IN MEMORIAM

MICHAEL M. MULLIN 1937–2000

On 19 December 2000, Professor Michael M. Mullin died as a result of complications from heart bypass surgery. He was at home, recovering from the operation; he had planned a meeting at SIO on the next day. Without warning, the Marine Life Research Group lost its leader, CalCOFI lost a skilled and vigorous supporter, and we all lost a colleague, a shipmate, and a friend.

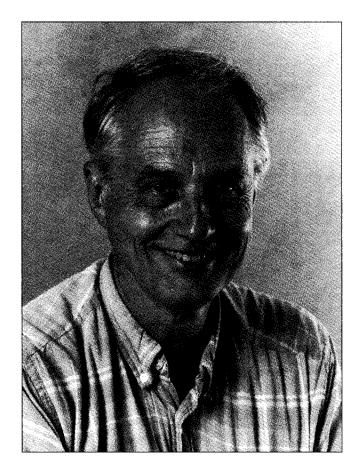
I first met Mike playing beach volleyball in 1964. Being tall and limber, he was a good man at the net, but never hogged the ball. Mike had recently earned his Ph.D. at Harvard/Woods Hole Oceanographic Institution and completed a year of postdoctoral work before accepting a position with the Food Chain Research Group at Scripps. He was planning to marry Connie, a Radcliffe College friend (much to the dismay of several of us single ladies). A year later, he joined the Scripps faculty.

In the following years, I sailed with Mike many times as he continued his research into the feeding ecology of planktonic copepods. He used some weird and wonderful sampling devices, including the bongo nets in their original stratified, opening-closing mode.

On a February 1973 expedition to the central Pacific I first realized Mike's love of Renaissance music. As we steamed into San Diego after a long journey, Mike and a small group stood on the bow singing "Never Weather-Beaten Sail" (Campian, 1612) to appropriately modified words: "...Seven knots, and seven knots and seven knots we sail. Neuston patches float in spots to fill our neuston pail...." They made the Channel 8 news.

Mike continually expanded his copepod research. Eventually, his study of how the environment affects copepods evolved to include the study of how the environment and copepods affect fish, leading him into fisheries oceanography. He published several research papers in that field, and a book with a typically terse and whimsical Mullin title: *Webs and Scales*. Mike's contributions to PICES were honored with a full biographical article published in *PICES Press* (January 2000, vol. 8, no.1*). In 1997, Mike became the editor of *Fisheries Oceanography*.

Because Mike was principled, rational, and fair, it was inevitable that he would be sought out for administrative positions. He served as director of the SIO Graduate



Department between 1977 and 1980, and as deputy director of SIO and dean of academic affairs between 1992 and 1996. In 1989, Mike was appointed director of MLRG, and as a consequence, became a member of the three-man CalCOFI Committee. Mike loved to teach and he loved his research, but I don't think he enjoyed administration. He seemed frustrated by the slow, tedious progress of "bureaucracy": the paperwork, the meetings, and the endless small conflicts. I suspect he accepted the administrative positions primarily out of a sense of duty. His frequent trips on CalCOFI cruises were an obvious escape into research.

Looking back, it is now clear that Mike made one extraordinary contribution as director of MLRG: he kept alive our participation in the CalCOFI program, and, almost certainly, the CalCOFI program itself. In view of the obstacles he encountered, this must have taken a near-Herculean effort.

^{*}This article, written by David Checkley Jr., can be found at http://www.sio.ucsd.edu/scripps_news/pressreleases/mullin/mullin.pdf

When Mike assumed the directorship of MLRG, the CalCOFI program was suffering a serious image problem. If our academic colleagues thought about us at all, they thought of us as the "rich" program that endlessly repeated the same measurements, at the expense of (their) more innovative science. Because Mike's directorship coincided with the start of CalCOFI's fifth decade, he attacked the image problem head-on with a gala CalCOFI birthday party held at SIO. This was promotion on a grand scale. Prestigious speakers were invited from government and academic institutions outside the CalCOFI family to evaluate the program from their perspective. Their message was clear: the CalCOFI program of the past had pioneered the field of fisheries oceanography, and the CalCOFI of the present was poised to make major contributions to our understanding of global change. CalCOFI was not just important, it was essential. The symposium was impressive. A graceful ice sardine leapt from the center of a sumptuous lunch buffet. CalCOFI brochures and T-shirts were distributed, and a CalCOFI video was produced that is still shown on San Diego's UCSD television channel.

Since then, the CalCOFI image has improved. Perhaps it was the fortieth birthday celebration; perhaps it was the scientific and societal interest in global change, or the aggressive recruitment of ancillary programs on the quarterly cruises, or the publication of several seminal papers that spawned headlines in the national and local press. Whatever the reason, Mike's directorship saw a

marked increase in the recognition and appreciation of the CalCOFI program among our academic colleagues. As Mike wrote in 1999, the "...surveys of the California Current have metamorphosed from 'mindless monitoring' to the world's premier time series of ocean physics and ecology (with no change in our basic work)."

However, Mike was faced with worse than image problems. In the early 1990s, the state of California suffered several years of budgetary shortfalls, and this was passed along to state agencies. Overnight, the MLRG portion of the CalCOFI budget was threatened with a cut of nearly 50%. At one point MLRG had secure funds for a single additional cruise, and we debated canceling cruises altogether and diverting existing funds toward analysis of data. It took budgetary magic and unending negotiations to keep CalCOFI going.

Mike would be the first to acknowledge that he alone was not responsible for these successes. Indeed, many of us stretched ourselves far outside previous boundaries to maintain and improve the CalCOFI program. Mike's legacy to us was a continuing CalCOFI program. Our tribute to him must be a CalCOFI that moves vigorously into the challenges of the future.

I hope that some time before his death, maybe while bicycling to work wearing his orange signal-flag bike vest, Mike had a chance to look back over his directorship and to appreciate his accomplishments and to feel satisfied.

Elizabeth Venrick

Ode to the Standard Station

BY MICHAEL MULLIN Expedition Dramamine II 22 April–20 May 1974

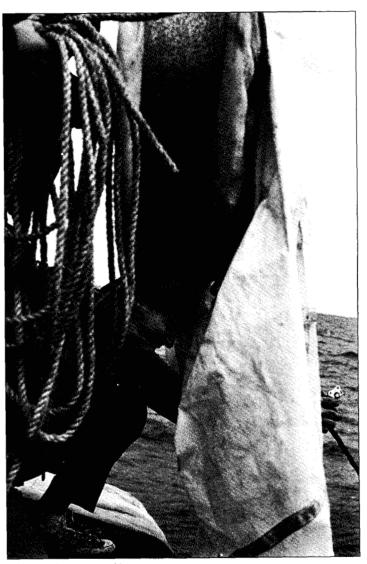
Oh, standard station, pride of science, Boon to Oceanographer's self-reliance; Mother Nature's forced compliance borders upon rape

The sea which makes our feet get damp'll Yield to us another sample, Though 20's plenty and 50's ample To make contours take shape.

The method hypothetico-deductive For classroom use is quite instructive. But Bill says it is too seductive, Making mathematicians gape.

Each time we pose a brand new query, Hoping to disprove a theory, While our backs get sore and our eyes get bleary, We log it on magnetic tape.

So we dock with reams of data. Surely we will publish later, For science is our Alma Mater Salvation for the Upright Ape



Mike deploys a set of bongo nets.