Denise A. Martin Work: (802) 654-2628

EDUCATION

<u>Biology Laboratory Workshops</u>, Association for Biology Laboratory Educators Annual Conference, June 1984, 1991-1997, 1999-2000, 2002-2003. Various locations.

Education courses, Saint Michael's College, Colchester, Vermont. 1983-1986.

Master of Science in Zoology, University of Vermont, Burlington, Vermont, March 1982. Graduate Thesis: "Structure of a Stonefly (Plecoptera) Assemblage in Relation to Food Availability".

<u>Bachelor of Arts</u> in Environmental Studies, Wheaton College, Norton, Massachusetts, May 1977, *Summa cum laude*.

HONORS

- Sigma Xi Scientific society, Vermont Chapter, elected May 1983.
- Phi Beta Kappa Honor Society, Wheaton College, elected March 1977.
- Clinton Viles McCoy Prize in Ecology, May 1977.
- Honors thesis, "Ecological Analysis of Seasonal Changes in Phytoplankton Communities in Stony Brook Pond, Norfolk, MA and Norton Reservoir, Norton, MA", Wheaton College, May 1977.
- Departmental Honors in Environmental Studies, Wheaton College, 1977.

PROGRAM DEVELOPMENT AND ADMINISTRATIVE EXPERIENCE

<u>Biology Laboratory Coordinator</u>, Saint Michael's College, Colchester, Vermont. Responsible for all aspects of laboratory program for Freshman Biology course (enrollment 70-120 students per semester) and non-majors laboratory course including: developing new labs, writing and revising laboratory manual, and maintaining inventory of supplies. Hire, train and supervise ten teaching and preparation assistants. Fall 1982-present.

<u>Greenhouse Supervisor</u>, Saint Michael's College, Colchester, Vermont. Responsible for maintaining greenhouse facilities and care of permanent plant collection

(approximately 100 plants). Coordinate use of greenhouse space for course projects. Train and supervise student employees. May 1991-1996.

<u>Elderhostel Coordinator</u>, Saint Michael's College, Colchester, Vermont. Participated in program development and scheduling activities for three, one-week long residential programs. Planned and coordinated logistics for housing, food, related services, and daily activities, Summer 1987.

<u>Invertebrate Museum Curator</u>, University of Vermont, Burlington, Vermont. Organized and implemented physical layout of museum when moved to new facilities in 1982. Maintained the University's invertebrate collection while the permanent curator was on sabbatical, 1982.

<u>Assistant to the Director</u>, Massachusetts Audubon Society, Stony Brook Wildlife Sanctuary, Norfolk, Massachusetts. Participated in the development of the sanctuary master plan, developed and taught natural history programs to third through ninth graders. Summer 1976-1977.

TEACHING EXPERIENCE

<u>Lecturer and Laboratory Instructor</u>, Saint Michael's College, Colchester, Vermont. Develop and teach introductory biology courses with laboratory. Courses taught include: Biology for Elementary Education Majors (105), General Biology (101 and 103) and Human Biology (107). Fall 1982-present.

<u>Weaving Instructor</u>, Vermont Weavers' Guild, Montpelier, Vermont. Developed and taught workshops on reproducing historical coverlets and on Overshot weaving. Fall 1993 and Spring 1995.

<u>Natural History Instructor</u>, Saint Michael's College, Colchester, VT. Developed and taught courses in natural History for children and seniors, Summer 1986. For seniors, Summers 1987-1990.

Naturalist, Appalachian Mountain Club in Gorham, NH, Summer 1982.

<u>Laboratory Instructor</u> for graduate and undergraduate courses, Zoology Department, University of Vermont, Burlington, VT, from September 1978-1982. Laboratories taught include: Invertebrate Biology, Limnology, Population Biology, Field Biology and Natural History of Birds and Mammals.

<u>Teaching Assistant</u>, Biology Department, Wheaton College, 1972-1973.

Worked with juveniles in court diversion program, 1973-1974; assisted in drug-alcohol abuse workshops and family planning workshops, hotline volunteer, Attleboro Drug Council, Attleboro, MA, 1972-1974.

RESEARCH

<u>Taxonomist</u>. Identified to species, Stoneflies (Order Plecoptera) and Mayflies (Order Ephemeroptera) collected from various streams in Vermont. Employed by William Countryman, Environmental Assessment and Planning, Northfield, VT, Winter 1989. Spectrum, Inc., Montpelier, VT, Spring 1987-Spring 1988. Milton Potash, University of Vermont, Burlington, VT, Summer 1985.

<u>Field Researcher</u>, Botany Department, University of Vermont, Burlington, VT. Designed and conducted sampling program of soil fauna of Camel's Hump Mountain, Huntington, VT, as part of the Botany Department's acid rain project, Summer 1982.

Aquatic Biology Technician, Department of Water Resources, State of Vermont, Waterbury, VT. Participated in the planning and implementation of a long-term water quality study of the Winooski River. Duties included measuring dissolved oxygen, biological oxygen demand, nitrates, phosphates, pH, temperature and quantitative sampling of algal flora, 1979-1980.

PUBLICATIONS

Bozzone, Donna M. and Denise A. Martin, 2000. An Experimental System to Study Phagocytosis. Pages 405-415. *in* Tested studies for laboratory teaching, Volume 21 (S. J. Karcher, Editor). Proceedings of the 21st Workshop Conference of the Association for Biology Laboratory Education (ABLE), 509 pages.

Bozzone, Donna M. and Denise A. Martin. 1998. Chemotaxis in the plasmodial slime mold, *Physarum polycephalum*: An experimental system for student exploration and investigation. American Biology Teacher. 60 (1). 59-62.

Chemotaxis lab also published *in* Biology Labs that Work: The Best of How-to do-Its, Vol. II, (National Association of Biology Teachers; Suzanne Black *et.al.*, Editors) pp10-13, 2000.

Martin, Denise (ed.). 1997-present. Laboratory Handouts for General Biology - A Laboratory Manual for General Biology.

Martin, Denise (ed.), 1996-2001. Handouts for Biology for Elementary Education Majors - A Laboratory Manual for Biology 105.

Hessler, Arthur and Denise A. Martin. 1987. <u>Exploration in Biology Laboratory</u>, a laboratory manual for non-biology majors, St. Michael's College, Colchester, Vermont.

Costello, W. J. and D. A. Martin. 1980. "Suspended Algae Populations on the Lower Winooski River and Some Implications for Water Quality Monitoring". <u>Proceedings</u> 1980 Seventh Annual Lake Champlain Environmental Conference. p. 196.

Kricher, J.C., C.L. Bayer, and D.A. Martin. 1979. "Effects of Two Aroclor Fractions on the Productivity and Diversity of Algae from Two Lentic Ecosystems". <u>International</u> Journal of Environmental Studies, Volume 13, pp. 159-167.

BOOK REVIEWS

Cohen, J., <u>Powerplants: A Plant-Based Energy Curriculum</u>. 1992. (National Gardening Association, Burlington, VT). Pre-publication review.

Cohen, J. and E. Pranis, <u>Curriculum Guide for GrowLab</u>. 1990. Pre-publication review.

ABSTRACTS AND PRESENTATIONS

Bozzone, Donna and Denise A. Martin. . An Experimental System to Study Phagocytosis. Presentation at the 1999 Association for Laboratory Educator's Conference

Martin, Denise A. 1995. Plant Competition from the Field and Laboratory Perspective. p.256 in Tested studies for laboratory teaching, Volume 16 (C.A. Goldman, Editor). Proceedings of the 16th Workshop/Conference of the Association for Biology Laboratory Education (ABLE), 273. Abstract of presentation given at 1994 conference.

Martin, Denise A. 1992. Introduction to Growlab, a Plant-Based Curriculum. p. 221. in Tested studies for laboratory teaching, Volume 14 (C. A. Goldman, Editor). Association for Biology Laboratory Educator's Conference (ABLE) 240pp. Abstract of presentation given at 1991 conference.

SERVICE

Community Mentor, Vermont Youth Conservation Corps, Richmond, VT. 2008. mentor for high school students working on local conservation projects. Facilitate program planning, visit student work sites and help students with choosing and implementing final volunteer project.

Chair, Membership Committee, Association for Biology Laboratory Education (ABLE), Colchester, Vermont. 2000-2002 Responsible for maintaining membership database, processing memberships, and preparing membership directory. Voting member of board of directors. Participated in planning for the annual conference, held at various institutions in Canada or United States. ABLE is an international organization with 400 active members dedicated to improving undergraduate laboratory education.

<u>Volunteer, Friends of Richmond Library</u>, Richmond, Vermont. 1998-present. Assist in yearly book sale.

<u>Parent Volunteer, Camel's Hump Middle School, Richmond, Vermont.</u> Assist in science labs for 7th and 8th graders. 2000- 2003.

<u>Parent Volunteer, Richmond Elementary School</u>, Richmond, Vermont. Assisted in classroom and with fundraising activities. 1997-1998.

<u>Science Planning Committee, Richmond Elementary School</u>, Richmond, VT. Provided input for the revision and planning of the elementary school's science program, March 1994-June 1996.

<u>Volunteer Curator, Shelburne Museum</u>, Shelburne, Vermont, Summer 1994. Coordinated the documentation, including photography, of 52 handwoven coverlets in the museum's collection.

Advisory Committee, National Gardening Association, Burlington, VT. Resource person for an "inquiry teaching" program using plant-based research as its foundation. Project includes the implementation of a staff developer network and school/community partnerships at selected test sites throughout the United States. Fall 1991-2000.

Advisory Board, St. Michael's College Childcare Center, August 1990-July 1991.

<u>Program Chairperson, Vermont Weavers' Guild.</u> Planned programs for monthly guild meetings consisting of several morning workshops and an afternoon presentation. Responsible for contacting and interviewing prospective instructors, hiring, writing contracts, and writing press releases, May 1984-May 1987.

OTHER ACTIVITIES AND INTERESTS

<u>Handweaver</u>. Began weaving Spring 1982 and have had juried work accepted to exhibit at Frog Hollow Craft Center, Middlebury, Vermont, May 1987; Vermont Weavers' Guild Exhibit, May 1991, 1993, 1995, 2003. Received first and second place awards 1993 and 1995. Juried work exhibited at New England Weavers Seminar, 1993 (second place for historical coverlets and special award for historical work), 1995 and 2003. Have audited courses in Two- and Three-Dimensional Design and Art History. Active member of the Vermont Weavers' Guild since May 1983. Produced a monograph, *Echoes of Our Ancestors* (1998), documenting 22 handwoven coverlets from the Shelburne Museum. Monograph includes draft analysis, original and balanced threading information, computer drawdowns, as well as historical information.

Avid gardener, enjoy many outdoor activities including hiking, bicycling (including a six week trip from Burlington, Vermont through Nova Scotia, Canada in Summer 1983 and 3 week trip along the west coast of Ireland in 2002), cross-country skiing, kayaking, and swimming.