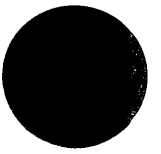


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GARTH, 1991

J. Martin



BENTHIC
MACRO-
CRUSTACEANS
OF THE EASTERN
TROPICAL PACIFIC

MACRO-
CRUSTÁCEOS
BENTÓNICOS
DEL PACIFICO
ESTE TROPICAL



San Diego
Natural History Museum



Instituto de Ciencias del Mar y Limnología
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Dedication to John S. Garth

When we heard from John Garth that he would attend the Colloquium on Benthic Macrocrustaceans of the Eastern Tropical Pacific—which he insists was the last scientific conference he will attend—we decided that it would be fitting to honor this great Pacific carcinologist by dedicating the meeting to him. It was with great pleasure that we awarded him a certificate of recognition from UNAM and the San Diego Society of Natural History. The many students and scientists at the colloquium that John has assisted over the years were especially delighted, and for many this was their first opportunity to communicate with J. S. Garth without relying on the postal services. Thus we also take pride in dedicating this collection of papers to John Shrader Garth, one of the last of the Renaissance scholars, a gentleman, musician, academician, and educator.

It was shortly after his 80th birthday that John traveled from Los Angeles to Mazatlan to attend the colloquium at which the papers in this volume were presented. His contributions to the meeting exceeded expectations. Not only did John sit through every talk, every day, providing stimulating questions and comments, but he also presented *two* papers himself (included in this volume) and gave meeting participants a rare treat when he screened the classic Allan Hancock Foundation documentary film "The New Frontier," based on the 1949 Gulf of California cruise of the *Velero IV*, for which he provided delightful narration.

John Garth is a native Los Angelino, born 3 October 1909. He received his bachelor's degree in music in 1932 from the University of Southern California (USC), and was (and still is) a musician of modest renown. In December 1931, while still an undergraduate in the School of Music, John Garth received an offer that was to change his life forever. Knowing that young John was both an accomplished pianist and an avid butterfly collector, W. F. Skeele (the college dean) and William Strowbridge (Captain Allan Hancock's musical arranger) asked if he might be interested in joining Captain Hancock on the maiden expedition of his new research vessel, the *Velero III*. The proposed destination was the Galapagos Islands. The date was 1 December 1931; the *Velero III* was scheduled to sail 9 days later. Captain Hancock preferred to include a complement of musicians on the ship's manifest, to entertain his guests with chamber music each evening. Hancock's usual pianist, Mr. Strowbridge, was prone to seasickness and had flatly refused to join in such an extended venture. Thus, musician-lepidopterist Garth was the perfect candidate for what was to become a fateful expedition.

Hancock played cello and Garth played piano. In addition, of course, Hancock had a burgeoning interest in natural history. The Galapagos Expedition was an unprecedented zoological (and musical) success, and eventually, through the influence and efforts of John and USC zoology professor Irene McCulloch, Hancock's interests in marine science grew into the now-famous Allan Hancock Pacific Expeditions and eventually the Allan Hancock Foundation itself, which Garth and McCulloch helped design, dedicated in 1940.

John Garth participated on all of the Pacific Expeditions, 1931–1941. He recalls helping Captain Hancock comfort baby seals and sea lions that he was transporting from the Galapagos and Guadalupe islands back to San Diego, for the San Diego Zoological Society. John also recalls one of his most memorable concerts, in the National Theater in Quito, high in the Ecuadorian Andes. Enlarged, the Hancock Ensemble went on to record a number of long-playing records.

John Garth's entomological career has paralleled his music and carcinological careers. His youthful interests in entomology blos-

somed during his participation on the Hancock Expeditions. While on the now-famous 1931 Galapagos Expedition, he visited Barro Colorado Island in Gatun Lake, Panama. There he met Frank Lutz, entomologist and author of an early classic *Field Book of Insects*, and Irving Huntington, another lepidopterist. He also met the medical entomologists at Gorgas Memorial Hospital in Balboa (Canal Zone) and became interested in medical entomology. Some of his first rain-forest collecting was done along the trails of Barro Colorado Island, and there he collected his first blue *Morpho amathonte*. And, John notes, on his second visit to Barro Colorado (with Waldo L. Schmitt), in 1933, he turned up living *Peripatus* among leaf litter. His early entomological interests were also reinforced by his experiences in the Yosemite Field School during 1933. John later went on to write a seminal work on the butterflies of Yosemite (*Butterflies of Yosemite National Park*, Bulletin of the Southern California Academy of Sciences 34:37–75, 1935). Later, at Cornell (1937), he had the opportunity to take formal courses in entomology from Robert Matheson and Oscar Johannsen, and in 1940 he studied entomology at the University of Pennsylvania with A. Glenn Richards, Jr. John went on to collect butterflies throughout the Pacific, in Polynesia, Fiji, Australia, New Zealand, Singapore, Ceylon, India, the Maldives, Japan, Kenya, central and western Europe, and Scandinavia. And of course, he collected extensively throughout western North America, particularly on the islands of Baja California and in the Sonoran desert, regions for which he holds, like many of us, a special fondness.

John has so far published 11 papers and books on butterflies, including field guides to the butterflies of Organ Pipe Cactus National Monument and Yosemite and Grand Canyon National Parks. His most recent entomological contribution was the long-awaited *California Butterflies*, in the California Natural History Guide Series of University of California Press (co-authored with J. W. Tilden, and with paintings by noted nature artist David Mooney).

Participation on the 1931 Galapagos Expedition had a profound effect on John Garth and eventually led him to a career in zoology. Thus he entered graduate school at USC not in musicology but in zoology, receiving his M.Sc. in 1935 and his Ph.D. in 1941, the year after he married his lovely wife Isla (Isla L. Detter). The famous lepidopterist John Adams Comstock, then at the Los Angeles County Natural History Museum, served on his Ph.D. committee. By the time he received his Ph.D., he had already published four papers on butterflies and three on brachyuran crabs.

Just after receipt of his Ph.D., John served his country during the Second World War, first as a civilian instructor in maps and charts at Santa Ana Army Air Base, California, 1942–44 and subsequently by obtaining a direct commission in the Sanitary Corps of the Army Medical Department. After the war, John returned to his brachyuran research at USC. For 10 years he also taught a course in arthropod vectors for parasitology majors, and this course eventually expanded into a course in crustacean biology, perhaps the first in the country. In addition to the ten Hancock Pacific Expeditions to Mexico and Central and South America, his brachyuran research also led to travel in Norway, Sweden, Denmark, the maritime provinces of Canada, and two expeditions to the Great Barrier Reef of Australia. He participated on the International Indian Ocean Expedition (1964) and the expeditions to Enewetak Atoll and the Marshall Islands sponsored by the Atomic Energy Commission (1957, 1959). His working visits to the great European museums took him to London, Cambridge, Leiden, Amsterdam, and Paris.

Perhaps no one's work better reflects the title of this colloquium than that of John Garth, whose long series of monographs and

shorter papers in the Allan Hancock Pacific Expeditions series laid the foundation of our modern knowledge of eastern Pacific Brachyura. It was probably John's initial exposure to island biology on the fateful 1931 Galapagos Expedition that led to his long-standing love of island faunas, and he went on to publish papers on the crabs of Clipperton Island, the Seychelles, Amirante and Caroline Islands, the Philippines, Ceylon, the Maldives, Easter Island, and Efaluk and Enewetak atolls. In addition, his long association with the large and intriguing family Xanthidae has led to a series of studies on central and west Pacific Brachyura, including numerous papers on poisonous crabs and crabs commensal with hermatypic corals.

Through John's friendship with the late L. R. Richardson of Victoria University, Wellington, a connection between New Zealand carcinologists and USC was established in the 1960's. Several of Dr. Richardson's graduate students, including John Yaldwyn (who went on to become director of the National Museum of New Zealand) and Desmond Hurley (who went on to become director of the New Zealand Oceanographic Service), became post-doctoral fellows at the Allan Hancock Foundation. John recalls that his second visit to New Zealand prompted Dr. Yaldwyn to organize a day-long meeting of all the carcinologists in the country, the first time that all 13 of them had ever met together at one time. John opened this conference with an overview of oceanic circulation in the Pacific Ocean, with emphasis on larval transport by means of ocean currents.

Beginning in 1935, John Garth held a series of appointments at USC, moving from "Assistant in Zoology" to "Full Professor" and eventually to "Chief Curator" for the Hancock Foundation. During this time he also served on the Scientific Advisory Committee of the

Charles Darwin Foundation of the Galapagos Islands. During his years of professorship at USC he supervised 10 of his own graduate students, and sat on the thesis committees of an additional 36 students. His own Ph.D. offspring included, among others, Robert Menzies, J. Laurens Barnard, Jens Knudsen, Gary Brusca, Donald Bright, Roger Scapy, Manuel Murillo, John McConaugha, and Mary Wicksten. He also sponsored visits from a number of foreign carcinologists who worked in his laboratory, including Leonila Vázquez (Mexico), William Stephenson (Australia), and Hoon Soo Kim (Korea). His publication list currently exceeds 70 papers, of which 51 are on brachyuran crustaceans.

John organized a number of symposia during his years on the USC faculty, perhaps the most famous being the symposium on Biogeography of Baja California and Adjacent Seas (co-organized with Jay Savage and held in San Diego, 1959). The papers resulting from this symposium, particularly Garth's own paper on brachyuran crab zoogeography, published in *Systematic Zoology*, laid the cornerstone for all future work on Pacific Mexican biogeography.

John retired from USC and the Hancock Foundation in 1975 as Emeritus Professor of Zoology and Chief Curator. In 1987, USC honored him with the Distinguished Emeriti Award, and the same year the Lepidopterists' Society honored him with the John Adams Comstock Award. The dedication of this Colloquium volume to John is just one more small honor in a life filled with influential achievements.

*R. C. Brusca
San Diego
November 1991*