

## **Michael F. Gross**

- Associate Provost for Academic Program Development
- Professor of Biology
- Director, Sister Mary Grace Burns Arboretum of Georgian Court University

### **Education:**

- Ph.D. Marine Studies, University of Delaware, 1987
- ITT International Fellow, Universite de Rennes I, France, 1982- 1983
- B.S. Biology (Second Major: Accounting), Lebanon Valley College of Pennsylvania , 1982

### **Work Experience:**

- Associate Provost for Academic Program Development, Professor of Biology, Director of the Sister Mary Grace Burns Arboretum, Georgian Court University, 2002 -
- Professor of Biology, Assistant Dean for Program Initiatives, Director of the Sister Mary Grace Burns Arboretum, Georgian Court University, 2001-2002
- Professor of Biology, Assistant Dean for Program Initiatives, Georgian Court University, 2000 - 2001
- Associate Professor of Biology, Georgian Court University, 1996-2000
- Assistant Professor of Biology, Georgian Court University, 1992-1996
- Assistant Professor of Biology, Marshall University, 1991-1992
- Assistant Professor of Biology, Elmhurst College, 1990-1991
- Assistant Professor of Biology, Gettysburg College, 1989-1990
- Assistant Professor of Biology, Behrend College of the Pennsylvania State University, 1988-1989
- Research Consultant, University of Delaware, 1988-1994
- Postdoctoral Fellow, University of Delaware, 1987-1988

### **Scholarly Interests:**

Plant collection maintenance, identification and development in Georgian Court University's S. Mary Grace Burns Arboretum and the Georgian Court University greenhouse; preservation/restoration of Georgian Court University's piece of New Jersey pinelands on campus; wetland plant ecology; plant conservation; parasitic plants.

### **Representative Publications and Presentations:**

- Gross, M.F., M.B. Stockton, A.T. Wendolowski, M. Smith, D.G. Unkow, K.D. Hopson, T.M. Strickland, M. Bilderback. (eds). 2018. S. Mary Grace Burns Arboretum Self-Guided Walking Tour Booklet. 16p.

- Plantard, O., S. Valette, and M.F. Gross. 2007. The root-knot nematode producing galls on *Spartina alterniflora* belongs to the genus *Meloidogyne*: rejection of *Hypsoperine* and *Spartonema* spp. *J Nematol* 39(2): 127-132.
- Stockton, M.B., M.F. Gross, A.T. Wendolowski, M. Smith, D.G. Unkow, K.D. Hopson, T.M. Strickland, K. Guilfoyle, M. Bilderback. (eds). 2012. *S. Mary Grace Burns Arboretum at Georgian Court University: A history and a guide* (5th ed.). 36p.
- Stockton, M.B., M.F. Gross, A.T. Wendolowski, M. Smith, D.G. Unkow, K.D. Hopson (eds). 2005. *S. Mary Grace Burns Arboretum at Georgian Court University: A history and a guide* (4th ed.). 36p.
- Gross, M.F. 2002. Vegetation characteristics of a New Jersey Pinelands community containing high terrestrial gastropod density and exotic gastropod species. Presented at Botanical Society of America Annual Meeting, Madison, WI, 2-7 Aug.
- Gross, M.F. 2002. The small college arboretum: How to establish it and use it for undergraduate teaching. Hour-long workshop presented at Botanical Society of America Annual Meeting, Madison, WI, 3 Aug.
- Gross, M.F. 1996-2003. [Plants of the New Jersey Pinelands \(Pine Barrens\)](#).
- Gross, M.F. 2001. Portrait of the New Jersey Pinelands. [Wildflower](#) 17(3): 21-25.
- Stockton, M.B., M.F. Gross, A.T. Wendolowski, M. Smith, D.G. Unkow, K.D. Hopson (eds). 2001. *S. Mary Grace Burns Arboretum at Georgian Court College: A history and a guide* (3rd ed.). 36p.
- Schneider, C.E. and M.F. Gross. 2001. Tree species composition and conservation of a remnant New Jersey Pinelands community. Presented at Ecological Society of America Annual Meeting, Madison, WI, 4-10 Aug.
- Gross, M.F. and M.E. Creamer. 1999. June wildflowers in the Georgian Court College Arboretum. Presented at New Jersey Academy of Science Annual Meeting, Lakewood, NJ, 24 April. (Based on student research project.)
- Gross, M.F. 1998. Integrated Pest Management in a college greenhouse: a model system for demonstrating ecological processes. Presented at Ecological Society of America/Botanical Society of America Annual Meeting, Baltimore, MD, 1-6 Aug.
- Gross, M.F. 1998. Using Integrated Pest Management in the Georgian Court College greenhouse. Invited lecture at DuPont Experimental Station, Wilmington, DE, 7 Jan.
- Gross, M.F. 1997. Species-area relationship for vegetation on islands in a New Jersey Pinelands fen. Presented at Botanical Society of America Annual Meeting, Montreal, 3-7 Aug., and at Ecological Society of America Annual Meeting, Albuquerque, NM, 10-14 Aug.
- Schneider, C.E. 1997. Common pinelands plants of Lake Carasaljo Park, Lakewood, New Jersey: An illustrated guide. Ed. by M.F. Gross. Georgian Court College, Lakewood, New Jersey. 25 p. (Student research project, made possible by a grant from the [Trust for Public Land](#)'s Barnegat Bay Environmental Grant Fund.)

- Gebert, C.M., M.A. Hardisky, P.L. Wolf, M.F. Gross, S. Black, and S. Possessky. 1996. Root type effects upon methane ventilation. Presented at Ecological Society of America Annual Meeting, Providence, RI, 11-15 Aug.
- Possessky, S., M.A. Hardisky, P.L. Wolf, M.F. Gross, S. Black, and C.M. Gebert. 1996. Methane emission and oxidation in *Typha* wetlands. Presented at Ecological Society of America Annual Meeting, Providence, RI, 11-15 Aug.
- Gross, M.F. 1996. Learning botany using web pages of local, native plants. Presented at Botanical Society of America Annual Meeting, Seattle, WA, 4-8 Aug.
- Gross, M.F. 1996. Learning botany using web pages of New Jersey Pinelands plants. Presented at New Jersey Academy of Science Annual Meeting, South Orange, 11 May.
- Gross, M.F. 1995. Germination ecology and host preference in the holoparasite, *Cuscuta gronovii*. Presented at Ecological Society of America Annual Meeting, Snowbird, UT, 31 July-3 Aug.
- Gross, M.F. and C.M. Howells. 1994. Relationships between plant biomass and pore water methane concentrations in Lake Carasaljo, New Jersey, wetlands. Presented at New Jersey Academy of Science Annual Meeting, West Long Branch, NJ.
- Howells, C.M. and M.F. Gross. 1994. Preliminary investigation into protocols necessary for aseptic culture of *Impatiens walleriana* anthers. Presented at New Jersey Academy of Science Annual Meeting, West Long Branch, NJ. (Student research project).
- Gross, M.F., M.A. Hardisky, P.L. Wolf and V. Klemas. 1993. Relationships among *Typha* biomass, pore water methane, and reflectance in a Delaware (USA) brackish marsh. *Journal of Coastal Research* 9:339-355.
- Gross, M.F., M.A. Hardisky, E. Williams, S. Black, P.L. Wolf and V. Klemas. 1993. Correlations among *Typha* biomass, methane concentrations and methane flux in a Delaware marsh. Presented at Twelfth Biennial International Estuarine Research Conference, Hilton Head, SC.
- Gross, M.F., M.A. Hardisky, P.L. Wolf, and V. Klemas. 1991. Relationship between aboveground and belowground biomass of *Spartina alterniflora* (smooth cordgrass). *Estuaries* 14:180- 191.
- Gross, M.F., M.A. Hardisky, and V. Klemas. 1990. Inter-annual spatial variability in the response of *Spartina alterniflora* biomass to amount of precipitation. *Journal of Coastal Research* 6:949-960.
- Gross, M.F., M.A. Hardisky, J.A. Doolittle, and V. Klemas. 1990. Relationships among depth to frozen soil, soil wetness, and vegetation type and biomass in tundra near Bethel, Alaska, U.S.A. *Arctic and Alpine Research* 22:275-282.
- Doolittle, J.A., M.A. Hardisky, M.F. Gross, and V. Klemas. 1990. A ground-penetrating radar study of active layer thicknesses in areas of moist sedge and wet sedge tundra near Bethel, Alaska, U.S.A. *Arctic and Alpine Research* 22:175-182.
- Gross, M.F., M.A. Hardisky, and V. Klemas. 1988. Effects of solar angle on reflectance from wetland vegetation. *Remote Sensing of Environment* 26:195-212.

- Bartlett, D.S., M.A. Hardisky, R.W. Johnson, M.F. Gross, V. Klemas, and J.M. Hartman. 1988. Continental-scale variability in vegetation reflectance and its relationship to canopy morphology. *International Journal of Remote Sensing* 9(7):1223-1241.
- Gross, M.F., V. Klemas, and J.E. Levasseur. 1988. Remote sensing of biomass of salt marsh vegetation in France. *International Journal of Remote Sensing* 9(3):397-408.
- Gross, M.F., M.A. Hardisky, V. Klemas, and P.L. Wolf. 1987. Quantification of biomass of the marsh grass *Spartina alterniflora* Loisel. using Landsat Thematic Mapper imagery. *Photogrammetric Engineering and Remote Sensing* 53(11):1577-1583.
- Hardisky, M.A., M.F. Gross, and V. Klemas. 1986. Remote sensing of coastal wetlands. *BioScience* 36(7):453-460.
- Gross, M.F., V. Klemas, and J.E. Levasseur. 1986. Biomass and structure of a *Spartina alterniflora* Loisel.-dominated salt marsh in France. *Bulletin of the Torrey Botanical Club* 113(2):125-130.

#### **Service:**

- Georgian Court University representative to Garden State Gardens Consortium (2009-Present; Secretary 2018-Present)
- Supervisor and Secretary, Ocean County Soil Conservation District (2008-Present)
- Member, Lakewood, NJ, Shade Tree Commission, 2007-2015 (chair, 2013-2015)

#### **Awards:**

- Honorary Member, Sigma Tau Delta (Sigma Mu Chapter), International English Honor Society, May 2019
- Georgian Court University Student Life Advocate Award, May 2019

#### **Professional Memberships:**

American Association for the Advancement of Science, Botanical Society of America, Ecological Society of America, Native Plant Society of New Jersey, Philadelphia Botanical Club, Society for Conservation Biology