CENTER FOR TROPICAL AND SUBTROPICAL AQUACULTURE

Regional e-Notes ~ November 2025 ~ Volume 17, Issue 11

Letter from the Director

Aloha,

We at CTSA send our warmest wishes to you and your family for a pleasant and uplifting holiday weekend. As we reflect during this season of gratitude, I want to share my sincere appreciation for you --our valued CTSA community-- and for the ongoing support you provide to our program. We are fortunate to work alongside dedicated aquaculture professionals who help guide and strengthen our efforts, especially the members of our Industry Advisory Council and Technical Committee. Their shared expertise and steadfast commitment ensure our program remains effective and impactful, contributing greatly to the success of CTSA's annual plans of work. Many of these individuals also devote extra time by serving on ad hoc committees and taking on roles as project liaisons, and we are genuinely grateful for their exceptional dedication.

L to R: HAAA Board Members Anthony Mau and Ron Weidenbach with ED Dick Jones

Dick Jones addresses HAAA members at the 50th Anniversary Meeting

Earlier this month, we completed our semiannual project update discussions with each project's PI(s) and liaison. These check-ins offer a valuable opportunity to reconnect, assess progress, and delve deeper into the information presented in the annual reports; they also connect projects to valuable industry resources via the liaisons. I am delighted with the strides being made across our active projects, several of which hold significant potential to advance aquaculture in innovative and impactful ways both in our region and beyond.

In addition to the progress within our own projects --and following the reopening of the federal government after the longest shutdown in U.S. history-- CTSA is encouraged to see new provisions in the appropriations bill aimed at strengthening domestic seafood production through aquaculture and fisheries. Demand for aquatic animal protein continues to rise more rapidly than for other protein sources, and global aquaculture growth is helping to meet this need. However, a Rabobank report warns that by 2028, the limited availability of fishmeal and fish oil --key ingredients in aquatic feed-- could constrain further aquaculture expansion. Identifying and developing alternative feed sources is therefore essential to sustaining industry growth. CTSA remains committed to supporting this effort within our region alongside our partners.

On that note, CTSA extends our warm congratulations to the Hawaii Aquaculture and Aquaponics Association (HAAA) on reaching the significant milestone of its 50th anniversary. As pictured, HAAA recently commemorated the occasion alongside longtime members and newcomers to Hawai'i's aquaculture community, and unveiled its strategic vision for the next 50 years. The organization also announced that Dick Jones will join as executive director to help advance the continued growth of aquaculture in Hawai'i; we look forward to working with Dick and HAAA in this capacity.

Mahalo,
Dr. Cheng-Sheng Lee
Executive Director, CTSA

Aquaculture Announcements

December 10 'Hawaii Aquaculture Workforce' Webinar

Waipahu Natural Resources Teacher and CTSA Co-PI, Jeff Garvey, will discuss his ongoing aquaculture workforce efforts --partially supported by CTSA-- and other natural resource activities inspiring students in his classroom on December 10 (zoom link not yet provided; contact UH Sea Grant and/or check the CTSA website next week for additional details).

GSA Webinar: Understanding the Global Seafood Consumer

Global Seafood Alliance and GlobeScan are hosting a webinar titled "Understanding the Global Seafood Consumer: What Drives Trust and Purchase Decisions" on Thursday, December 4 at 10am EST (5am Hawaii). This webinar will provide an overview of market research conducted by GlobeScan for GSA in 2025 in Canada, France, Spain, the United Kingdom and the United States. Seafood consumers were surveyed to better understand purchasing decisions related to seafood and ecolabels, as well as the best methods to inform and engage with consumers on responsible sourcing. There will be a live Q&A at the end. Click here to register (note, those who cannot attend can register for a complementary recording of the webinar).

AquaClip: Traditional Hawaiian fishponds show resiliency to climate change

Traditional Hawaiian fishponds, or loko iʻa, are emerging as a model for climate resilience, according to a recent study from University of Hawaiʻi. Researchers from the university's Hawaiʻi Institute of Marine Biology discovered that indigenous aquaculture systems effectively shield fish populations from the negative impacts of climate change, demonstrating resilience and bolstering local food security, according to a news release from the university, or UH. Their findings were published in npj Ocean Sustainability.

"Our study is one of the first in academic literature to compare the temperatures between loko iʻa and the surrounding bay and how these temperature differences may be reflected in potential fish productivity," said lead author Annie Innes-Gold, a recent PhD graduate from UH. "We found that although rising water

temperature may lead to declines in fish populations, loko iʻa fish populations were more resilient (fish populations did not decline as much as fish populations in the surrounding estuary) to rising water temperatures than those in the surrounding estuary. This result is likely due to the temperature regulation that the loko iʻa receives from freshwater input, both at the surface and below the ground."

The authors found that the combined benefits of fisheries regulations, nutrient flow restoration, and restocking were found to offset some of the potentially negative effects of warming on fish populations and substantially increase short- and long-term estuarine and loko iʻa fish density. Innes-Gold worked with an interdisciplinary team that included university researchers, resource managers and loko iʻa practitioners.

"These findings highlight how important freshwater inputs are as a source of temperature regulation," said Innes-Gold. "They also support the importance of biocultural restoration in terms of enhancing fish populations and increasing social-ecological resilience in a changing climate."

For Hawaiʻi, the findings demonstrate the value that Indigenous knowledge and systems have on guiding modern science.

"Loko iʻa are a system unique to Hawaiʻi, and their restoration can have wide-reaching benefits including cultural preservation, education, healthy ecosystems, food security, and now—from what we found in our study—also climate resilience," said Innes-Gold.

The team used mathematical modeling to simulate various management and climate change scenarios.

"What's powerful about this modeling approach is that it allows us to test management scenarios we couldn't easily experiment with in real life," said senior author Lisa McManus, who leads the Marine Ecological Theory Lab at HIMB. "Our projections show these combined restoration strategies can substantially increase fish populations even under warming, quantifying how Indigenous systems offer viable climate solutions."

"Loko iʻa are designed to take advantage of natural ecological processes—their design increases the residence time of nutrient-rich waters, so it makes sense that it would also increase the residence time of cooler freshwater and result in lower temperatures," said Innes-Gold...

Source: Maui Now // Full Article

This newsletter is written and prepared by the CTSA Information Specialist Meredith Brooks.
The Center for Tropical and Subtropical Aquaculture (CTSA) is one of five regional aquaculture centers in the United States established and funded by the U.S. Department of Agriculture's National Institute of Food and Agriculture (NIFA) under active grants 2020-38500-32559, 2022-38500-38099, 2023-38500-40707, and 2024-38500-42306. The regional aquaculture centers integrate individual and institutional expertise and resources in support of commercial aquaculture development.
CTSA was established in 1986 and is administered by the University of Hawaii.

Center for Tropical and Subtropical Aquaculture
www.ctsa.org

Center for Tropical and Subtropical Aquaculture | University of Hawaii at Manoa 1955 East West Road, Ag. Sci. 216 | Honolulu, HI 96822 US

Unsubscribe | Update Profile | Constant Contact Data Notice

Constant Contact

Try email marketing for free today!