

The Haliotis Herald

The Bodega Marine Lab's White Abalone Captive Breeding Program Newsletter

December 2022

Issue 1

Welcome to the White Abalone Captive Breeding Program's Annual Newsletter

In our newsletter, we will share annual highlights on the White Abalone Captive Breeding Program. Every winter, expect to receive updates on baby abalone, our wild animals, and any new and exciting abalone restoration science.

Successful Spawntaneous Events!!

In 2022, we had THREE spontaneous spawning events that resulted in viable larvae. Before 2022, we have no documented instances of larval rearing resulting from a spontaneous captive white abalone spawn. In Spring 2022, a few 6- and 5-year-old white abalone at Bodega Marine Lab (BML) spawned overnight and we settled about 360,000 larvae. A few weeks later at BML, 9-year-old animals spontaneously spawned resulting in 22,000 larvae! The siblings of those 9-year-olds spontaneously spawned at UC Santa Barbara in late October, and The Cultured Abalone Farm settled approximately 100,000 larvae! This is the latest spawn in the calendar year that we know of for captive white abalone.



Images by Devin Spencer, The Cultured Abalone Farm. Larvae from the UCSB spontaneous spawn are shown on the left. Settled animals about a month old are just visible in the troughs on the right. Arrows are pointing to a few of the juveniles.

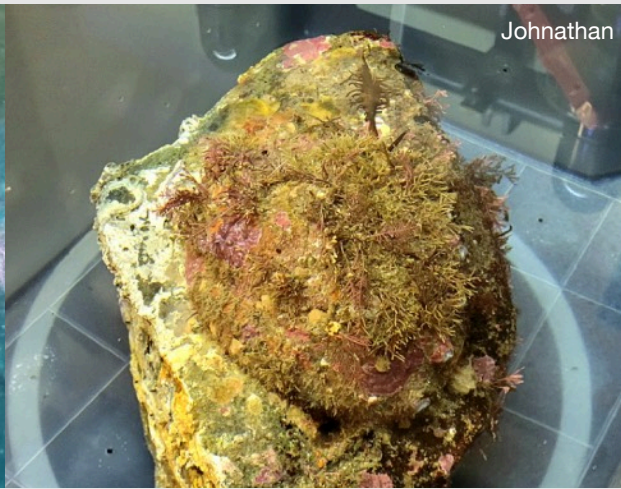
A New Wild-Origin Animal Joins the Program

On September 30, the newest member of Team White Abalone, now known by their tag "Green 417," was collected and brought to the Aquarium of the Pacific (AOP). The California Department of Fish and Wildlife's collection divers were able to collect the entire rock that the abalone was living on, and the animal is eating plenty and undergoing routine health checks at AOP. This brings our total to 11 living wild-origin animals program-wide, and we are hopeful that we will have an injection of new genes during the 2023 spawning season.

[Click here for a video on the animal underwater.](#) [Click here for a video of the collection.](#)



Jenny Hofmeister, CDFW



Johnathan Casey, AOP



Team White Abalone “On Tour”

In July, BML team members Kristin, Shelby, Nora, Leela, and Audrey visited all the white abalone in the program, from Moss Landing to San Diego. In October, Alyssa followed their itinerary and helped outplant some abalone “born” during her very first spawning attempt with the program. Our partner facilities are some of the best parts of this program and success would be impossible without them!



Photos by Kristin Aquilino

Supporting Team White Abalone

Every gift helps us to feed our animals, conduct research, create new white abalone, and grow them big enough to go back into the wild. Thank you for your generous support – we couldn't do it without you!

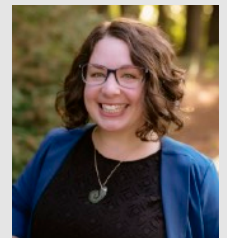
GIVE

Director's Note

I (Alyssa) became the director of the White Abalone Captive Breeding Program at Bodega Marine Lab in August, after three years here as a postdoctoral scholar. This is a dream come true for me – I have been working on abalone science and aquaculture for almost a decade, and I am so grateful for the opportunity to put those skills to the test to save this species.

This year was one of great transition for BML's White Abalone Culture (WAC) Lab. Dr. Kristin Aquilino, Shelby Kawana, Sadie Small, and Chelsey Souza set sail on new career journeys. Kristin is now the Associate Director of the Bodega Marine Lab. Shelby is an Environmental Scientist with the California Department of Fish and Wildlife. Sadie is a Kelp Conservation Research Assistant at the University of Washington. Chelsey is studying for her PharmD at UCSF. We are all extremely happy for them, while greatly missing their presence and leadership in the lab.

In light of all these bittersweet departures, I am so thankful to have such a wonderful and talented team of abalone superstars running the WAC Lab. The WAC Lab welcomed two new specialists, Audrey Deutsch and Leela Dixit in fall 2021, and lead tech Nora Frank in spring 2022. Dr. Lauren Ashlock just started as a postdoctoral researcher in November. We are looking forward to the 2023 spawning season!



Gonad or go home,
Alyssa R. Frederick