

# Biography: Gordon Gunter

Aug. 18, 1909 - Dec. 19, 1998

Dr. Gordon Pennington Gunter was many things, but uninter-esting wasn't among them. He was a gifted scientist and naturalist, Director of Research in Texas and Mississippi, devoted Civil War enthusiast and father to five children. Gordon Gunter devoted nearly his entire career to the study of the complex system of the Gulf of Mexico and the creatures living in it. In fact, his fisheries research led him to coin the phrase "fertile fisheries crescent" to describe the U.S. coast of the Gulf of Mexico. He led one of the first research teams developing shrimp feed for use in commercial aquaculture, which in 1968 was a new and burgeoning field. His research aided in the determination of the presence of the parasite *Dermocystidium marinum* (Dermo) and its contribution to oyster mortalities in the Gulf of Mexico.

Gordon Gunter was born in 1909 in Goldonna, Louisiana. Goldonna is located in what was then one of the poorest counties in the south, Natchitoches Parish in the Red River county of Northwestern Louisiana. The Civil War had taken a heavy toll on the citizens of Natchitoches, people who had little to lose in the first place. His grandfather, Miles Osborn Gunter, served in the Confederate Army. Gunter was proud of his ancestral heritage and was an active member of at least three patriotic organizations: The Sons of the American Revolution; The Sons of the Confederate Veterans, honoring the memories of those who fought with valor for the south during the Civil War; and The Order of the Stars and Bars, an organization for male descendents of commissioned officers in the Confederate Army.

In 1929 Gunter received a B.A. degree in zoology from Louisiana State Normal, now Northwestern State University of Louisiana, and his M.A. from the University of Texas in 1931. He then became a researcher for the U.S. Bureau of Marine Fisheries in Louisiana and Florida, and studied ichthyology in California at the Scripps Institute of Oceanography. He returned to Texas in 1939 and worked for the Texas Game, Fish and Oyster Commission and for the University of Texas as an instructor of physiology. During this time he also pursued his Ph.D. in physiology and zoology and finished his doctoral work under Professor Elmer Julius Lund in 1945. Dr. Lund had a great effect on Gunter's life and subsequent employment. In 1945, two other achievements of Dr. Lund came to fruition; the opening of the Institute of Marine Science at Port Aransas, and the printing of the first issue of the journal *Publications of the Institute of Marine Science*. Gunter conducted research at the Institute of Marine

Science at Port Aransas and served as Acting Director of the Institute from 1949 to 1954 and director until 1955. Gunter also served as editor of the *Publications of the Institute of Marine Science* from 1950-1955.

In 1955, Gunter became the 3rd Director of the Gulf Coast Research Laboratory (GCRL) in Ocean Springs, Mississippi. He stepped down from that position in 1971, but stayed on as Director Emeritus and professor of zoology, retiring in 1979 at the age of 70. It is from his tenure as Director of the GCRL that Gunter is best known.

The mission of the Gulf Coast Research Laboratory was three-fold: education, research and public service. To these ends, Dr. Gunter was well suited. He had a talent not only for salient research and a skill for relating important matters of science, but was also a gifted leader. Under his direction, the GCRL grew from a part-time, summer facility to a full-time research station with greater than 100 researchers and supporting staff becoming one of the best known and most respected marine research laboratories on the Gulf Coast<sup>1,2</sup>.

Gunter's interest in research was equaled by his drive for dissemination of this information and open access to published findings. He was an avid reader who understood the importance of keeping apprised of current literature. Dr. Gunter began amassing literature for a lending library soon after his appointment as

Director of the GCRL<sup>3</sup>. In 1961, the first issue of *Gulf Research Reports* was published. This journal, established by Gunter, served two important functions: a forum for research on the Gulf of Mexico and a publication that he could trade for other scientific journals to add to the collection. He bought and donated much of the early works that served as the foundation of the collection<sup>3</sup>. The Board of Trustees of the Institutes of Higher Learning named the library on the grounds of the Gulf Coast Research Laboratory facilities in Ocean Springs, Mississippi after Dr. Gordon Gunter on December 21, 1972. It is now one of the largest repositories of marine science publications on the Gulf Coast<sup>3</sup>.

Gordon Gunter wrote about and published papers on a diverse set of topics. In fact, he published over 330 works in both scientific and popular formats, and grey literature<sup>1,2</sup>. In addition to his widely known research on salinity and its effects on regional biota<sup>4, 5, 6</sup>, he published numerous articles in assorted journals and popular publications on topics such as the habits and abilities of shore



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birds<sup>7, 8</sup>, insects<sup>9, 10</sup> and primroses<sup>11</sup>. He was genuinely curious about the world around him, and was considered by his peers and associates as an avid and competent naturalist. His name is even known amongst animal-rights advocate groups whose websites quote Gunter's 1961 submission to *Science* stating that the boiling of lobsters is an "unnecessary torture"<sup>12</sup>. He also compiled many books of writings on topics such as family and nature calling them "Gunter's Archives". Many of these Archives are today housed in the Gunter Library<sup>13, 14</sup>.

His scientific vision had a wide scope and he asked big questions. For many years Gunter was the sole expert consultant to the Army Corps of Engineers in Mississippi<sup>12</sup>. From his research on the paleogeography of the Mississippi river<sup>15</sup>, Gunter projected a current-day course for the river, a course that might have occurred if the Army Corps of Engineers had not interrupted the seasonal ebb and flow of the Mississippi. He determined that the Atchafalaya would have expanded to approximately the size of the Mississippi River and would not meander through New Orleans, but would empty into the Gulf further west of where it does today<sup>1, 15</sup>. He examined how changes in salinity affect populations and species diversity in the northern rim of the Gulf of Mexico<sup>4, 5, 6</sup>. He was an early proponent of aquaculture<sup>16</sup> and was a charter member and later president (1973-1974) of the World Mariculture Society, now the World Aquaculture Society. He was also a lively member of the National Shellfisheries Association. Gordon Gunter became the first paid Life Member in 1959 and was named Honored Life Member of the National Shellfisheries Association in 1973, the society's most prestigious award. He was further honored by our organization with the eponymous Gordon Gunter Poster Award<sup>17</sup>.

The American Fisheries Society named Gordon Gunter an Honorary Member, synonymous with our Honored Life Member and is likewise reserved for those whose achievements in the field merit this type of singular distinction. Gunter's merit as a scientist and his contributions to our understanding of the ecology, comparative physiology of the biota, and commercial fisheries of the U.S. Gulf of Mexico was recognized by other groups as well. In 1966 Gunter was elected President of the Mississippi Academy of Sciences. And for his contributions to marine fisheries sciences, the National Oceanic and Atmospheric Administration recommissioned the research vessel *Relentless* to the Gulf of Mexico where it was renamed the *R.V. Gordon Gunter* on August 28, 1998<sup>1, 2, 3</sup>.

Dr. Gordon Gunter was a pioneer in the fields of comparative physiology of shellfish and fish and fisheries science. He was a well known and well respected figure in

science and in his adopted hometown of Ocean Springs, Mississippi. Each person I spoke with about Dr. Gunter recalled him as intelligent, curious about the natural world, with many diverse interests and opinions and an outgoing mannerism<sup>13, 14, 18</sup>. Each one called him a "great man", and I wish I had the opportunity to know him personally.

### Acknowledgements

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### References:

1. Burke, David W. 1999. Gordon Pennington Gunter 1909-1998. *Gulf Research Reports*. 11:65-67.
2. Tighe, James. 1996. Serendipity and Science; the life of Gordon Gunter. *Coast Magazine*. January-February: 46-50.
3. Shaw, Joyce M., Skupien, Linda. Gulf Coast Research Laboratory: A Mississippi Academy of Sciences Project that has Come of Age. <http://www.msstate.edu/org/MAS/octjournal/gcrl.htm>
4. Gunter, G. 1950. Seasonal population changes in distributions as related to salinity of certain invertebrates in the Texas coast, including the commercial shrimp. *Publications of the Institute of Marine Science*. 1(2): 7-51.
5. Gunter, G. 1955. Mortality of oysters and abundance of certain associates as related to salinity. *Ecology*. 36(4): 601-605.
6. Gunter, G. 1956. Some relations of faunal distributions to salinity in estuarine waters. *Ecology*. 37(3): 616-619.
7. Gunter, G. 1956. Duck blinds as nesting sites for great blue herons on the south Texas coast. *The Auk*. 73:131.
8. Gunter, G. 1956. On the reluctance of gulls to fly under objects. *The Auk*. 73:131-132.
9. Gunter, Gordon; Christmas, J.Y. 1959. Corixid insects as part of the offshore fauna of the sea. *Ecology*. 40(4):724-725
10. Gunter, Gordon. 1975. Observational evidence that shortwave radiation gives orientation to various insects moving across hard-surface roads. *The American Naturalist*. 109(965):104-107.
11. Gunter, Gordon. 1951. A note on the blooming of Drummond's primrose. *Bulletin of the Torrey Botanical Club*. 78(4):350.
12. Gunter, Gordon. 1961. Painless killing of crabs and other large crustaceans. *Science*. 133(3449):327.
13. Joyce Shaw, Personal Communication.
14. Ed Gunter, Personal Communication.
15. Gunter, G. 1952. Historical changes in the Mississippi River and the adjacent marine environment. *Publications of the Institute of Marine Science*. 2(20): 119-139.
16. Gunter, G. 1956. Principles of shrimp fishery management. *Proceedings of the Gulf and Caribbean Fisheries Institute, Eighth Annual Session*. pp. 99-106.
17. Carriker, Melbourne R. 2003. *Taming of the Oyster; a History of Evolving Shellfisheries and the National Shellfisheries Association*. 264 p.
18. Mrs. Rasor, Personal Communication

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