

Abstract

Capacity Building in Marine Biology Research and Teaching

San Carlos University -USAC- is the only public and autonomous university in Guatemala, founded in 1776. CEMA was created in 1977 with the goal of providing higher education and research in the fields of aquaculture, fisheries management, oceanography, and marine biology, however for many years most of the students at CEMA were oriented to aquaculture, probably because shrimp and fish aquaculture grew rapidly in the country.

With the decline of the national fishing stocks, the periodic appearance of harmful algae blooms, and the effects of oceanographic events such as ENSO on climate and agriculture, among others, the interest of students, government and professors for the study of the sea, has increased in the last decades in Guatemala. As a result, since 2018 CEMA began to design an undergraduate program in Marine Biology. In 2019 the Guatemalan government approved some funds for different university projects, including one for the construction of new facilities for CEMA that are named "Campus del Mar". This Project includes the construction of marine biology, oceanography, and aquaculture labs in the area of Monterrico, on the Pacific coast of Guatemala. Funding for these projects had to be approved by the Guatemalan Congress, however, due to political differences with USAC, they were not approved. It is expected that a new Congress in 2024 could approve the projects.

In 2020 CEMA submitted a proposal to AWB USA to find experts in Marine Biology from academic institutions in the USA and bring them to Guatemala to provide technical assistance reviewing the proposal of the new undergraduate program, and advising on the design of labs and infrastructure required for the academic program in Marine Biology.

As a volunteer from AWB USA, Dr. Moira Décima from the Scripps Institution of Oceanography, University of California, San Diego visited Guatemala from August 23 to September 4, 2022. A variety of activities that allowed to interact with the students, professors, and leadership of CEMA USAC took place during this visit. The main activity designed to obtain final approval of the curriculum was a two-day workshop where the coursework and graduation requirements were presented to all the CEMA faculty. Based on the recommendations and conferences of Dr. Décima, both students and faculty at CEMA have a more complete opinion and knowledge of the coursework, labs and facilities that a program on Marine Biology should include. The Commission of Marine Biology has finalized the proposal and sent it to the CEMA Board for approval. It is expected that the career in Marine Biology starts in 2024.