2023 Sea Star Monitoring

Sea Star Monitoring Program:
In 2013, a sea star wasting syndrome, of unprecedented proportions, hit the majority of the west coast. Starting in 2014, the Port Townsend Marine Science Center has monitored sea stars at a few separate sites including two fixed 10 meter x 10 meter plots on Indian Island. The purpose of the monitoring is to gauge the health and number of sea stars over time. PTMSC partners with the Multi-Agency Rocky Intertidal Network (MARINe), a project based out of University of California Santa Cruz, that collects data across the west coast to understand the health and populations of sea stars. Monitoring the plots involves measuring arm length of mottled and ochre sea stars, and gauging the level of wasting. The plots are surveyed 2 - 4 times a year, pending on time, tides, and staff availability. (Use this link for information about MARINe's Sea Star Wasting Syndrome study.)

Sea Star Monitoring Highlights 2023
This year we went out twice, once during a low tide at night in January and again during the daytime low tide of July. No evidence of sea star wasting was observed in the mottled or ochre stars in the subtidal plots at Indian Island Lagoon Beach. A total of 6 healthy ochre stars and 17 wasting-free mottled stars were observed in the two surveys. The average arm length, from star center to arm tip, for ochre stars was 140 mm, the largest specimen measuring a staggering 210 mm! The mottled stars had an average arm length of 105 mm, the longest arm measuring only 150 mm. The total number of individuals observed was 23, which is up from last years' 20.

See graph below or follow this link.

The work with the sea star monitoring is reliant upon the dedication of a few reliable volunteers. In 2023, 5 volunteers contributed a total of 11 hours for this project.

Our 2023 star gazers were:
Jassen Bowman
Gail Wellenstein
Nick deChadenedes
Kathleen Waldron
Madis Kennedy

With AmeriCorps: Hadley Beahan and Lydia Plescher

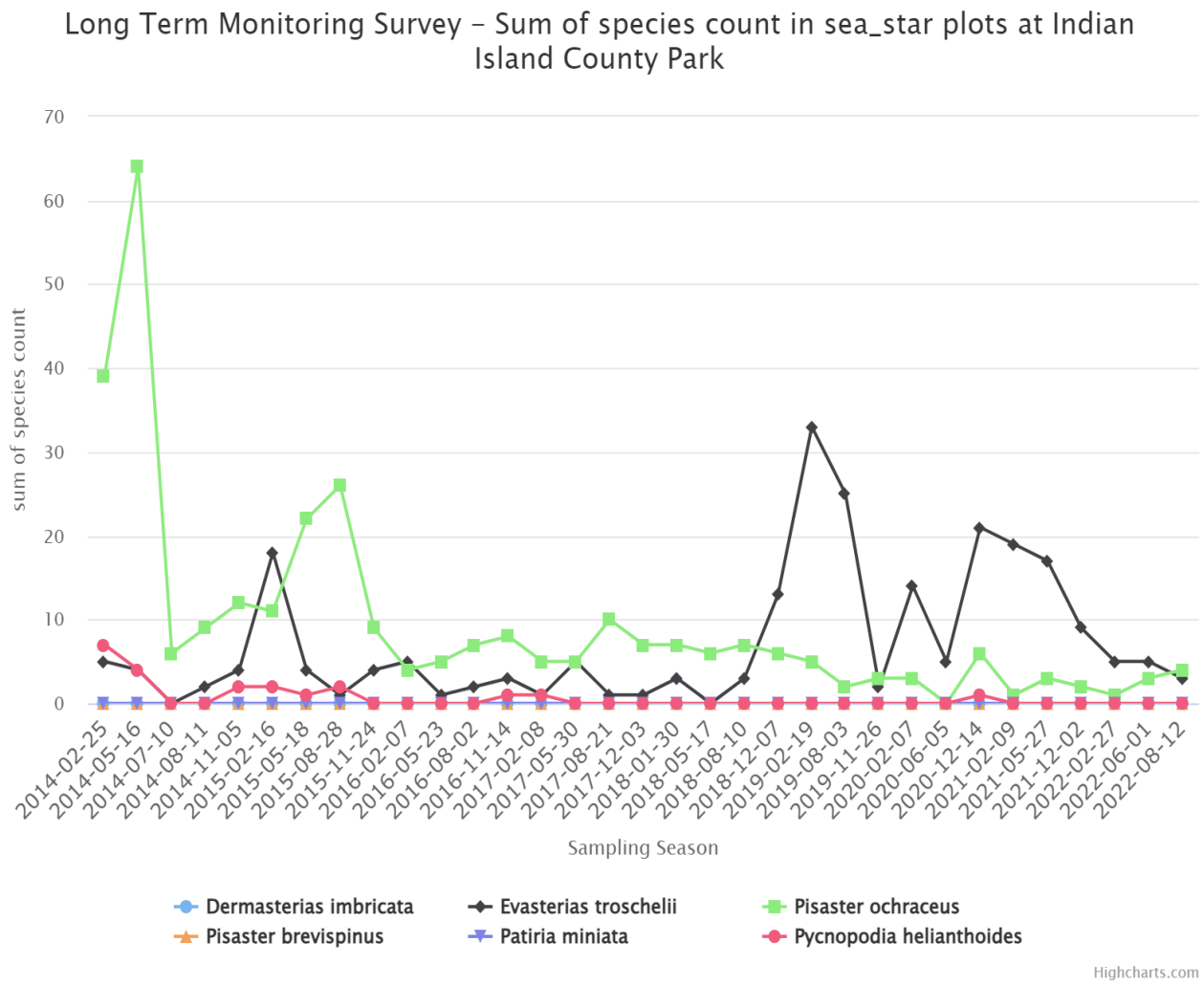

Chart source: MARINe, " Long Term Monitoring Survey - Sum of species count in sea_star plots at Indian Island County park," 2023. Link

Dermasterias imbricata - leather star (not found)
Pisaster brevispinus - pink sea star (not found)
Evasterias troschelii - mottled star
Patiria miniata - bat star (not found)
Pisaster ochraceus - ochre star
Pycnopodia helianthoides - sunflower star (rare)