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# Charles Eric "Chuck" Dawson, 1922-1993 [in Memoriam]

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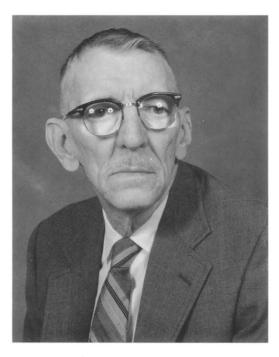
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1922-1993

CHARLES ERIC A truly extraordinary "CHUCK" DAWSON A marine ichthyologist and frequent contributor to Copeia, Chuck

Dawson passed away on 11 Feb. 1993 after a relatively short battle with bronchioloalveolar carcinoma in conjunction with other longerterm lung ailments. Chuck always stopped carefully at train crossings because he did "not want to get killed by a 'damned' train." He retired eight years earlier after 27 productive years at the Gulf Coast Research Laboratory (GCRL) in Ocean Springs, Mississippi. While at GCRL, un-



Charles Eric "Chuck" Dawson, 26 Oct. 1991.

like most scientists today, Chuck switched from spending considerable time as an extremely effective administrative officer to being a highly prolific researcher, rather than the reverse. He was always curator of the GCRL Museum, building up that regionally acclaimed facility to what today probably contains the most extensive collection of Latin American estuarine and inshore marine fishes, including premiere collections of syngnathids, dactyloscopids, and new world gobiids.

Chuck was born 6 Dec. 1922 in Vancouver, British Columbia. His father was a construction engineer, so young Chuck and the Dawson family moved a great deal, including periods in Montreal and Ottawa, Canada; Brooklyn, New York; and Miami, Florida, coinciding with the concurrent erection of still impressive buildings. Then in World War II, as a member of the Royal Canadian Army, he was fortunate to survive the Battle of Dieppe, France, but left that experience missing one eye and carrying shrapnel in one leg and disaster in his memory. Chuck later volunteered for the United States Army and soon after, in 1946, became a naturalized United States citizen.

Biological endeavors for Chuck started in Miami, Florida, where he later graduated from the University of Miami. From 1946 to 1949, he served F. G. W. Smith as well as many national and international visitors, first as field assistant

and then as fisheries technician, during the early days of the university's Marine Laboratory, the institution now known as the Rosentiel School of Marine and Atmospheric Science. This period taught Chuck about working with scientists, politicians, governmental employees, and others; working with boats, environmental conditions and features, tagging, and biologic aspects of both ecosystems and specific organisms; and conducting excellent work despite numerous diverse situations. From 1949 to 1954, Chuck used his Miami experience to enamor officials of the public health community and state agencies (e.g., the Board of "Consternation," as he used to say) with his no-nonsense attitude, first as oyster biologist and then as head of Division of Oyster Culture for the State of Florida. He lived much of that period in Apalachicola, Crystal River, and Inverness. During six months in 1951 and part time in 1953-54 when finishing his schoolwork at the University of Miami, he also was oceanographic technician and then research aid at the Marine Laboratory. In 1954, Chuck left for the University of Texas Institute of Marine Science at Port Aransas as research scientist. While there, he developed a new method using biological dyes to mark penaeid shrimps under a grant from the Fish and "Wildflower" Service, as he termed that agency. He also cultivated his knowledge of fisheries science as well as a taxonomic perspective of fishes and crustaceans. Then for six months in 1956, he served as Fisheries Consultant for the Arabian American Oil Company in the western Persian Gulf, even though he thought he should have left a week after arrival because he had already written a draft report answering all the questions requested by the company. From 1957 to 1958, he was biologist for G. R. Lunz at Bears Bluff Laboratories, Wadmalaw Island, South Carolina. While there, he was given duties investigating problems he considered already solved. Consequently, he also used some of his time producing a helpful publication on biology of local spot and on material collected in the Persian Gulf (e.g., 1958) and serving as ichthyologist (part time) at the Charleston Museum. Chuck arrived at the budding GCRL as marine biologist and museum curator in 1958. There, he also acted in an administrative role to aid G. Gunter, who was then director of GCRL, designing new buildings; overseeing building construction, physical plant, vessels, and library; and providing other services until 1969 when he chose to be limited to senior ichthyologist and curator. As the part-time administrator, he had no trouble requiring GCRL, governmental,

or contracted personnel to perform their jobs correctly or "pay the consequences," such as twice tearing down and replacing an extensive masonry wall as well as having all doors removed and their underside painted as stipulated in his plans. During that period, Chuck also helped students as an assistant professor in the Department of Biology, University of Southern Mississippi, and member of the adjunct faculty of the Graduate School at Mississippi State University. During his early period at GCRL, he was contracted by Freeport Sulphur Company (now Freeport McMoran, Inc.) to design and conduct a premining, base-line study. Housed in Grand Isle, Louisiana, he conducted for about two years the first comprehensive chemical, physical, and biological survey in the northern Gulf of Mexico, where his ashes are now dispersed. That period allowed him to appreciate better the historical biology of the gulf. He then took an annual or nearly annual trek, usually by pick-up truck, to coastal Latin America to collect fishes for his museum and research, including an assessment of the zoogeographic distribution of select fishes.

Chuck started publishing in the late 1940s (e.g., 1948), ultimately producing 150 publications, most of them sole authored. In 1950, Dawson started publishing on ecological conditions in Florida, primarily as they related to the eastern oyster but also to sponges and other invertebrates as well as to fishes (1952, 1953, 1955). He then started publishing on miscellaneous groups, mostly fishes, including ones of local interest, but also on various crustaceans, including barnacles (e.g., 1957). Gobies and flatfishes interested him strongly. He started publishing descriptions and revisions from local areas and from his southern trips (e.g., 1964, 1969a, 1969b) as well as important guides for students and ichthyologists (1969c). In fact because of that early interest in flatfishes, soon before his retirement he was asked about and seriously considered producing a flatfish checklist for CLOFNAM. Also because of those interests, he published a few articles on anomalous flatfishes (1962) and gobies which led to a much used bibliography of anomalies of all fishes, followed by three supplements (e.g., 1976b). The goby work led to his becoming an authority on microdesmids, exemplified by a string of articles starting in 1962 (e.g., 1974). His southern trips, often including or restricted to Panama, also resulted in ecological treatments (e.g., 1973). Because of limited museum space, his fondness for small fish, his thirst for solving problems, and a good stock of available specimens, he got hooked on the confusion that surrounded sand stargazers and pipefishes. Chuck systematically studied eastern Pacific dactyloscopids, resulting in four large helpful generic reviews (e.g., 1976a). Then because of other commitments by J. E. Böhllke and V. G. Springer, it was agreed by them that Dawson also review the Atlantic ones (1982a).

The most recent efforts by Chuck dealt with pipefishes, a group for which he became the ultimate authority. That work started in earnest in 1970, leading him to a genus-by-genus review of the group until he summarized the Western North Atlantic Region species (Dawson, 1982b) and later the Indo-Pacific ones (1985). In the latter work, which is unquestionably the single most important contribution to the biology of pipefishes, he drew on 43 of his papers, mostly generic reviews of which 36 were sole authored. He also recognized 15 species from the eastern Atlantic region (Dawson, 1982c, 1990) but never fully resolved taxonomic problems involving all Mediterranean species. To exemplify some of the general taxonomic problems with pipefishes, in the synonymies for western Atlantic species (1982b), he recognized over 20 different names for each of four of the 29 recognized species. Pipefishes had always been confused because most species arbitrarily were placed in the genus Syngnathus Linneus, 1758. Dawson finally recognized 52 genera of Syngnathidae, with most, 47, occurring in the Indo-Pacific region and encompassing 175 species with seven subspecies. For the genus Microphis Kaup, 1853, he provided 10 different names in the synonymy. He listed 27 nominal species originally described in or commonly referred to the genus Ichthyocampus Kaup, 1853, of which only one he finally accepted (1977). Moreover, of the 175 recognized species (1985), Dawson named 30 of the species and made new combinations for the names of many of the others. All who work with these and other small fishes will long marvel and appreciate the detail of his observations and the meticulous accuracy of his counts and measurements essential for their identification. That these data were taken with one eye attested to his extraordinary commitment to his work.

Chuck always functioned on a modest, wellestimated budget. Since the mid-1960s, Chuck was funded by GCRL, the National Science Foundation, and to a lesser extent the American Philosophical Society and Society of the Sigma Xi. He belonged to the American Institute of Fisheries Research Biologists, American Fisheries Society, Sigma Xi, Marine Biological Association of the United Kingdom, in addition to ASIH, but he treasured ASIH the most.

Not one who personally cultivated awards or

professional offices, Chuck liked to acknowledge those who helped him. He, in turn, is associated with a few patronymics: Syngnathus dawsoni (Herald, 1969); the chain pearlfish, Echiodon dawsoni Williams and Shipp, 1982; and the Brazilian goby Priolepis dawsoni Greenfield, 1989. His interest in crustaceans is also exemplified by Octolasmis dawsoni Causey, 1960, a barnacle symbiont which he found on the relatively large deep water isopod Bathynomus giganteus Milne Edwards, 1879. He also collected another symbiont, Therodamas dawsoni Cressey, 1972, a copepod occurring on but one of over 2000 individuals of a stargazer he examined from Panama. He described the mud shrimp Gourretia latispina (Dawson, 1967) as well as numerous fishes.

Chuck was a brilliant, wise person with an encyclopedic mind that was probably somewhat underrecognized in the ichthyology community, perhaps because he was sequestered in Mississippi. Those attributes, however, allowed him to critically review manuscripts, put his first drafts in nearly final form, and make quick, almost always proper, decisions. They also were evident in his wry sense of humor.

The 6-foot, 4-inch, thin-framed Dawson normally kept to himself and did not waste time. When in Panama, Panamanians considered him a native; when in a Mississippi restaurant with his straw hat and Wellington boots, he was considered a farmer. He perfected the art of intimidating or scaring away individuals who did not have bona fide queries, requests, or interests. Some of his friends first had to stand up against him before he accepted them. When passing next to him, most people considered him rather gruff and indifferent to them. Actually, his single eye, quite adequate for critical observations through his converted microscope, seldom permitted his reduced peripheral vision to recognize them. On the other hand, he was concerned, honest, forthright, and direct and did not waste time on idle chit chat during work hours. He did offer freely of his time for bona fide encounters. He spent considerable time directly or indirectly teaching local laypersons and professionals. During lunch hours, he enjoyed reminiscing, solving problems, and discussing politics, international events, as well as projects, facilities, and governments that were poorly run. Moreover, he even wrote "love notes" to his wife. He retired to maintaining his "pine tree farm," cooking healthy meals at the homefront, and writing letters to the editor.

Survivors are his devoted wife since 26 Oct. 1945, Mary Rose of Biloxi, Mississippi; a son, Charles Eric Dawson III, also of Biloxi; and a daughter, Kathleen Dawson Budd, who is presently a civilian at a USAF facility at Aviano, Italy.

#### SELECTED BIBLIOGRAPHY

- Dawson, C. E. 1948. The use of the plastic laminating press for the mounting of fish scales. Quarterly J. Florida Acad. Sci. 10:153–154 (with C. A. Gathman).
- -----. 1952. Growth of the American oyster, Crassostrea virginica (Gmelin) in Florida waters. Bull. Mar. Sci. Gulf Carib. 2:393-404 (with R. M. Ingle).
- ——. 1953. A survey of the Tampa Bay area. Florida St. Brd. Conservation, Tech. Series 8:1-40.
- ----. 1955. A contribution to the hydrography of Apalachicola Bay, Florida. Publ. Inst. Mar. Sci. (Univ. of Texas) 4:15-35.
- -----. 1957. Balanus fouling of shrimp. Science 126: 1068.
- ----. 1958. Observations on the infection of the shrimp, *Penaeus semisulcatus*, by *Epipenaeon elegans* in the Persian Gulf. J. Parasitol. 44:240-241.
- -----. 1962. Notes on anomalous American Heterosomata with descriptions of five new records. Copeia 1962:138–146.
- -----. 1964. A revision of the western Atlantic flatfish genus *Gymnachirus* (the naked soles). Copeia 1964:646-665.
- —. 1969a. A new seven-spined goby, Gobiosoma (Austrogobius) polyporosum, from the Pacific Coast of Panamá. Copeia 1969:510-514.
- —. 1969b. Citharichthys abbotti, a new flatfish (Bothidae) from the southwestern Gulf of Mexico. Proc. Biol. Soc. Wash. 82:355-372.
- Sound and adjacent waters II. An illustrated key to the gobioid fishes. Publ. Gulf Coast Res. Lab. Mus. 1:1-59
- ——. 1973. Salinity-temperature profiles in the Panama Canal locks. Mar. Biol. 21:86–90 (with M. L. Jones).
- . 1974. A review of the Microdesmidae (Pisces: Gobioidea) I. Cerdale and Clarkichthys with descriptions of three new species. Copeia 1974:409–448.
- . 1976a. Studies on eastern Pacific sand stargazers 3. Dactylagnus and Myxodagnus, with description of a new species and subspecies. Copeia 1976: 13–43.
- . 1976b. A bibliography of anomalies of fishes. Supplement 3. Gulf Res. Repts. 5(2):35–41 (with E. Heal).
- ally referred to the genus *Ichthyocampus* Kaup, with description of new genera and species. Bull. Mar. Sci. 27:595-650.
- . 1982a. Atlantic sand stargazers (Pisces: Dactyloscopidae), with description of one new genus and seven new species. *Ibid.* 32:14–85.
- -----. 1982b. Fishes of the western North Atlantic. Family Syngnathidae. The pipefishes. Subfamilies Doryrhamphinae and Syngnathinae. Mem. Sears Found. Mar. Res. 1(8):1-172.

#### NOTES AND NEWS

-----. 1982c. Descriptions of Cosmocampus retropinnis sp.n., Minyichthys sentus sp.n. and Amphelikturus sp. (Pisces, Syngnathidae) from the Eastern Atlantic Region. Zool. Scr. 11:135–140.

. 1985. Indo-Pacific Pipefishes (Red Sea to the Americas). Gulf Coast Research Laboratory, Ocean

Springs, Mississippi.

. 1990. Syngnathidae, p. 658-664. In: Checklist of the fishes of the eastern tropical Atlantic. J. C. Quéro, J. C. Hureau, C. Kaarrer, A. Post, and L. Saldanha (eds.). JNICT, Lisbon, Portugal.

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