



Steve R. Mattox, Ph.D.

Associate Professor of Geology, Unit Head of Geology

The Seymour K. & Esther R. Padnos Hall of Science # 133

One Campus Drive

Allendale, Michigan 49401-9403

Office Telephone: (616) 331-3734

Office Fax: (616) 331-3740

Electronic Mail: mattox@gvsu.edu

EDUCATION

- Ph. D., Geology, 1992, Northern Illinois University.
- M.S., Geology, 1986, Northern Illinois University.
- B.S., Geology, 1983, Indiana University.

TEACHING EXPERIENCE

- Associate Professor, Department of Geology, GVSU, 2003 to present.
- Assistant Professor, GVSU, 1998 to 2003.
- Lecturer, 2001, University of the Philippines College Baguio, Baguio City, Luzon, Philippines.
- Post-doctoral Research Volcanologist, University of North Dakota, 1995-1996.
- Lecturer, University of Hawaii at Hilo, 1991-1996.
- Visiting Lecturer, School of the Art Institute, Chicago, Illinois, 1991.

WORK EXPERIENCE

- Exploration Geologist (east Java, Indonesia), Golden Valley Mines NL, West Perth, WA, 1997.
- Exploration Geologist (Kimberley), Precious Metals of Australia, West Perth, WA., 1996-1997.
- Consulting Geologist, Belt Collins & Associates, Honolulu, HI, 1993.
- Geologic Investigation Contractor, Utah Geological Survey, 1989-1990.
- Geologic Mapping Contractor, Utah Geological Survey, 1984-1989.

AWARDS, HONORS, and GRANTS

- GVSU Alumni Association Outstanding Educator Award, 2009.
- Michigan Science Teachers Association, College Teacher of the Year, 2008.
- Pew Teaching Excellence Award for the Science and Mathematics Division, 2002.

- National Science Foundation, co-PI, Volcanology for Earth Science Teachers, 1994-1996, \$315,000.
- National Park Foundation, to write “A Teacher's Guide to the Geology of Hawaii Volcanoes National Park”, 1993-1994, \$21,000.

INTERESTS

- Collaborating with undergraduate students in writing/presenting innovative teaching materials.
- Establishing a state-wide “AP” geology exam in Michigan.
- Completing “Geology Underfoot in Michigan” for Mountain Press.
- Learning paleomagnetism as a research method.

SELECTED PUBLICATIONS

Awad, A., and Mattox, S., accepted, Recruiting Students to Undergraduate Geoscience Programs through Dual –Credit and Dual-Enrollment Classes, *GSA Today*.

Mattox, S.R., Llerandi-Román, P.A., and Fegel, L., 2008, Designing and Implementing Earth Science Courses for a New Integrated Science Program for K-8 Teachers, *Journal of Geoscience Education*, v. 56, no. 5. p. 417-421.

King, C.M., and Mattox, S.R., 2007, *Learning Through Inquiry: Weaving Science with Thinking and Literature*, Christopher-Gordon Publishers, 301 p.

King, C. and Mattox, S.R., 2004, Great Trade Books for Teaching Earth Science: Michigan *Journal of Reading*, v. 37, no. 1, p. 52-58.

Mattox, S.R., and Babb, J.L., 2004, Volcanology for Earth Science Teachers – A Field-Oriented Course to Improve Earth Science Teaching: *Journal of Geoscience Education*, p. 122-127.

Mattox, S.R., 2000, Teaching the Basics about Volcanoes to K-16 Students: *Journal of Geoscience Education*, v. 48, p. 576-577.

Mattox, S.R., 1999, An Exercise in Forecasting the Next Mauna Loa Eruption: *Journal of Geoscience Education*, v. 47, p. 255-260.

SELECTED PRESENTATIONS

Mattox, S.R., 2008, Earth Science in Print Media, Insights from a Mid-Sized Newspaper: Geological Society of America Abstracts with Programs, p. 249.

Mattox, S., and Bolhuis, C., 2007, Current Status of Earth Science Teaching in Michigan, Michigan Science Teachers Association Conference Program, p. 15.

Bolhuis, C., and Mattox, S., 2007, The Geologic Evidence of an Old Earth, Michigan Science Teachers Association Conference Program, p. 18-19.

King, C.M. and Mattox, S.R., 2007, Learning Through Inquiry: Pairing Science Trade Books and Hands-on Learning, Michigan Reading Association.

Mattox, S.R., 2006, How Gender and Race of Geologists are Portrayed in Physical Geology Textbooks: 4th International Conference on Geoscience Education, Bayruth, Germany, p. 114.

Mattox, S.R., and Bolhuis, C., 2004, Developing a State-wide Applied Earth Science Exam: Michigan Science Teachers Association Conference Program.

Mattox, S.R., 2003, Using Radon Data to Incorporate a Research Experience for Earth Science Students: Geological Society of America Abstracts with Programs, v. 35, p. 319.

Mattox, S.R., 2000, Training Students to Construct the Flood Potential of Major Waterways: A Case Study Using the Grand River in Southwest Michigan: Geological Society of America Abstracts with Programs, v. 32, no. 4., p. 50.

Mattox, S.R., 2000, Exploring Michigan Landforms: Hands-on activities for late elementary school students: Michigan Science Teachers Association conference.

Mattox, S.R., Kaawaloa, A.M., Babb, J.L., Heliker, C., and Wood, C., 2000, Multi-Agency and Academic Collaboration to Increase Public Knowledge of Geologic Hazards: A Case Study from the Island of Hawaii: 3rd International Conference on Geoscience Education, Sydney, Australia, AGSO Record 1999/49, p. 82-84.

MENTORED PROJECTS/PUBLICATIONS WITH UNDERGRADUATES

Bostelman, S., Breimayer, J., Bumstead, L., Butler, K., Check, D., Cooke, S., DeWitt, A., Gray, J., Harris, N., Hazel, M., Hendershot, B., Hernandez, J., Jorgensen, A., Lewis, E., Mathews, I., Mattox, S., Mishler, R., Murray, M., Pisz, M., Rickens, A., Rumpz, S., Sauve, R., Schmidtendorff, A., Slider, R., Stempky, A., Stevens, B., VanderBoon, C., Verwey, G., 2008, The Presentation of Science in a Mid-sized Newspaper, a Quantitative Study, Michigan Science Teachers Association Journal, v. 53, no. 2, p. 24-28.

Dryer, E., and Mattox, S., 2008, Evolution of Horses, Michigan Science Teachers Association Journal, v. 53, no. 2, p. 47-50.

Mattoxs, S., **Bridenstine, M., Burns, B., Davis, E., Koning, A., Meek, P., Ritchie, M., Schafer, N., Shepard, L., Slater, A., Waters, T., and Wigent, A.,** 2008, How Gender and Race of Geologists are Portrayed in Physical Geology Text Books, Journal of Geoscience Education, v. 56, no. 2. p. 156-159.

Laney, E., and Mattox, S.R., 2007, Using Simple 3-D Clay Models to Understand the Paths Taken by Lava Flows, Mudflows, and Pyroclastic Flows: Science Scope, v. 30, no. 3, p. 22-25.

Mattox, S.R., and **King, K.,** 2006, Perspectives on Water Usage in Michigan and the Geology of the Ice Mountain Site, Michigan Science Teachers Association Journal, v. 51, p. 51-60.

Mattox, S.R., and **Zeff, C.,** 2006, The Great Quake of 1906, Science and Children, v. 44, no. 2, p. 14-16.

Bliss, M., and Mattox, S.R., 2006, Was that a Normal Winter?, Michigan Science Teachers Association Journal, v. 51, p. 5-13.

Coffey, P., and Mattox, S.R., 2006, Using a Rock Tumbler to Promote Critical Thinking about Weathering and Erosion: v. 29, no. 6, Science Scope. p. 33-37.

Mattox, S.R., and **Webster, C.**, 2005, Modeling Geyser Eruptions in the Classroom: Science Scope, v. 28, no. 7, p.42-45.

Sullivan, S., and Mattox, S., 2005, Is Punxsutawney Phil Right? Using Groundhog Day to Teach Statistics and the Nature of Science: Michigan Science Teachers Association Journal, v. 50, no. 1, p. 26-29.

MENTORED PRESENTATIONS WITH UNDERGRADUATES

Butler, K., and Mattox, S., 2009 Comparing the Grand Rapids Press to Michigan's High School Graduation Requirements, Michigan Science Teachers Association Conference Program.

Hazel, M., and Mattox, S., 2009, Visualizing the Impact of Burning Coal, Michigan Science Teachers Association Conference Program.

Russo, J.C., and Mattox, S., 2009, Exploring the Timing and Location of the Next Hawaiian Volcano Michigan Science Teachers Association Conference Program.

Frasco, M., and Mattox, S., 2009, Activities to Discover Your Students' Perceptions of Geologic Time, Michigan Science Teachers Association Conference Program.

Russo, J.C., Mattox, S.M, and **Kildau, N.A.**, 2008, Predicting the Timing and Location of the Next Major Hawaiian Volcano, National Science Teachers Association, p. 165.

Vandyke, K.I., Dreyer, E.K., Pas, D.N., and Mattox, S., 2008, Using Trade Books to Teach About Soils, Gold, And The Evolution Of Horses, National Science Teachers Association, p. 112.

Frasco, M., and Mattox, S., 2008, Students' Conceptions and Misconceptions about the Age of Geologic Materials and Character and Timing of Geologic Ages, National Science Teachers Association, p. 106.

Mattox, S.R., 2007, Gender and Race in Physical Geology Textbooks: Reinforcing the Caucasian Male Stereotype of Geologists: Geological Society of America Abstracts with Programs, p. 238.

Mattox, S.R., 2007, Designing Relevant, Field-based Environmental Exercises for K-12 Students, Kentucky Association for Environmental Education Conference, p. 4.

Wolfinger, C., and Mattox, S., 2007, Identifying Gender and Racial Bias in Children's Earth Science Trade Books, National Science Teachers Association, Advance Program, p. 162.

Brower, T., Essenmacher, S., VanderVelde, C., and Mattox, S., 2007, Using Topographic Maps to Explore Volcanoes, National Science Teachers Association, Advance Program, p. 114.

Leys, D., and Mattox, S., 2007, Exploring Students Conceptions and Misconceptions of Volcanoes, National Science Teachers Association, Advance Program, p. 154.

Schaefer, Z., Arsulowicz, M., and Mattox, S., 2007, Connecting modern fish to their ancient ancestors, National Science Teachers Association, Advance Program, p. 149.

Essenmacher, S., VanderVelde, C., and Mattox, S., 2007, Exploring Volcanoes Using Topographic Maps, Michigan Science Teachers Association Conference Program, p. 37.

Wolfinger, C., and Mattox, S., 2007, Gender and Racial Bias in Children's Earth Science Trade Books, Michigan Science Teachers Association Conference Program, p. 30.

Sullivan, S., Bliss, M., Kidwell, K., and Mattox, S., 2006, Engaging middle school students in analysis/evaluation of weather data: Michigan Science Teachers Assoc. Conference Program, p. 31.

King, K., and Mattox, S., 2006, Exploring the Geology of the Ice Mountain Bottled-Water Site: Michigan Science Teachers Association Conference Program, p. 38.

Mattox, S.R., and **Richardson, L.M.,** 2005, Viewing the Geologic Timeline from the Perspective of Integrated Science: Geological Society of America Abstracts with Programs, v. 37, p. 153.

Mattox, S.R., **Pohl, D., and Gasparick, G.,** 2004, Engaging Elementary Students in Earth Science through Reading, an Update: Michigan Science Teachers Association Conference Program.

Mattox, S.R., **Rhodea, J.,** Nolasco-Javier, D.D., and Vera-Yabes, R.N.F., 2003, International Collaboration in Geoscience Education: A Case Study between the Philippines and the United States: 4th International Conference on Geoscience Education, Calgary, Canada, p. 137-138.

Mattox, S.R., and **Gasparick, G.,** 2003, Engaging Elementary Students in Earth Science through Reading: Michigan Science Teachers Association Conference Program.

Mattox, S.R., and **Prough, B.,** 2002, Ten Great Ways to Engage Students in Geosciences: National Science Teachers Association, Advance Program.

Mattox, S.R., **Prough, B., and Fenlon, M.,** 2002, Constructing Middle- and High-School Students Knowledge of Earth Science through Relevant Inquiry-Based Lessons: Geological Society of America Abstracts with Programs, v. 34.

Mattox, S.R., and **Prough, B.,** 2002, Exploring the hydrosphere, climate, and geologic history of Michigan: Michigan Science Teachers Association Conference program.

Mattox, S.R., and **Fenlon, M.,** 2001, Exploring Michigan's Geology through Hands-on Inquiry-based Lessons: National Science Teachers Association, Advance Program, p. 15.

Mattox, S.R., and **Fenlon, M.,** 2001, Michigan's Earth System, Exploration through hands-on, inquiry-based lessons: Michigan Science Teachers Association Conference program, p. 29.

Mattox, S.R., and **Fenlon, M.,** 2000, Exploring Michigan using Maps: A Progress Report On New Curriculum For The Middle School Classroom: Michigan Space Grant Consortium Conference.

Mattox, S.R., and **Firlit, J.,** 1999, Landforms Of Michigan: A Progress Report On New Curriculum for the Elementary School Classroom: Michigan Space Grant Consortium Conference.

