

## **Michael E. Mallonee**

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### **Education:**

University of Maryland University College  
Bachelor's Degree in Computer and Information Science, 2002

Anne Arundel Community College  
Associate of Arts Degree in Ocean Engineering Technology, 1978

### **Professional Experience:**

Horn Point Laboratory  
University of Maryland Center for Environmental Science

Faculty Research Assistant - Mar 1993 - Jun 1997  
Senior Faculty Research Assistant - Jul 1997 - Oct 2003  
Advanced Senior Faculty Research Assistant - Nov 2003 - present

World's End Aquaculture  
2324 W. Joppa Rd. Suite 630  
Lutherville, MD 21903

Production Manager - Sept 1991 - Feb 1993

Chesapeake Bay Institute  
Johns Hopkins University  
34th & Charles Streets  
Baltimore, MD 21218

Laboratory Technician - 1978 - 1982  
Marine/Laboratory Technician I - 1982 - 1986  
Marine/Laboratory Technician II - 1986 - 1990  
Hatchery Research Coordinator - 1990 - 1991

### **Areas of Professional Expertise:**

I began working as a laboratory technician at the Chesapeake Bay Institute (CBI) in August 1978 after obtaining an AA Degree in Ocean Engineering Technology from Anne Arundel Community College. I was hired to work on an EPA project conducting monthly cruises on the Chesapeake Bay with Bill Cronin. After this project ended, I became a "technician for hire",

working with different scientists at the lab on a variety of projects. I also spent time as the marine technician for the R/V Ridgely Warfield. Oyster aquaculture research with Ken Paynter was my last project at CBI. This led to a production manager job for a private aquaculture company for several years after CBI closed.

In the spring of 1993, I began working at Horn Point Laboratory for a NASA-funded project with Tom Fisher and Larry Harding. After this project ended, I continued to work with Larry on the LMER TIES and CISNet projects, and presently on a Bio-Complexity and ACE INC project. Our group is responsible for measurements of primary productivity, bio-optical profiles, pigments, dissolved organics, suspended particulates, and the collection of samples from the CTD and SAIL systems of the research vessels that we use.

In 1998, I began taking night courses at University of Maryland University College to complete a bachelor's degree. I pursued, and received in 2002, a degree in Computer and Information Sciences as I felt that I would benefit greatly from more expertise in this field. I will begin work on a Master of Science in Information Technology degree in the fall of 2005. Currently, I am responsible for all aspects of laboratory and shipboard operations for the Harding group. This includes preparing for cruises, ordering materials and supplies, running experiments, analyzing samples, processing data, maintaining equipment, and helping supervise the graduate students and postdoctoral fellows.

### **Laboratory Experience:**

1. Performing analyses of samples from cruises and laboratory experiments
2. Design and development of experiments, e.g., photosynthesis in laboratory and at sea using a variety of incubation techniques
3. Assisting in the preparation and reduction of data for reports including graphics and drafting
4. The design and construction of specialized gear used in bio-field studies requiring skills in woodworking, electrical wiring, and plexiglas and plastic workmanship
5. Operating data processors (IBM, Macintosh, and Silicon Graphics IRIS/INDIGO UNIX workstations) for the completion of experimental data and results.

### **Personal Interests:**

American Originals Fife & Drum Corps – Director, webmaster, snare drummer

### **Publications:**

Harding, L. W., Jr., Mallonee, M. E., Henderson, K. W. (1989). Spectral distribution and species-specific photosynthetic performance of natural populations of *Prorocentrum mariae-lebouriae*. (Dinophyceae) in the Chesapeake Bay. *Marine Ecology Progress Series* 52: 261-272.

Paynter, K. T., Mallonee, M. E. (1991). Site-specific growth rates and associated water qualities. In: New Perspectives in the Chesapeake System: A Research and Management Partnership, (Mihursky, J. and Chaney, A., Eds.), Proc. 2nd Chesapeake Bay Research Conference, Baltimore, Maryland, 4-6 Dec. 1990, pp. 391-399.

- Paynter, K. T., Mallonee, M. E., Shriver, S. H. (1992). Cost analysis of floating raft oyster production in Chesapeake Bay. *Journal of Shellfish Research* 11: 163-167.
- Harding, L. W., Jr., Mallonee, M. E., Perry, E. S. (2002). Toward a Predictive Understanding of Primary Production in a Temperate, Partially Stratified Estuary. *Estuarine Coastal and Shelf Science* 55: 437-463.
- Jordan, C. L., Harding, L. W., Jr., Mallonee, M. E. (2003). *Acartia tonsa* operates at a high trophic level in Chesapeake Bay microplankton blooms with abundant ciliates. *Journal of Plankton Research* (submitted).
- Jordan, C. L., Harding, L. W., Jr., Mallonee, M. E. (2003). Autotrophic microplankton, microheterotrophs and ciliates along a biomass gradient at a region of hydraulic control. *Marine Biology* (submitted).
- Magnuson, A., Harding, L. W., Jr., Mallonee, M. E., Adolf, J. E. (2004). Bio-optical model for Chesapeake Bay and the Middle Atlantic Bight. *Estuarine Coastal and Shelf Science* 61: 403-424.
- Adolf, J. E., Jordan, C. L., Miller, W. D., Mallonee, M. E., Harding, L. W., Jr. (2004). Phytoplankton Floral Composition and Primary Productivity in Chesapeake Bay (in prep).
- Harding, L. W., Jr., Magnuson, A., Mallonee, M. E. (2005). SeaWiFS retrievals of chlorophyll in Chesapeake Bay and the mid-Atlantic bight. *Estuarine Coastal and Shelf Science* 62: 75-94.
- Yeager, C. L. J., Harding, L. W., Jr., Mallonee, M. E. (2005). Phytoplankton production, biomass and community structure following a summer nutrient pulse in Chesapeake Bay. *Aquatic Ecology* 35: 135-149.

**Publications (Technical Assistance/Acknowledgment):**

- Harding, L. W., Jr., Meeson, B. W., Tyler, M.A. (1983). Photoadaptation and diel periodicity of photosynthesis in the dinoflagellate *Prorocentrum mariae-lebouriae*. *Marine Ecology Progress Series* 13: 73-85.
- Harding, L. W., Jr., Heinbokel, J. F. (1984). Periodicities of photosynthesis and cell division: behavior of phase-lagged replicate cultures of *Ditylum brightwellii* in a diurnally varying photic regime. *Marine Ecology Progress Series* 15: 225-232.
- Harding, L. W., Jr., Meeson, B. W., Fisher, T. R., Jr. (1985). Photosynthesis patterns in Chesapeake Bay phytoplankton: short- and long-term responses of P-I curve parameters to light. *Marine Ecology Progress Series* 26: 99-111.
- \_\_\_\_\_ (1986). Phytoplankton production in two east coast estuaries: photosynthesis-light functions and patterns of carbon assimilation in Chesapeake and Delaware Bays. *Estuarine, Coastal and Shelf Science* 23: 773-806.

- Harding, L. W., Jr., Fisher, T. R., Tyler, M. A. (1987). Adaptive responses of photosynthesis to different time-scales of change in light availability. *Biological Oceanography* 4: 419-453.
- Fisher, T. R., Jr., Harding, L. W., Jr., Stanley, D. W., Ward, L. G. (1988). Phytoplankton, nutrients, and turbidity in the Chesapeake, Delaware, and Hudson estuaries. *Estuarine, Coastal and Shelf Science* 27: 61-93.
- Coats, D. W., Harding, L. W., Jr. (1988). Effect of light history on the ultrastructure and physiology of *Prorocentrum mariae-lebouriae* (Dinophyceae). *Journal of Phycology* 24: 67-77.
- Harding, L. W., Jr., Coats, D. W. (1988). Photosynthetic physiology of *Prorocentrum mariae-lebouriae* (Dinophyceae) during its subpycnocline transport in Chesapeake Bay. *Journal of Phycology* 24: 77-89.
- Harding, L. W., Jr. (1988). The time-course of photoadaptation to low-light in *Prorocentrum mariae-lebouriae* (Dinophyceae). *Journal of Phycology* 24: 274-281.
- Coats, D. W., Heisler, J. J. (1989). Spatial and temporal occurrence of the parasitic dinoflagellate *Dubosquella cachoni* and its tintinnine host *Eutintinnus pectinis* in Chesapeake Bay. *Marine Biology* 101: 401-409.
- Paynter, K. T., Chen, T. T. (1991). Biological activity of biosynthetic rainbow trout growth hormone in the eastern oyster, *Crassostrea virginica*. *Biol. Bull.* 181: 459-462.
- Harding, L. W., Jr., Itsweire, E. C., Esaias, W. E. (1992). Determination of phytoplankton chlorophyll concentrations in the Chesapeake Bay with aircraft remote sensing. *Rem. Sens. Environ.* 40: 79-100.

### References:

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