



Letter from the Director

Aloha!

According to the recent GOAL survey, global shrimp production from aquaculture is expected to reach around 4.8 MMT in 2017, barring a new disease crisis. This projected amount is nearly five times the amount produced in 1995. All shrimp farming stakeholders, from researchers and producers to consumers, are part of this success. As I frequently share in this column, it is my belief that the greatest impacts are achieved through partnership and teamwork. Together, we can make a difference.

On the subject of shrimp production, I would like to use this opportunity to acknowledge an important contributor to the growth of the industry. Dr. I. C. Liao, known as the "Father of Tiger Prawns," will soon celebrate his 80th birthday; Happy Birthday, Dr. Liao. Upon completion of his studies in Japan, Dr. Liao started his research in Taiwan in 1968 to close the life cycle of the tiger prawn. Over the following decade, his successful research results coupled with the hard work of shrimp farmers in Taiwan led to a rapid expansion in shrimp farming throughout Asia. In the 1980's, the USDA-led United States Shrimp Consortium started additional crucial research to sustain the global shrimp production catalyzed by Dr. Liao.

As we enjoy the bounty of delicious shrimp now being produced from aquaculture, we must remember the contributions of the various groups who built the industry. CTSA is currently developing our FY2016 Plan of Work, and I have challenged each of our researchers to focus their attention on partnerships and the potential impacts their projects can have on aquaculture in Hawaii and the U.S. Pacific Islands. This is not only a USDA requirement, but it is also important to consumers and the overall successful development of the industry in our region. Let's continue working together for the future benefit of the industry!

Mahalo,
Cheng-Sheng Lee
Executive Director, CTSA

New CTSA Board Chair & Interim CTAHR Dean Dr. Rachel Novotny: Exploring the Relationship Between Agriculture and Human Nutrition

The Center for Tropical and Subtropical Aquaculture is pleased to welcome Dr. Rachel Novotny as Chair of the CTSA Board of Directors. Dr. Novotny is a Professor of Nutrition and the Interim Dean of the College of Tropical Agriculture and Human

Resources (CTAHR) at the University of Hawaii at Manoa.

Though she has been a CTAHR professor for nearly three decades, Dr. Novotny is looking forward to exploring new and various areas of agriculture in Hawaii and the region in her role as Interim Dean. During a recent discussion with CTSA, she expressed great interest in learning more about

In This Issue

Letter from the Director

Interview with new CTSA Board Chair
Dr. Rachel Novotny

NAA Action Alert: Regulatory action
may affect Hawaii aquaculture farmers

Aquaculture Announcements

October AquaClip

www.ctsa.org
www.oceanicinstitute.org



[CTSA is on Facebook!](#)

Click the icon to view and like our
new page

[Join our Mailing List!](#)



aquaculture and how it can be incorporated into local food production and education efforts throughout the Pacific Region.

Dr. Novotny is Principal Investigator of the Children's Healthy Living Program for Remote Underserved Minority Populations of the Pacific, or CHL, a 25 million dollar community-based multi-level intervention, training and outreach program throughout the US Affiliated Pacific region including Marshall Islands, Palau, Federated States of Micronesia, American Samoa, Commonwealth of the Northern Mariana Islands, Guam, Hawaii and Alaska. The program, which focuses on healthy eating and obesity prevention, has implemented mostly vegetable-based projects at this point. However, a small handful of participating jurisdictions in the region have incorporated fish, for example an aquaponics project in American Samoa.

"I welcome the opportunity to bring more aquaculture into the CHL network, and look forward to working with CTSA and partners to do so," stated Dr. Novotny. In a similar (yet much smaller) effort to CHL, the CTSA education and outreach program emphasizes the importance of consuming omega-3 fatty acids and including seafood in a healthy diet. There are opportunities for partnership among the programs to increase the sustainable production of fresh, local food and to improve the well being and health of communities throughout the region.

"Canned meats are a challenge in the diet. Emergencies have helped make canned fish and meats the norm," explained Dr. Novotny. "We have to work explicitly on managing this issue." To this end, the program has already worked with communities to re-plant food gardens immediately after storms. In the future, incorporation of more aquaculture can also improve local food resources and community health during and after emergencies. Dr. Novotny, who has also served on an FAO committee which released recommendations on the importance of seafood for children, summed it up by saying: "Any contributions to producing food locally are crucial, and fish are such an important part of a healthy diet. Aquaculture is a good option for us here in the Pacific."

Dr. Novotny trained in maternal child health, nutrition, epidemiology, anthropology and environmental biology. She has published more than 135 scientific papers related to maternal, infant and child nutrition and health in remote regions and among culturally diverse populations.

NAA Action Alert: Regulatory Action by FWS May Affect Hawaiian Tilapia and Catfish Aquaculture Farmers

The NAA has distributed the following Action Alert concerning recent regulatory action by the US Fish and Wildlife Service (FWS) that may affect Hawaiian aquaculture:

The FWS is using a quick environmental risk analysis, called an Ecological Risk Screening Summary (ERSS), to assess nonnative and native species impacts on the environment and likely locations that they might colonize the United States. The FWS has dedicated several webpages to the ERSS and the reports that they have produced. [Click here](#) to view.

The FWS published a final rule on September 30th, based, in-part, on ERSS reports, that lists 10 nonnative fish and one crayfish as Injurious Wildlife. Authority to do so is derived from the Lacey Act which was passed in 1900 to regulate hunting of wild game to supply commercial markets and prohibit the importation of nonnative Injurious Wildlife. Injurious Wildlife are defined as being "mammals, birds, fish (including mollusks and crustacea) amphibians, and reptiles" that are "injurious to human beings, to the interests of agriculture, horticulture, forestry, or to wildlife or wildlife resources of the United States." Upon listing as Injurious Wildlife these live animals and their gametes, viable eggs or hybrids may not be imported or transported interstate. Information about the 11 species listing and Injurious Wildlife is available [here](#).

Species ERSS

- High Risk
- Low Risk
- Uncertain Risk

Injurious Wildlife: Invasive Species Prevention
www.fws.gov

Invasive Species Prevention: Keeping Risky Aquatic Species Out of the United States – How We are Working

The same day of the final rule for the 11 species, the Center of Invasive Species Prevention (CISP) announced that they had submitted a petition to list 43 species as Injurious Wildlife on September 23rd. Their petition was based solely upon a high risk ERSS findings by the FWS. This petition includes native and nonnative species cultured, possessed or sold throughout the United States for food, water gardening, recreational fishing or biological control. These species, or their hybrids, are the black acara, blue catfish, common carp (i.e., koi), grass carp, guppies, Jaguar guapote, three plecos (Amazon, Orinoco and vermiculated sailfin catfish), red swamp crawfish, and the three tilapia (i.e., blue, Mozambique and Nile). [Click here](#) to visit the CISP website.

This is a complex issue and it is critical to understand that hybrids of these species may be listed as Injurious Wildlife. In particular, tilapia and catfish farmers could be impacted.

The NAA would like to emphasize the importance of responding to the CISP petition with constructive, science-based comments, and is encouraging anyone interested to reach out to NAA staff to obtain information on the US Fish and Wildlife Service's Ecological Risk Screening Summaries (ERSS) or the process to list Injurious Wildlife. The FWS will require some time to review the petition and gather additional information as required by their internal processes.

Aquaculture Announcements

FREE Webinar: Use of Veterinary Feed Directive Drugs in Aquaculture

The United States Aquaculture Society, National Aquaculture Association and North Central Regional Aquaculture Center are offering a free webinar entitled "Use of Veterinary Feed Directive Drugs in Aquaculture." A veterinary feed directive (VFD) is a written statement issued by a licensed veterinarian that authorizes the use of a VFD drug in animal feed. The U.S. Food and Drug Administration issued a proposed VFD administrative rule in 2000, and Aquaflor® became the first VFD aquaculture drug in 2005. Based upon national initiative to prevent the development of bacterial resistance to antimicrobial drugs used in food animals, FDA issued a VFD Final Rule in 2015. Under this rule, all additional antimicrobial drugs used in aquaculture feed (including Romet® and Terramycin®) will transition from over-the-counter to VFD marketing status effective January 1, 2017. This presentation will discuss the impact of the Final Rule on the producers, distributors and veterinarians using VFD drugs in aquaculture.



The Webinar will take place on Tuesday November 1, 3-4pm EST; [click here to register](#). It will be led by Dr. Pat Gaunt, professor of Aquatic Animal Health at the MSU CVM Fish Diagnostic Laboratory in Stoneville, MS. Her research efforts are focused on fish health, toxicology and pharmacology. She performed pivotal studies with Aquaflor® leading to its approval as the 1st VFD aquaculture drug in the US. Dr. Gaunt served as an associate editor for Journal of Aquatic Animal Health for 8 years and is currently its Co-Editor-in-Chief. She serves on the American Veterinary Medical Association Aquatic Veterinary Medical Committee.

EPA Aquaponics Webinar U.S. EPA Brownfields - Promoting Aquaponics in Redevelopment Projects - November 15, 2016

The EPA has scheduled a Webinar, titled "U.S. EPA Brownfields - Promoting Aquaponics in Redevelopment Projects," for November 15, 2016. The purpose of the workshop is to provide an opportunity to "... learn about a new planning tool, developed by U.S. EPA, which can help communities create these healthy food production systems: Aquaponics Business Plan User Guide and Worksheets. This new tool is based on the acclaimed U.S. EPA Urban Farm Business Planning Guide. While originally created to encourage aquaponics development on brownfields [properties that may have hazardous substances, pollutants or contaminants present], the new guide is now available for use in any community. [Participants will] learn about aquaponics business planning, as well as hear about the experience of the East Capital Urban Farm in implementing an urban aquaponics project in Washington D.C. The East Capital Urban Farm is developing urban food hubs to connect neighborhoods to healthy food ..." [Click here](#) to register

Attention Clam Farmers!

A petition has been filed with the NMFS to list clams as threatened. For information, reach out to the [Protected Resources office](#).

AquaClip ~ Global hunger will not end by UN goal of 2030

by Aquafeed.com staff. October 13, 2016.

The need for aquaculture development was further confirmed by new statistics from IFPRI that show the global community is not on course to end hunger by the United Nations Sustainable Development Goal deadline of 2030. If hunger declines at the same rate as the report finds it has since 1992, more than 45 countries - including India, Pakistan, Haiti, Yemen, and Afghanistan - will still have "moderate" to "alarming" hunger scores in the year 2030, far short of the goal to end hunger by that year.

"Simply put, countries must accelerate the pace at which they are reducing hunger or we will fail to achieve the second Sustainable Development Goal," said IFPRI Director General Shenggen Fan. "Ending global hunger is certainly possible, but it's up to all of us that we set the priorities right to ensure that governments, the private sector and civil society devote the time and resources necessary to meet this important goal."

The Central African Republic, Chad, and Zambia had the highest levels of hunger in the report. Seven countries had "alarming" levels of hunger, while 43 countries - including high-population countries like India, Nigeria, and Indonesia - had "serious" hunger levels.

The report outlined some bright spots in the fight to end world hunger. The level of hunger in developing countries as measured by the Global Hunger Index has fallen by 29 percent since 2000. Twenty countries, including Rwanda, Cambodia, and Myanmar, have all reduced their GHI scores by over 50 percent each since 2000. And for the second year in a row, no developing countries for which data was available were in the "extremely alarming" category.

[Original article](#)

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 grants 2012-38500-19566 and 2014-38500-22241. The regional aquaculture centers integrate individual and institutional expertise and resources in support of commercial aquaculture development. CTSA was established in 1986 and is jointly administered by the Oceanic Institute and the University of Hawaii.

Center for Tropical and Subtropical Aquaculture, 41-
202 Kalaniana'ole Highway, Waimanalo, HI 96795

[SafeUnsubscribe™ {recipient's email}](#)

[Forward email](#) | [Update Profile](#) | [About our service provider](#)

Sent by mbrooks@ctsa.org in collaboration with

Constant Contact 

Try it free today