, F. Porifera. IN: Zoological Catalogue of Australia. Volume 12. Wells, A, ed. Melbourne : CSIRO Australia, 1994; **2:** Ecological Monographs 44(1):105-128, 1974; **3:** A revision of the classification of the Calcareous sponges; with a catalogue of the specimens in the British Museum (Natural History). Burton, Maurice. London : British Museum (Natural History), 1963; **4:** Journal of Experimental Marine Biology and Ecology 482:38-55, plus 2 supplements, 2016; **5:** Jenkin, C.F. 1908b. Porifera. III. Calcareous. National Antarctic Expedition, 1901-1904 Natural History 4, Zoology: 1-49, pls XXVII-XXXVIII; **6:** Zootaxa 3619(3):275-314, 2013; **7:** Revista del Museo Argentino de Ciencias Naturales, n.s. 7(2):191-219, 2005; **8:** OBIS, Ocean Biogeographic Information System, iobis.org/mapper/?taxon=Leucascus%20leptorhaphis, accessed February 2017

Feb 2017: taxonomic name checked in World Porifera database www.marinespecies.org/porifera