

Surprising Discovery: Glimmer of hope shines for endangered sea star

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The Oregon Coast Aquarium (OCAq) staff has discovered 25 critically endangered sunflower sea stars in Yaquina Bay.

The discovered site is the most documented in one location since populations were decimated by Sea Star Wasting Syndrome (SSWS).

The group took to the bay in search of fish and invertebrates, which OCAq is permitted to acquire a limited number of each year. During the excursion, staff documented one adult and 24 juvenile sunflower stars—the largest measuring just six inches across.

Fully grown, the stars can reach up to four feet across and have as many as 26 arms.

SSWS caused a mass die off of sea stars along the Pacific Coast in 2013-2017. The National Oceanic and Atmospheric Administration (NOAA) estimates 90 percent of the sunflower star population fell to the disease.

Sunflower stars are a keystone species, native to the coastal waters of the Northeast Pacific Ocean. They play an important role keeping urchin populations in check, preventing the destruction of offshore kelp forests that serve as vital nursery habitat for marine life.

“We have to document this,” OCAq Aquarist Tiffany Rudek said as she began measuring the stars.

Rudek spent the last several years developing an effective treatment for sea stars impacted by stress, injury, or disease—including those suffering with SSWS symptoms. She continues to collaborate with marine life groups involved in sea star research efforts.

After photographing and measuring the sunflower stars, each was carefully returned to the sandy seafloor. This concentration of juvenile sunflower stars may be a precursor of the species' recovery, though only time will tell.

“To come across not one, but twenty five sunflower stars?” Rudek said. “It’s incredible. It’s unprecedented. I am so excited about what this could mean for the species.”