

The Haliotis Herald

The White Abalone Captive Breeding Program Newsletter

December 2023

Issue 2

A Busy Spawning Season

In 2023, we conducted *nine* spawning events throughout the program, the most attempts ever in a year. Two of these spawning attempts were coordinated between multiple partner facilities in Southern California, and one was conducted successfully by Moss Landing Marine Labs. We tried new things this year - nighttime spawning, different spawning induction methods, new sperm cryopreservation techniques, and spawning 2-year-old animals. All of this innovative work contributed to the collection of over **11 million eggs** during these spawning events! We are excited to carry this momentum into the 2024 spawning season.



L-R: Augustine (3) helps plunge “eggs.” Nighttime spawn with Leela collecting gametes. SWFSC spawn. CMA spawn. SBMNH-SC spawn. UCD-BML spawn. AOP spawn. UCSB spawn.

Abalone Spawning and Culture Workshop

In early November, the White Abalone Captive Breeding Program and The Cultured Abalone Farm (TCAF) hosted a 3-day abalone spawning and culture workshop at the farm, created and led by Nora Frank (BML) and Devin Spencer (TCAF). Well over a year in the making, this workshop was an enormous feat. Set against a beautiful coastal California backdrop, Nora and Devin trained all of our partner institutions on abalone health, husbandry, spawning induction, gamete collection, and fertilization, among other topics like growing the proper algal layers for settling larvae. A favorite quote from Devin was “If you can grow microalgae, you can grow abalone.” We also got to share in knowledge from our most experienced partners and we all came away with new ideas for spawning season. Immediately following, Moss Landing Marine Labs performed their first successful spawn of white abalone!



Team White Abalone Goes International

Along with many of our outplanting partners, Lauren, Kristin (a keynote speaker!), and Alyssa represented the captive breeding program at the 2023 International Abalone Symposium in Auckland, New Zealand. Leela and Nora traveled from BML to Juneau to work on pinto abalone mariculture and spawning, as part of a new collaboration with researchers at University of Alaska, NOAA Alaska Fisheries Science Center, and local mariculture partners. The BML team got to travel to partner facilities three times this year for spawning events and visiting all of our partners. We are excited about these opportunities to share our knowledge in abalone spawning and care, and to make new connections so we can learn new ways to help save white abalone.



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 into the wild. Thank you for your generous support – we couldn't do it without you!

GIVE

Director's Note

This year was one of great accomplishments for Bodega Marine Lab's (BML) White Abalone Culture (WAC) Lab and for the White Abalone Captive Breeding Program. I am deeply thankful for the incredibly hard work of our team at BML, as well as all of our partners from Alaska to Mexico. We had a record number of spawning attempts, a successful spawning and culturing workshop, and partner-led spawning events. This program is growing and transforming and spreading its knowledge far and wide, the necessary work to save this endangered species.

Our former postdoc Dr. Lauren Ashlock is expanding their research in the WAC Lab as a newly-appointed Assistant Project Scientist. Audrey Deutsch has moved on from her specialist position to become a PhD student at UC Davis. Isaac Treviño has joined us to conduct white abalone health monitoring and research. In the midst of these transitions, the WAC Lab completed two experiments on abalone reproduction and spawning, welcomed new volunteers, and designed a new white abalone display when BML reopened to the public for the first time in three years. Come visit us!

Having been in this role for a little over a year now, I am incredibly thankful to have such a wonderful and talented team of abalone superstars running the WAC Lab and the entire program. We are looking forward to the 2024 spawning season!

Gonad or go home,
Alyssa R. Frederick

