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## IN MEMORIAM

Robert Winston Menzel, Sr. 1920–1989

The aquatic science community lost a colleague and dear friend in June with the death of Dr. Robert Winston Menzel, Sr. I learned of Winston Menzel's passing from Sandy Shumway some three weeks after the event. Sandy asked me to share some thoughts about Winston and the significant impact he had on our profession. What follows are some of my remembrances that have endeared him to me. That is followed by lists of the graduate students who took degrees under him and his list of publications. I am proud to be included in the former.

In the academic world, where egos reign supreme and it seems as though it is always possible to find someone with an ego that is slightly larger than the most gigantic one you've ever seen, Winston Menzel was something of an enigma. He was, at least in the years that I knew him (slightly over 20), among the most humble human beings in my acquaintance. His manner (relaxed, almost plodding) and speech (a slow, downhome Virginia drawl) belied his enthusiasm, keen wit, and outstanding intellectual ability. Winston always spoke fondly of his former students and was intensely interested in their careers. He seemed much less interested in having any glory heaped upon himself, though his research productivity led to some such heaping, which he accepted with humility.

While he was not at all dynamic in the classroom, students who had the good fortune to have him available to them outside the lecture hall found him to be an absolute fountain of information. Winston was knowledgeable in virtually every aspect of marine biology, and in a wide variety of subject areas outside of that broad discipline. In his many conversations with the students that surrounded him, he always had some tidbit of information that none of us had previously known, and he frequently could drag out a reprint to underwrite his information. A trait that meant perhaps as much to me as any, was Winston's availability to his students.

Winston joined the faculty at Florida State University in 1954 after taking his Ph.D. from Texas A&M University under Sewell Hopkins. By 1968, when I got to Florida State, Winston had moved up to a spacious closet office in what had been Bachelor Officer Quarters during World War II. The buildings—I seem to recall that there were five of them—

housed the Oceanography Department during its first few years of existence. Other students, such as Ed Cake, Ed Bault, and Pat McCaffrey who were all contemporaries of mine, were housed in one end of a BOQ with Winston. His door was always open to us and many hours were spent learning about the wonders of marine science in his presence.

Winston introduced me to my first raw oyster; actually to my first oyster of any kind. We were at the old Florida State marine laboratory on Alligator Harbor when he found a cluster of oysters on a piling. He whipped out his pocket knife, deftly shucked a large *Crassostrea virginica*, and passed it my way. That was the start of a love affair that continues to this day. It has been difficult to make up for nearly 30 years of deprivation. Winston gulped down several of the delicacies on that trip, and there were many other opportunities at various seafood restaurants that were obligatory pit stops on our field trips to Alligator Harbor and the then new Turkey Point laboratory to observe Winston's gustatory pleasures being accommodated.

Winston, in fact, had a reputation for eating nearly anything. He admitted to having consumed the world's largest stone crab before anyone had a chance to measure it for the record books. Somewhat less probable is the story about the recovery of the only known living trilobite. After bringing it aboard the ship, the scientific party, with one exception, began congratulating each other about their amazing find. In the meantime, the subject of their delight disappeared. Winston Menzel was observed leaving the deck of the ship with a leg of some type of sea creature protruding from the corner of his mouth. Or, so the story goes.

I attended Florida State University for a variety of reasons, though none of them involved any attempt with linking myself with a particular professor. Becoming associated with Winston Menzel was largely chance. While I was a student, I knew him as a mollusc biologist who had done some interesting work on oyster genetics, had demonstrated the economic and biological feasibility of rearing quahog clams in Florida long before any commercial aquaculturist made an attempt to do so, and as a person who kept algae cultures going and spawned the occasional shellfish.

The greater breadth and depth of the man came to be appreciated in large part after I left his tutelage. There was one episode, however, that was humiliating for me while at the same time providing me with a much greater appreciation for Winston's scope of expertise. I had written a term paper for one of Winston's classes in which I reviewed the literature on catfishes and their culture. When he returned my graded paper, he indicated that it was acceptable but that I had missed two critically important references. That didn't seem likely in that I felt my literature search had been painstakingly thorough. The two papers in question involved the catfish fishery of Virginia and an incidence of albinism in catfish in the same state. Both papers had been written by R. Winston Menzel. My face was red, and I've subsequently cited both papers (they were Winston's first two publications) on many occasions.

My first job after completing my education was at Skidaway Institute of Oceanography in Savannah, Georgia where I worked under the direction of David Menzel (no relation). In a conversation with David and my wife one day, the fact that I had been associated with two Menzels arose. David made some comment to the effect, "I didn't know you had studied under the famous Menzel." Certainly, both Menzels can lay claim to fame, but between my wife and I, Winston has always been the "famous" Menzel.

Some of our fondest memories of Florida State University, Tallahassee, and the Menzel's were the get-togethers that Margaret (now deceased) and Winston hosted at their home. We always felt very welcome, and they tolerated and even seemed to enjoy the small children that came along with students like myself. The Menzel's always made the students feel comfortable and were truly interested in us and in our families.

The homespun demeanor, slow drawl, and easygoing nature demonstrated by Winston did nothing to detract from the respect that we as graduate students held for him. None of us would have ever thought of calling him by his first name, at least while we were students. Some referred to him as 'doc,' but that was as familiar as it became. In fact, it was several years before I could address him as other than 'Dr. Menzel,' and my wife continues to refer to him by that name. Yet, Winston did not demand respect in any outward way. Instead, he genuinely earned it. The longer I knew him, the more respect I developed.

Shortly after I joined the faculty of Texas A&M University in 1975, I had the opportunity of having dinner with Winston Menzel and Sewell Hopkins. It occurred to me as I sat in the presence of two eminent scientists that while publications provide a legacy, an important part of what academicians leave behind is the knowledge and the philosophy that are passed down through their students to later generations. Those of us who were Winston's students can only hope that some of the knowledge, dedication, high ethical standards, and love of life that was exhibited by him have been kept alive in us and passed along to our students.

I'll miss you, Winston, and I'll always wonder if you really did eat that trilobite!

## M.S. Students who completed degrees under R. Winston Menzel

- 1955 T. M. Smith. "The distribution and breeding of chaetognaths of the northwest coast of Florida" (Now M.D.)
- 1956 F. E. Nichy. "The effects of predators on the mortality of oysters in a high salinity area in Florida"
- 1956 B. C. Townsend, Jr. "A study of the spot, Leiostomus xanthurus Lacepede in Alligator Harbor, Florida"
- 1957 R. R. Hathaway. "Studies on the crown conch, Melongena corona Gmelin" (Ph.D. later)
- 1958 F. K. Little. "The sponge fauna of St. George's Sound, Apalachee Bay and Panama City regions of Florida Gulf Coast" (Ph.D. later)
- 1958 J. M. Branham. "An ecological survey of the ascidians of Alligator Harbor, Florida and the adjacent Gulf of Mexico" (Ph.D. later)
- 1961 R. O. Waller. "Ostrocods of the St. Andrew Bay System"
- 1962 F. O. Perkins. "The maintenance of oyster cells in vitro" (Ph.D. later, vide below)
- 1965 M. H. Zilberberg. "An assessment of the biological, chemical and physical factors of a tidewater marsh area before impoundment"
- 1966 H. Matthews. "Primary production studies on an artificial reef"
- 1966 L. W. Yeater. "Studies on the ecology of the commensal crab Pinnotheres maculatus Say" (Ph.D. later)
- 1966 S. M. Z. Naqvi. "Effects of predation in infaunal invertebrates of Alligator Harbor, Florida region" (Ph.D. later)
- 1967 T. P. Ritchie. "Chemical and physical factors that influence the setting of the larvae of the American oyster, Crassostrea virginica".
- 1968 R. O. Adams. "The color variation of *Neosima* (Mollusca: Gastropoda) with notes on the natural history" (Ph.D. later).
- 1968 William J. Tiftany III. "The life cycle and ecology of the beach clam *Donax variables* Say (Mollusca Pelecypoda: Donacidae)" (Ph.D. later)
- 1969 Edward I. Bault. "A study of the distribution and the zoogeography of the Polychaetous Annelids of the continental shelf in the northeastern Gulf of Mexico"
- 1969 Patrick M. McCaffrey. "Cytotaxonomy of the Florida species and evolution of the genus *Fundulus* (Pisces: Cyprinodontidae)" (Ph.D. later, vide below).
- 1970 Edwin W. Cake, Jr. "Some predator-prey relationships involving the Sunray Venus clam, *Macrocallista nimbosa* (Lightfoot) (Pelecypoda: Veneridae) along the Gulf coast of Florida" (Ph.D. later vide below)
- 1971 Martha Moulton. "An inquiry into the use of plastic 'grass' as a substitute for Thalassia"
- 1972 Luis A. Soto. "Decapod shelf fauna of the northeastern Gulf of Mexico: Distribution and zoogeography" (Ph.D. later)
- 1973 David LeBlanc. "The ecology, diversity, and biomass of nearshore polychaetes in Ochlockonee Bay, Florida"
- 1973 L. A. Olsen. "Food and feeding in relation to the ecology of two estuarine clams, Rangia cuneata (Gray) and Polymesoda caroliniana (Bosc)" (Ph.D. later, vide below)
- 1977 R. C. Dalton. "The reproductive cycles of the northern and southern Quahogs, *Mercenaria mercenaria* (L.) and *M. campechiensis* (Gmelin), and their hybrids, with a note on their growth"
- 1978 Gregg Gitschlag. "Salinity effects on survival and growth of larvae of the Quahog clam Mercenaria mercenaria, M. campechiensis and their hybrids"
- 1978 J. Michael Lyons. "Distribution and abundance of the larvae of *Decapterus punctatus* (Pisces, Carangidae) and *Bothus* spp. (Pisces, Bothidae) in the Florida and Yucatan Straits"
- 1978 J. Dugan Whiteside. "Evaluation of the nutritional aspects of certain cultivable marine organisms"
- 1979 Robert H. Blanchet. "The distribution and abundance of ichthyoplankton in the Apalachicola Bay, Florida area"
- 1979 Paul F. Hayes. "The reproductive cycle of early setting Crassostrea virginica (Gmelin) in the northern Gulf of Mexico and its implications for population recruitment"
- 1980 Joseph Hendricks. "The salinity tolerance of the squid Lolliguncula brevis"
- 1980 Jan Mandrup-Poulsen. "Changes in selected blood serum constituents, as function of salinity variations in the marine elasmobranch, Sphyrna tiburo"
- 1981 Steven Glomb. "Speciation in the oyster genus Crassostrea: It's not just a shell game"
- 1981 Boris Fabre. "Abundance, distribution and species composition of demersal finfish off northeast South America."
- 1983 Craig F. Feeny. "Effects of salinity on the vertical distribution of the larvae of Crassostrea virginica and Ostrea equestris."
- 1984 David W. Arnold. "The effect of salinity on size increase of the blue crab, Callinectes sapidus Rathbun"
- 1984 Darly E. Joyner. "Mariculture of bay scallops, Argopectin irradians (Lamarck)
- 1985 Lawrence E. Eaton. "The Interrelationships Between the Bay Scallop Argopectin irradians and Its Associated Fauna"

- 1986 Samuel A. Johnson, Jr. "Electrophoretic investigations of black mangrove (Avicennia gerinans L.) Populations and Their Chemotaxonomic Implications"
- 1987 James Loftin. "The distribution of crown conch egg capsules"
- 1987 Irma Olguin-Espinoza. "The reproductive cycle of the oyster Crassostrea virginica (Gmelin) in the Apalachicola Bay, Florida"
- 1987 Steven H. Wolfe. "The mouthparts and fore gut morphology of larvae and juveniles of the spiny lobster, *Panilirus argus*, with ecological implications"

## Ph.D. Students who completed degrees under R. Winston Menzel

- 1957 G. C. Grice. "The copepods of the Florida West coast"
- 1958 N. C. Nulings. "An ecological study of the recent ostracods of the Gulf coast of Florida"
- 1962 A. M. Sastry. "Studies on the bay scallop, Aequipectin irradians concentrictus in Alligator Harbor, Florida"
- 1962 M. L. Forbes. "Studies of Ostrea permollis and aspects of its relationship to the host sponge Stellata grubii"
- 1964 T. L. Hopkins. "The plankton of the St. Andrews Bay System"
- 1966 F. O. Perkins. "Life history studies of Dermocystidium marinum, an oyster pathogen"
- 1970 R. R. Stickney; "The effects of various dietary lipids on the growth and lipid metabolism of channel catfish"
- 1974 Edwin W. Cake, Jr. "Larval and postlarval cestode parasites of shallow water, benthic mollusks of the Gulf of Mexico from the Florida Keys to the Mississippi Sound"
- 1975 M. Lynn Haines. "The reproductive cycle, larval development, culture, and tolerances of the sunray venus clam Macrocallista nimbosa (Lightfoot 1786)"
- 1976 L. A. Olsen. "Reproductive cycles of *Polymesoda caroliniana* (Bosc) and *Rangia cuneata* Gray, with aspects of dessication in the adults, and fertilization and early larval stages in *P. caroliniana*"
- 1977 P. M. McCaffery. "Studies on demersal ichthyofauna of the northeastern Gulf of Mexico continental shelf"

## Publications of R. Winston Menzel

- 1943 Menzel, R. W. The catfish fishery of Virginia. Trans. Amer. Fish. Soc., 73:364-372.
- 1944 Menzel, R. W. Albino catfish in Virginia. Copia, 2:124.
- 1945 Mackin, J. G. and R. W. Menzel. Research seeks to expand new fishery (mussels). The Commonwealth, 12:3-10.
- 1945 Newcombe, CL. L and R. W. Menzel. Future of the Virginia oyster industry. The Commonwealth, 12:3-11.
- 1951 Menzel, R. W. Early sexual development and growth of the American oyster in Louisiana waters. Science, 113:719-721.
- 1952 Hopkins, S. H. and R. W. Menzel. Methods for the study of oyster planting. Proc. Nat'l. Shellfish Assoc., 43:109-112.
- 1953 Hopkins, S. H., J. G. Mackin and R. W. Menzel. The annual cycle of reproduction, growth and fattening in Louisiana oysters. Proc. Nat'l. Shellfish Assoc., 44:19-24.
- 1953 Menzel, R. W. The prodissoconchs and setting behaviour of three species of oysters. Proc. Nat'l. Shellfish Assoc., 44:104-112.
- 1954 Menzel, R. W. and S. H. Hopkins. Effect of two parasites on the growth of oysters. Proc. Nat'l. Shellfish Assoc., 45:184–186.
- 1955 Menzel, R. W. and S. H. Hopkins. Crabs as predators of oysters in Louisiana. Proc. Nat'l. Shellfish Assoc., 46:177-184.
- 1955 Menzel, R. W. Marking of shrimp. Science, 121:446.
- 1955 Menzel, R. W. Some phases of the biology of Ostrea equestris Say, and a comparison with Crassostrea virginica (Gmelin). Publ. Inst. Mar. Sci. (Univ. Texas). 4:70–153.
- 1955 Menzel, R. W. and S. H. Hopkins. The growth of oysters parasitized by the genus Dermocystidium marinum and by the trematode Bucephalus cuculus. Journ. Parasit., 41:333-342.
- 1956 Menzel, R. W. The effect of temperature on the ciliary action and other activities of oysters. Florida State University Studies, 22:25-36.
- 1956 Menzel, R. W. Some additional differences between Crassostrea virginica and Ostrea equestris in the Gulf of Mexico area. Proc. Nat'l Shellfish Assoc., 47:76-81.
- 1957 Menzel, R. W. Marine Biology of Alligator Harbor, Florida. ASB Bull., 4:51-54.
- 1957 Gunter, G. and Menzel, R. W. The crown conch, Melongena corona, as predator upon the Virginia oyster. Nautilus 70:84–87.

- 1958 Menzel, R. W., Hulings, N. C. and Hathaway, R. R. Causes of depletion of oysters on St. Vincent's Bar, Apalachicola Bay, Florida, Proc. Nat'l Shellfish Assoc., 49:66-71.
- 1958 Menzel, R. W. Further notes on the albino catfish. Journ. Heredity, 49:1p.
- 1958 Menzel, R. W. and Nichy, F. E. Studies on the distribution and feeding habits of some oyster predators in Alligator Harbor, Florida, Bull. Mar. Sci., Gulf and Caribb., 8:125-145.
- 1960 Nichy, F. E. and Menzel, R. W. Mortality of intertidal and subtidal oysters in Alligator Harbor, Florida. Proc. Nat'l Shellfish Assoc., 51:39-41.
- 1961 Menzel, R. W. Shellfish mariculture. Proc. Gulf Caribb. Fish Inst., 14:195-199.
- 1961 Menzel, R. W. Seasonal growth of the northern quahog *Mercenaria mercenaria* and the southern quahog *M. campechiensis* in Alligator Harbor, Florida. Proc. Nat'l Shellfish Assoc., 52:37–46.
- 1962 Sastry, A. N. and Menzel, R. W. Influence of hosts on the behavior of the commensal crab, *Pinnotheres maculatus* Say. Biol. Bull., 123:388-395.
- 1962 Menzel, R. W. Seasonal growth of the northern and southern quahogs *Mercenaria mercenaria* and *M. campe-chiensis*, and their hybrids in Florida. Proc. Nat'l Shellfish Assoc., 53:111–119.
- 1962 Menzel, R. W. and H. W. Sims. Experimental farming of hard clams. Mercenaria
- 1964 Perkins, F. O. and R. W. Menzel. Maintenance of oyster cells in vitro. Nature, 204:1106-1107.
- 1965 Perkins, F. O. and R. W. Menzel. Morphological and cultural studies of a motile stage in the life cycle of *Dermo-cystidium marinum*. Proc. Nat'l Shellfish Assoc., 56:23-30.
- 1965 Menzel, R. W. and M. Y. Menzel. Chromosomes of two species of quahogs and their hybrids. Biol. Bull., 129:181-188.
- 1966 Menzel, R. W., N. C. Hulings and R. R. Hathaway. Oyster abundance in Apalachicola Bay, Florida, in relation to biotic associations influenced by salinity and other factors. Gulf Research Rpts., 2:73-96.
- 1967 Perkins, F. O. and R. W. Menzel. Ultrastructure of sporolation in the oyster pathogen *Dermocystidium marinum*. Journ. Invert. Path., 9:204–229.
- 1968 Menzel, R. W. Cytotaxonomy of species of clams (Mercenaria) and oysters (Crassostrea). Symposium of Mollusca, Mar. Biol. Assoc. of India. Part I:75-84.
- 1968 Menzel, R. W. Chromosome number in nine families of marine pelecypod mollusks. Nautilus, 82(2):45-50; 53-58.
- 1969 Ritchie, T. P. and R. W. Menzel. The influence of light on the setting of the larvae of the American oyster Crassostrea virginica. Proc. Nat'l Shellfish Assoc., 59:116-120.
- 1971 Menzel, R. W. Selective breeding in oysters. Conference on Artificial Propagation of Commercially Valuable Shellfish. Eds. K. S. Price, Jr., and D. L. Maurer, University of Delaware. pp. 81-92.
- 1971 Menzel, R. W. The role of genetics in molluscan mariculture. Amer. Malacol. Union Bull. 1971 (Feb 1972):13–15.
- 1971 Menzel, R. W. Possibilities of molluscan cultivation in the Caribbean. "Symposium on Investigations and Resources on the Caribbean Sea and Adjacent Regions." FAO Fish. Res. Div. Fish. Rep. 712:183–200.
- 1971 Menzel, R. W. Quahog clams and their possible mariculture. Proc. World Mariculture Soc., II:23-36.
- 1972 Menzel, R. W. Effects of man's activities on estuarine fisheries. Underwater Naturalist, Am. Litt. Soc., 7(2):19–31.
- 1973 Menzel, R. W. Selection and hybridization in the mariculture of oysters and clams. Proc. World Mariculture Soc., III:309-317.
- 1974 Menzel, R. W. Portuguese and Japanese oysters are the same species. Journ. Fish. Res. Board Canada, 31:453–456.
- 1974 Menzel, R. W. Clams and oysters for mariculture in the United States. Marine Technology Society, 10th:611-617.
- 1975 Menzel, R. W., E. W. Cake, M. L. Haines, R. W. Martin and L. A. Olsen. Clam mariculture in northwest Florida: A field study of mortality. Proc. Nat'l Shellfish Assoc., 65:59-62.
- 1975 Sunderlin, J. B., M. Brenner, M. Castagna, J. Hirota, R. W. Menzel and O. E. Roels. Comparative growth of hardshell clams (*Mercenaria mercenaria* and *Mercenaria campechiensis*) and their F<sub>1</sub> cross in temperate, subtropical and tropical natural waters and in a tropical artificial upwelling mariculture system. Proc. World Mariculture Soc. VI:171-183.
- 1977 Menzel, R. W. Selection and hybridization in quahog clams. Proc. World Mariculture Soc. VIII:507-521.
- 1979 Clams and Snails (Mollusca: Pelecypoda [except Oysters] and Gastropoda). In: Pollution Ecology of Estuarine Invertebrates, Academic Press. pp. 371–396, Chapter 17.
- 1980 Cake, E. W. Jr. and R. W. Menzel. Infections of *Tylocephalum metacestodes* in commercial oysters and three predactious gastropods of the Eastern Gulf of Mexico. Proc. Natl. Shellfish. Assoc., 70:94–104.

- 1981 Hayes, P. F. and R. W. Menzel. The reproductive cycle of early setting *Crassostrea virginica* (Gmelin) in the northern Gulf of Mexico, and its implication for population recruitment. Biol. Bull., 160:80–88.
- 1983 Rodney Dalton and Winston Menzel. Seasonal development of young laboratory spawned southern (*Mercenaria* compechiensis) and northern (*M. mercenaria*) quahog clams and their reciprocal hybrids in Northwest Florida. J. Shellfish Resch., 3(1):11–17.
- 1987 Winston Menzel. Hybridization of oysters and clams. Proc. World Symp. on Selection, Hybridization and Genetic Engineering in Aquaculture. Bordeau, France. 27–30 May 1966, Vol II:47–59.
- 1989 Winston Menzel. The Biology, Fishery and Culture of Quahog Clams, Mercenaria. In: Clam Mariculture in North America, Elsevier Science Publishers. J. J. Manzi and M. Castagna, Editors. (In press).
- 1989 Menzel, W. (Editor) The biology and culture of bivalve mollusks, worldwide CRC Press (in Press).
- 1989 Menzel, W. Quahog clams in the United States. In The Biol. and Cult. of Bivalve Mollusks, CRC Press. (In press).
- 1989 Menzel, W. The oyster, Crassostrea virginica in the Southeast United States. In the Biol. and Cult. of Bivalves Mollusks. CRC Press (in press).