

William J. Cromartie
Associate Professor
Environmental Studies

ADDRESS:

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CURRICULUM VITAE

EDUCATION:

St. John's College. Santa Fe, New Mexico, B.A., Cum Laude, June, 1969, Board of Visitors and Governors Medal for Highest Academic Standing in Class

Cornell University, Ithaca, New York, PhD., August, 1974, Field of Ecology and Evolutionary Biology

Doctoral Committee - Richard B. Root, Robert H. Whittaker, George C. Eickwort

Thesis: The effect of stand size and vegetational background on the colonization of cruciferous plants by herbivorous insects

POSITIONS:

Assistant Professor, Environmental Studies Program, Stockton State College, Pomona, New Jersey, 1974-1979

Associate Professor, Environmental Studies Program, Stockton State College, Pomona, New Jersey, 1979-

Coordinator, Environmental Studies Program, 1976-1977, 1989-1991, 1999-2000

Director, Stockton Center for Environmental Research, 1979-1982

Visiting Tutor, Graduate Institute in Liberal Education, St. John's College, Santa Fe, NM, Summer 1987

FELLOWSHIPS AND SCHOLARSHIPS:

National Merit Scholarship, 1965-1969

National Science Foundation Graduate Fellowship, 1969-1971

National Institutes of Health Training Grant, 1972

American Association for the Advancement of Science/U.S. Environmental Protection Agency Science and Engineering Fellowship, 1982

American Association for the Advancement of Science Congressional Science and Engineering Fellowship, 1982-83 (legislative staff, office of Representative George E. Brown, Jr., with responsibilities in agricultural research and pesticide law)

PUBLICATIONS:

- The effect of stand size and vegetational background on the colonization of cruciferous plants by herbivorous insects. *Journal of Applied Ecology* 12: 517-533 (1975)
- Influence of habitat on the colonization of collard plants by *Pieris rapae*. *Environmental Entomology* 4:783-784 (1975)
- Environmental control of insects using crop diversity. pp 223-251 in David Pimentel, ed. *CRC Handbook of Pest Management in Agriculture Vol. 1.*, second edition CRC Handbook Series in Agriculture. CRC Press, Miami (1991)
- (with Dale F. Schweitzer) Biology of the Rare Skipper (*Problema bulenta*) in southern New Jersey. *Journal of the Lepidopterists' Society* 47(2):125-133 (1993)
- (with Dale F. Schweitzer) *Catocala louiseae*, *C. grisatra*, and *C. jair* (Lepidoptera: Noctuidae) in North Carolina, *Entomological News* 108(5):389-390 (1997)

REPORTS:

- Biological monitoring for low-level effects of pollution in aquatic ecosystems. U.S. Environmental Protection Agency, 1982
- Development of a Water Quality/Aquatic Biota Study of Selected Subwatersheds in the Great Egg Harbor Watershed. Atlantic County Utilities Authority, June 2002

PAPERS AT MEETINGS:

- Colonization of plants by insect herbivores in diverse stands and monocultures, Ecological Society of America, 1971
- Influence of stand structure and diversity on the colonization of plants by insect herbivores, Entomological Society of America, 1972
- Herbivorous insects causing mortality of pine seedlings in an old field, Eastern Branch, Entomological Society of America, 1979
- Impact of insects on pitch pine, American Entomological Society, 1981
- Post-storm planning for Avalon NJ, New Jersey Academy of Science, 1982
- Larval insects that bore into *Spartina* stems: are they competing? New Jersey Academy of Science, 1985
- Biological monitoring for low-level effects of pollution on aquatic ecosystems. Savannah River Ecology Lab, Ninth Symposium, 1986
- Monitoring long-term, low-level biological effects of pollution on aquatic and wetland ecosystems, New Jersey Academy of Science, 1986
- Darwin and Mendel: Paradoxes of Biology, Stockton State College, Biology Seminar, 1990
- Integrating GIS into undergraduate environmental studies. American Institute of Biological Sciences, Seattle WA, 1996
- Integrating GIS into an undergraduate environmental studies program. Second International Symposium on GIS in Higher Education, 1996
- Integrating dynamic modeling into environmental studies. Quantitative Reasoning Across the Disciplines, Regional Conference, 1997 (with Dr. Michael Geller)
- A geographic information systems facility for environmental studies. Post-conference Workshop, Thirteenth Annual Eastern Small College Computing Conference, 1997

Integrating GIS into environmental science. Poster presentation, NSF Transforming Undergraduate Education in Science, Mathematics, Engineering and Technology Education Conference, 1998 (with Dr. Weihong Fan)

Integrating GIS into environmental science. Poster presentation, Delaware Valley Chapter, Society for Conservation Biology, 1998

Student projects in conservation biology using GIS and GPS. Poster presentation, Delaware Valley Chapter, Society for Conservation Biology, spring 1999

Multidisciplinary ecology: Teaching using geographic information systems. Poster presentation, Annual Meeting of the Ecological Society of America, Spokane, Washington, 1999 (presented by Dr. Weihong Fan)

The AES Library: from Linnaeus to the Worldwide Web. American Entomological Society on October 27, at the Academy of Natural Sciences, Philadelphia PA, 1999 (with Dr. Dan Otte)

Revised macroinvertebrate criteria for the Great Egg Harbor River. Oral presentation, NJ Academy of Sciences annual meeting, 2003 (with Jason Gliddon)

Biomonitoring in New Jersey blackwater streams: recalibrating an invertebrate bioassay. Poster presentation. Annual Meeting of the Ecological Society of America, Savannah, Georgia, 2003 (with Jason Gliddon, Lynn Maun, Julie Akers, Tamica Johnson and James Grimes)

Stream biomonitoring using macroinvertebrates in the New Jersey Pinelands: Consistency with water chemistry and landuse. Mid Atlantic Chapter of the Ecological Society of America Conference on Sustainable Landscapes, Lancaster PA, March 2004 (with L. Maun, J. Akers, T. Johnson, J. Gliddon, J. Grimes and D. Monzo)

Using Stream Insects on Woody Debris to Assess Water Quality in the New Jersey Pinelands, at the NJ Academy of Sciences' annual meeting, April 2004, Fairleigh Dickinson University, Madison NJ (with L. Maun, J. Akers, T. Johnson, J. Gliddon, J. Grimes and D. Monzo)

Adams Branch Restoration: Macroinvertebrates and Water Chemistry. Poster session. Joint meeting, American Entomological Society and Entomological Society of Pennsylvania. Newark, DE. 20 October 2004. (with Lynn Maun, Julie Akers, Denis Cummings, Justine Cook, Jordan Leckenbush, and Bob Fromtling)

Aquatic Macroinvertebrates in the Great Egg Harbor River Watershed. Newark Entomological society, New Brunswick, NJ. 23 October 2004. Poster session (with Jason Gliddon, Tamica Johnson, Lynn Maun, Julie Akers, Denis Cummings, Justine Cook, Jordan Leckenbush, and Bob Fromtling)

Biomonitoring pinelands rivers using snag-dwelling insects. Invited speaker, American Entomological Society, at the Academy of Natural Sciences, Philadelphia PA, 10 November 2004

Macro-invertebrates, landuse and chemistry in an urbanizing watershed. Poster session. Mid-Atlantic Region, Ecological Society of America, Baltimore MD, 12 March 2005 (with Julie Akers, Justine Cook, Denis Cummings, Jordan Leckenbush and Graeme Millar)

Macro-invertebrates, landuse, hydrology and chemistry in an urbanizing watershed. Poster session. Delaware Valley Chapter, Society for Conservation Biology, Rowan

University, 9 April 2005 (with Julie Akers, Justine Cook, Denis Cummings, Bob Fromtling, Jordan Leckenbush and Graeme Millar)

Stream ecology of an urbanizing watershed in the New Jersey Pine Barrens. Poster presentation, International Congress of Ecology, Montreal, Quebec, August 2005 (with J. Akers, D. Cummings, J. Cook, J. Leckenbush and G. Millar)

Determination of biological, hydrological and chemical reference sites in a New Jersey Pinelands watershed. Poster session. Mid-Atlantic Region, Ecological Society of America, NJ School of conservation. 9 April 2006 (with Keltos, L., Dwyer, A., Mott, K. and F. Akers)

Reference site characterization for ecological monitoring in the Great Egg Harbor River, New Jersey. Poster presentation, Annual Meeting of the Ecological Society of America, Memphis TN, August 2006 (with Keltos, L., Dwyer, A., Mott, K., Akers, F. and T Chirenje)

Reading Darwin and Mendel: Paradoxes of biology. Association for Core Texts and Courses Annual Meeting, Williamsburg VA, 29 March – 1 April 2007

Animal and human: New ideas about who we are. Association for Core Texts and Courses Annual Meeting, Plymouth MA, 3-6 April 2008

Stream ecology in Pine Barrens landscapes: does monitoring improve with taxonomic refinement? Poster presentation, Mid-Atlantic Region, Ecological Society of America Wilkes College, Wilkes-Barre PA, 19 April 2008 (with C. Costa and A. Tripler)

Long-term ecological research at an undergraduate college: Student participation in monitoring and assessing ecosystem change. Oral presentation, Annual Meeting of the Ecological Society of America, Milwaukee WI, Aug. 2008

Assessment and habitat/host plant restoration for Lepidoptera species of concern in the NJ Pine Barrens. Poster presentation, Mid-Atlantic Region, Ecological Society of America, The College of New Jersey, Trenton NJ, 13 Mar. 2009

The Biosphere: constructing a tradition. Association for Core Texts and Courses Annual Meeting, Memphis TN, 16-19 April 2009

GRANTS AND CONTRACTS (Summaries):

Ecological Study Area Inventory, Stockton State College, 1977

Environmental Studies Program Development, 1978

Endangered Species in New Jersey, Stockton State College, 1979-80

Cordery Creek Natural Area Evaluation, Galloway Township, New Jersey, 1981

Post-storm Planning, Borough of Avalon, N.J., New Jersey Division of Coastal Resources, 1981-82

Biological Monitoring of Aquatic Ecosystems, Stockton State College, 1984, 1985

Technological Literacy Course Development, New Jersey Department of Higher Education, 1984

Infusing Humanities in General Education, New Jersey Department of Higher Education, 1985-86

Endangered Species of Lepidoptera in South Jersey, Stockton State College, 1987-88, 1989, 1990, 1992

Computer Software for Population Biology, Stockton State College Career Development Committee, 1992.

NJ Natural Heritage Program Lepidoptera Survey Contract, Cape May Co. NJ. 1994
National Science Foundation Instrumentation and Laboratory Improvement Grant. Field Monitoring Instruments for Environmental Sciences Labs with Geographic Information Systems. 1994-1997
National Science Foundation Course and Curriculum Development Grant. Integrating Geographic Information Systems into Undergraduate Environmental Science Curriculum. 1995-1998
National Science Foundation, Course, Curriculum and Laboratory Improvement. Increasing student and faculty participation in GIS education 2001-2004.
Development of a water quality/aquatic biota study of selected subwatersheds in the Great Egg Harbor Watershed. Atlantic County Office of Regional Planning and Economic Development. 2002-2003.
Development of Improved Biomonitoring Protocol for the Great Egg Harbor River. WRRRI Undergraduate Internship. 2002-2003. With Gliddon, Jason (student).
Biomonitoring the Great Egg Harbor River. WRRRI Undergraduate Internship. 2003-2004. With Maun, Lynn (student).
Adams Branch Stormwater Remediation Plan - Phase One. NJ Department of Environmental Protection, Division of Watershed Management, contract to Stockton College in cooperation with the Great Egg Harbor Watershed Association. May to December 2004.(with Claude Epstein, Ray Mueller and Tait Chirenje)
Research & Professional Development award: Aquatic macroinvertebrate research. Richard Stockton College. (\$3,800) Summer, 2005
Internships to Assess Gravelly Run, Great Egg Harbor River. Great Egg Harbor Watershed Association Grant to Richard Stockton College, 2005-2006. (students Denis Cummings, Jordan Leckenbush, Amy Dwyer and Karl Mott)
Assessing Subwatersheds within the Great Egg Harbor River Basin. WRRRI Undergraduate Internship. 2005-2006. With Lauren Keltos (student)

SPECIAL COURSES, CONFERENCES, ETC.

Organization for Tropical Studies, Ecology of Central American Pine Forests, 1972
Gordon Research Conference, Species Interactions of Importance to Agriculture, 1975
Environmental Protection Agency, Workshop on Training Construction Grants Program Citizen Advisory Board Members, 1980
Grantsmanship Training Program, St. Louis University, 1980
Gordon Research Conference, Opportunities and Strategies for Resolving Problems Associated with Crop Productivity and Protection, 1983
Chautauqua-type Short Course, Ecological Dynamics of Marshes and Marine Coastal Areas, 1984
Chautauqua-type Short Course, Ecological Dynamics of a Swamp, 1987
Chautauqua-type Short Course, The Inquiry Method of Teaching Field Sciences, 1989
Introduction to Systems Thinking with STELLA. High Performance Systems, 1995.

SCIENTIFIC AND TECHNICAL ADVISORY COMMITTEES:

Technical Advisory Group, New Jersey Pinelands Commission, 1979-82
New Jersey Endangered Species Council, 1980-86
Mullica River Estuarine Sanctuary Steering Committee, 1981

Galloway Township Environmental Commission, Chairman, 1984-89
Great Egg Harbor River Watershed Management Planning Project, Scientific and
Technical Advisory Committee, 2001-2003
Mullica River Watershed Management Planning Project, Steering committee, 2001-
Atlantic County Utilities Authority Groundwater Advisory Committee, 2003-

CURRENT RESEARCH INTERESTS:

Biogeography and ecology of insects associated with pine barrens and conifer-dominated wetlands in the eastern U.S.

Insects in brackish marshes and impoundments

Political and scientific foundations of the "green" movement

Biomonitoring of Coastal Plain stream ecosystems

Teaching undergraduate ecology through core texts

PROFESSIONAL SOCIETIES:

American Association for the Advancement of Science

Ecological Society of America - Mid-Atlantic Region Chapter representative to ESA

Regional Response Working Group, 2006-2008. Chapter Secretary-Treasurer, 2007-08.

British Ecological Society

American Society of Naturalists

Entomological Society of America

American Entomological Society - Corresponding Secretary, 1997-2003, Vice-President, 2003-2009, President 2009-

New Jersey Academy of Science

Xerces Society

PROFESSIONAL REFERENCES:

Dr. Claude M. Epstein

Natural Sciences and Mathematics

Stockton College

P.O. Box 195

Pomona, NJ 08240

Dr. Dale F. Schweitzer

1761 Main St.

Port Norris, NJ 08349

Frederick B. Akers, River Administrator

Great Egg Harbor Watershed Association

P.O. Box 395

Newtonville, NJ 08346

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