Letters

Woods Hole: Now and Then

In Carter's article "Woods Hole: summer mecca for marine biology" (15 Sept., p. 1288), a picture of "some early investigators at the Marine Biological Laboratory" implied incorrectly that the first director, Charles Otis Whitman, was then at the University of Chicago. The picture was most probably taken in 1891 when Whitman was chairman of the biology department of Clark University and William Morton Wheeler, Edwin O. Jordan and Charles L. Bristol were some of his graduate students, as was Hermon C. Bumpus who had just received his Ph.D. for his classic study of the embryology of the American lobster. Sho Watáse, Ph.D., was lecturer and assistant to Whitman. They appear in their winter plumage with the other members of the Clark University biology department, in the accompanying picture taken in the early spring of 1892.

The other four in the MBL photograph were Wm. A. Setchell (Ph.D., Harvard, 1890) who was the instructor in botany that summer; Pierre A. Fish, graduate student at Cornell; Edwin G. Conklin who received his Ph.D. that June from Johns Hopkins; and Jacques Loeb (M.D., Strassburg, 1884) who had been at the Marine Station in Naples, 1889–91, and who was spending the first of many summers at Woods Hole. The photograph, therefore, shows only three established scientists and seven young men each at the very beginning of an eminent career. It was in the following year, 1892, that Whitman and virtually the whole biology department of Clark University moved to the University of Chicago.

Another point is of interest. One reason for establishing the Marine Biological Laboratory was to continue the seaside instruction which Louis Agassiz began at the Anderson School of Natural History on nearby Penekese Island in 1873, but which had to be discontinued soon thereafter. In selecting Whitman as first director of the MBL, they chose a person dedicated primarily to the European type of individual professor-student instruction which was carried out so successfully at Clark. This duality of instruction, larger classes for the introduction to marine life, and individual instruction for research, continues in only slightly modified form today. It assured the growth and success of the laboratory because it developed and enhanced in many successive generations of young biologists the rewarding experience of summer work at the marine station.

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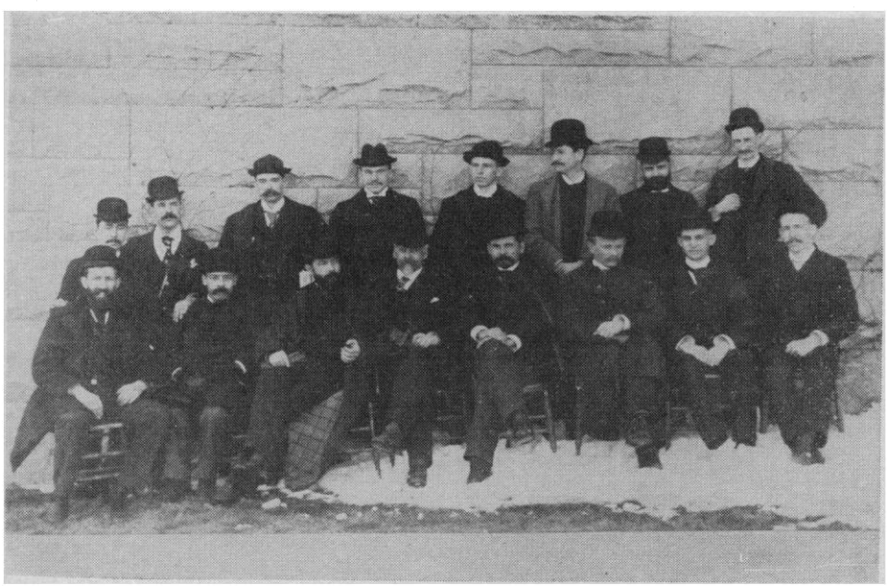

Biology department of Clark University, 1891–92. (Front row, from left) C. L. Edwards, S. Watáse, W. P. Lombard, C. O. Whitman (chairman), H. H. Donaldson, G. Bauer, F. P. Mall, W. M. Wheeler; (back row) T. Hyashi, A. C. Eycleshymer, E. O. Jordan, F. R. Lillie, A. D. Mead, C. L. Bristol, W. S. Miller, and H. P. Johnson.

Although heartened by Carter's article on the Marine Biological Laboratory, especially at a time when scientific endeavor at Woods Hole is usually equated with oceanography, I was perplexed by his omission of an important year-round activity which was recently initiated there.

With the present stress on molecular approaches in biology, the trustees recognized the necessity of balancing this trend with a formal reinstatement of natural history or "organismic" biology at the laboratory, and in 1962 initiated a full-time research training program known as the Systematics-Ecology Program. SEP has sought to expand interest in the natural history of marine organisms by using the Woods Hole region as a field laboratory.

Through the sponsorship of the Ford Foundation, National Science Foundation, Office of Naval Research, and National Institutes of Health, SEP has developed postdoctoral research, graduate, and student training programs administered by a small, permanent staff. In addition it has recruited established systematists and ecologists to develop studies of the regional biota, founded a research museum, begun a biotic census of inshore waters, provided consultation services to other biologists, published keys and guides to regional biota, and participated in MBL summer courses and scientific activities of neighboring institutions. Its research vessel, the 20-meter stern trawler *A. E. Verrill* is designed for inshore work and is the prototype of its class. The year-round activity of SEP went far in overriding objections to construction of the new research-training facility that would otherwise be used for only 3 months of the year. In winter months SEP includes 25 to 30 investigators, students, and assistants, and in the summer of 1967 this number swelled to 51.

Active, year-round programs at MBL would superficially appear at odds with the passive, idyllic summer mecca portrayed by Carter. In fact they are not a compromise, but a necessity to the continued success of MBL. By advancing the waning fields of natural history, MBL has already departed from its summer traditions and created another quiet, but significant revolution in modern biology.

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Upward Spiral of Costs and Dues

The recent announcement by the AAAS Council of an increase of over 40 percent in membership dues raises questions as to how AAAS funds are being spent. Apparently some unspecified additional obligations assumed by the Board of Directors have contributed to the large increase. I believe that a raise of this magnitude should not be made without some attempt to determine the consensus of the membership. (Perhaps some changes, such as placing the table of contents of *Science* on the cover, could even reduce present expenditures.) In any event, perhaps a majority of the membership would agree with me in feeling that every attempt must be made to keep the fee down, and that if there must be a raise, the membership should receive a complete and candid explanation of the options open to the Board, and their reason for raising the fee. I am particularly concerned because AAAS income exceeded expenses by over $100,000 in 1966, the last fiscal year, and this apparently represents an increase over the excess of 1965, which was in turn greater than the excess of 1964. Yet, in 1967, fees are raised over 40 percent.

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The statement that AAAS income exceeded expenses by over $100,000 in 1966 and by smaller amounts in 1964 and 1965 is correct. For 1967 there will be a deficit of the order of $150,000.

The options open to the Board of Directors were to decrease expenditures or to increase income. *Science* rep-