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A Brief History of CINVESTAV, Merida Unit, in Yucatan, Mexico

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This article contains the early history of the Merida Unit of the Centro de Investigación y de Estudios Avanzados (CINVESTAV) research center in Yucatan. The relative isolation of the Yucatan and southern Baja California peninsulas in the early 1970s imposed the need to carry on scientific research activities on the coastline devoted to the study of marine environment. With a high strategic purpose of dealing with the many problems caused by a growing human population, and the requirement of helping to cope with the conflicts of multiple users of the coastal environment in that part of the country, the Mexican government decided to establish a research center in Merida, on the Yucatan Peninsula, Mexico, in 1981. As a result of the same initiative, an earlier center of this type was created in 1976 in La Paz, Mexico. In both cases the goal was performing scientific research and capacity building, oriented to the study of the marine environment. A few years before, the Universidad Nacional de México (UNAM, National University of Mexico) established a marine station in Puerto Morelos, Quintana Roo, on the Caribbean coast, as part of the Instituto de Ciencias del Mar y Limnología (Institute of Marine Sciences and Limnology).

RESEARCH IN EARLY YEARS

The Merida Unit is a branch of the largest research center sponsored by the Mexican government, the Centro de Investigación y de Estudios Avanzados del Instituto Politécnico Nacional (CINVESTAV-IPN). With most of its departments in Mexico City, the Merida Unit was the first one established in another part of the country and its first director was Alonso Fernández, a distinguished physicist with experience in leading several academic groups in Mexico City. At its origin, the unit had two departments, one in physics and a second, the Departamento de Recursos del Mar (Department of Sea Resources). The latter was composed of a small group of six young scientists full of enthusiasm rather than experience. I was recruited as Head of the Department, and I held the position for 7 years.

From the beginning, we had in mind three main goals for our research lines: 1) developing aquaculture technologies of tropical species; 2) the study of applied aquatic ecology; and 3)

fisheries studies. In those days, the British Council played a significant role supporting our development, sponsoring some of our young collaborators to obtain their M.S. and Ph.D. degrees in the topics of aquaculture and marine biology, primarily at the Institute of Aquaculture of the University of Sterling, Scotland. With this group, a long-lasting relationship was established, with the some of the University's professors conducting joint projects at Merida Unit focused on developing the aquaculture technology of native species. Albert Tacon, Lindsay Ross, and Malcolm Beveridge were the most frequent visiting professors.

Within the field of marine biology, the Institute of Marine Biology at Port Erin, Isle of Man, and the University of North Wales played a significant role helping us in capacity building. Ernest Naylor, a visitor on several occasions, provided advice on how to develop a new research group in this area.

The infrastructure of the Merida Unit was set up in a few months, and in September 1981, José López Portillo, President of Mexico, inaugurated this facility (Figs. 1–4). The climate of Yucatan provided a good example of how fast the tropical environment becomes productive. During the last few days before the inaugural ceremony of this facility, the soil for the gardens was set up, the seeds for the grass were planted, and the grass began to grow in spectacular bloom to the point that Professor Naylor made the comment “it's like the creation, because this last week I have seen so much of this infrastructure being finished to the point of seeing the grass growing in a few days where there was nothing but a bare ground.”

In the area of fisheries, we organized several short courses with a national scope on selected topics in modern fisheries science. John Gulland, recently retired from his position in Rome working for the Food and Agriculture Organization, was hired by Imperial College in London, and assisted us with these classes. Other visiting professors were David Cushing and John Pope from the United Kingdom, Keith Sainsbury from Australia, and Gilbert Walter from the United States. We were able to offer this course on two occasions. Some of these distinguished visiting professors assisted us in advising graduate students, first in the marine science M.S. program started in 1982, and later in the Ph.D. program, started in 1987.



Fig. 1. The main gate.



Fig. 3. Buildings of the workshop and the administration.

With the intention of diversifying the academic links with other scientific groups and with the support of Bruce Phillips, from the Commonwealth Scientific and Industrial Research Organization (Australia), a workshop with the Australian Institute of Marine Sciences was organized in Yucatan in 1987. The general topic was the coral reef ecosystem, which was a common interest of both groups. Among the attendants at this meeting were Joe Baker, Director of the Australian Institute of Marine Sciences, and Chris Crossland and Graeme Kelleher from the Great Barrier Reef Marine Park Authority. A book was produced as a result of the workshop (Chávez, 1989).

In the early 1980s, UNAM launched one of its two oceanographic vessels, the *B. O. Justo Sierra*, and gave us the opportunity to use this ship for nearly 2 years, performing oceanographic surveys around the Yucatan Peninsula with the students of the young M.S. program, who acquired a magnificent opportunity of training in the use of current methods of chemical, physical, and biological oceanography.

The location of the Merida Unit provided a unique opportunity to start a long-term project studying coral reefs around the Yucatan Penin-

sula, taking advantage of the boats and ships of the Mexican Navy, which regularly supply water and food to the lighthouse keepers on the remote reef islands. Among our distinguished visitors, Vassil Zlatarski, a specialist in the systematics of corals, spent nearly 1 year there as a visiting professor and made an impressive collection of stony corals, a part of which was donated to the Smithsonian Institution in Washington, DC. Another distinguished visitor with whom I have had a long-term professional relationship as a colleague and friend was John "Wes" Tunnell from Texas A&M University-Corpus Christi. He didn't take too long to think about coming to the Yucatan with his family and spending an 11-month term under a Fulbright Fellowship. Assisted by some of our graduate students, he took advantage of the naval vessels of opportunity and made many surveys of the Campeche Bank reefs and islands. These experiences provided a huge amount of data, and a lifetime of memories. Many data and observations made on those reefs provided a significant



Fig. 2. Main entrance to the administrative building.



Fig. 4. Building lodging the Department of Sea Resources on the right side. In the lower floor there were four laboratories and on the upper floor there were cubicles for the academic personnel.



Fig. 5. View of the facilities of the Marine Station in Telchac, Yucatan, inaugurated in July, 2007.



Fig. 6. The aquaculture laboratory in the Telchac Marine Station.

background for the book on the coral reefs of the southern Gulf of Mexico (Tunnell et al., 2007) whose two main coeditors were distinguished with the Gulf Guardian Award by the Environmental Protection Agency one year later. Some data and samples of mollusks collected by Tunnell helped to increase a fine collection of mollusks organized by the late Esperanza Hidalgo, a founding member of the Merida Unit. David Liddell followed Tunnell with another Fulbright Award, and he, along with our students, primarily studied coral reef communities and geological processes on the Campeche Bank reefs for several months.

LATE EVOLUTION

Unfortunately for this Unit and also for the country, these fine collections were decimated and vandalized during the early 1990s for lack of oversight and long-term care. Despite this sad event, the experience on the Yucatan coral reefs was rescued in a paper published many years later (Zlatarski, 2007) providing detailed data on the scleractinian corals around the Yucatan Peninsula. Simultaneously, the change of authorities led to a change of diversion, and a significant portion of the academic staff was forced to leave the Unit, breaking the momentum that the department had achieved in its developing 10 years. At the end, the gray clouds dissipated and bad times were left behind, allowing the Department of Sea Resources to recover after the crisis and it has maintained a steady state that persists until today.

After 29 years, the Merida Unit of CINVESTAV has become one of the most influential academic institutions in the Yucatan Peninsula, leading the research on marine ecology, coastal management, aquaculture, and fisheries in the region.

The Unit has had a very strong impact in the production of graduate students in these areas. In the summer of 1997, the Unit inaugurated the Telchac Marine Station, located about 1 hour NE from Merida, from which some pictures illustrating its aspect (Figs. 5–7) are included.

A significant role in the activities and continued development of the Department of Sea Resources was played by two persons, Concepción “Connie” Escalante, who was working at the headquarters of CINVESTAV in Mexico City. She decided to move to the Merida Unit just as it was created. Luis Capurro, who had recently retired from the United Nations Educational, Scientific, and Cultural Organization (UNESCO), was recruited less than a year after the founding of the Unit. Connie worked as secretary within the Department and provided valuable experience in this role, taking advantage of her former knowledge of the institution. She worked for the Merida Unit until 2009 and,



Fig. 7. Another laboratory of the Telchac Marine Station.

during the last 10 years, was executive secretary for the Director. Luis Capurro was a physical oceanographer who worked for Texas A&M University several decades ago, before being recruited by UNESCO, where he led a project in Mexico before retiring from both institutions. After his recruitment to the Merida Unit, his international experience and connections were invaluable, providing advice through current times on research lines and to reinforce and develop the Unit, as well as the policies to adopt in the creation of the graduate programs.

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LITERATURE CITED

- CHÁVEZ, E. A. (ED.). 1989. Proceedings of the Workshop Mexico–Australia on Marine Sciences CINVESTAV, IPN, Mexico.
- TUNNELL, J. W., JR, E. A. CHÁVEZ, AND K. WITHERS (EDS.). 2007. Coral reefs of the southern Gulf of Mexico Texas A&M University Press, College Station, TX.
- ZLATARSKI, V. N. 2007. Scleractinians of Yucatán Peninsula, México: Results of 1983–1984 investigation. *CICIMAR Océánides* 22(2):45–116.
- CENTRO INTERDISCIPLINARIO DE CIENCIAS MARINAS (CICIMAR-IPN), AV. IPN s/N, COL. SANTA RITA, PLAYA EL CONCHALITO, LA PAZ, BAJA CALIFORNIA SUR 23096, MÉXICO.