

L. SCOTT EATON - CURRICULUM VITAE

ADDRESS

Department of Geology and Environmental Science
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POSITION

Professor of Geology, James Madison University

EDUCATION

Ph.D., Environmental Sciences
Department of Environmental Sciences, University of Virginia; 1999.
Dissertation: *Debris flows and Landscape evolution in the Upper Rapidan Basin, Blue Ridge Mountains, Central Virginia*
Advisor: Dr. Alan D. Howard.

M.S., Geology
Department of Geology, Southern Illinois University, 1991. Thesis: *Fluvial-Geomorphic Analysis of Wolf Creek Basin, Alexander County, Illinois.*
Advisor: Dr. Margaret E. Berry.

B.S., Geology
James Madison University, 1988. Honors Thesis: *Depositional History of the Lowest North River Terrace at Bridgewater Air Park, Virginia.*
Advisor: Dr. W. Cullen Sherwood.

PROFESSIONAL WORK EXPERIENCE

Field Geologist (faculty appointment), U.S. Geological Survey, Reston, Virginia, 1996 - present.
Principal investigator in mapping debris flow and flood deposits in the Blue Ridge Mountains of Central Virginia, including documentation of the stratigraphy and sedimentology of prehistoric surficial deposits.

Geological Consultant, 1996 – present.
Responsible for locating high yielding water wells using fracture trace analysis in conjunction with geophysical methods of investigation.

TEACHING ACTIVITY

Courses Taught:

Physical Geology, Geomorphology, Hydrogeology, Stream Ecology, Field Course in Ireland, Field Course in New Mexico, Surface Processes, Natural Hazards, Soils and Land Use, Engineering Geology, Undergraduate Student Research, Undergraduate Internship.

New Courses Developed/Modified Since Tenure/Promotion:

Surface Processes, Field Course in Ireland, Natural Hazards, Stream Ecology, Engineering Geology

SCHOLARLY ACTIVITY

(undergraduate student research, publications, abstracts, presentations, and funding)

JMU Undergraduates Collaborating in Research with L. Scott Eaton

Summary:

- Forty-three research students in the past 14 years
- In the past 7 years (since tenure and promotion):
 - 38% received outside funding to support their research
 - 35% presented at regional or national conferences
 - 8% coauthors in international geoscience journals

Bold of student name indicates external funding for student support

Year	Student Name	Title of Project	Product
2010-11	Brendan McGowan	Hydrogeology Project: T.B.A.	T.B.A.
	Brad Fitzwater	The Surficial Geology of the Luray Quadrangle, Virginia	(Projected) Publication of mapping as VGDMR product
2009-10	Alben Sellers	The application of fracture trace analysis in locating high-yielding water wells in sedimentary rocks of the Shenandoah Valley, Virginia	Presentation at Dept. Student Forum
2008-09	Holly Polivka Elizabeth Weisbrot	Using soils and sedimentology for deciphering the origins of geomorphic surfaces near Massanutten Mountain, eastern Rockingham County, Virginia	Presentation at Dept. Student Forum GSA presentation and publication in regional journal
	Timothy Heltzel	Man and Moo: The effects of channelization, cattle grazing, and elimination of grazing on a pasture land stream, western Albemarle County, Virginia	Presentation at Dept. Student Forum Potential GSA presentation and publication in regional journal
	Nicholas Bass	Summer internship at ECS, Manassas	Presentation at Dept. Student Forum

JMU Undergraduates Collaborating in Research with L. Scott Eaton (continued)

2008-09	Meghan Sibbard	Groundwater Inventory of Madison County, VA	GIS Database with analysis for Madison County Planning Commission
2007-08	Alyssa Melberg	Concentrations of floodplain soils along the South River, Shenandoah Valley, VA	Presentation at Dept. Student Forum
	Katie Jepson	Historic record of debris flows in the central Appalachians	Data published in USGS Professional Paper
2006-07	Sarah Roberts	Mixing Geomorphology and Ecology: Relationships between fish populations and stream bed permeability	Presented at Geological Society of America National Meeting
	Tanner Simensen	Bedload transport of sediment at Smith Creek, Rockingham County, VA	Presentation at Dept. Student Forum
	Sara Rangel	A water budget for the South River, Shenandoah Valley, VA	Student Research Credit
2005-06	Dan Bosener Clark Weigel	Surficial drainage patterns and geomorphic history of the Paine and Meadow Runs, Crimora, VA	Presentation at Dept. Student Forum
	Scott Nash	The applicability of the combined use of hydrological and geophysical methods for monitoring landfill leachate in areas at risk for groundwater contamination	Presentation at Dept. Student Forum
2004-05	Robert Sas	Geologic Controls of Basin Denudation from Debris Flows in Rockbridge County, VA,	NE regional <i>Geological Society of America abstract sectional meeting</i> Presentation at Dept. Student Forum Publication in Landslides Journal
	Sam Powell	<i>Magneto-Telluric and Streaming Potential Embankment Seepage Analysis of the Blue Ridge School Dam</i>	Presentation at Dept. Student Forum
	Jackie Hess	<i>Paleoflood Discharges and Origins of Surficial Deposits of Meadow Run, Augusta County, VA</i>	Presentation at Dept. Student Forum
2003-04	Kristin Felker Meredith Benedict	Sedimentology and geomorphic processes of Blackrock block stream, Shenandoah National Park, Virginia.	Presentation at Dept. Student Forum <i>SE Geological Society of America abstract sectional meeting</i>
	Melissa Orndorff	Geomorphic processes and inventory of block streams in the Paine Run drainage, Grottoes, Virginia	Presentation at Dept. Student Forum <i>SE Geological Society of America abstract sectional meeting</i>
	Eric Turner	Reactivation of slope failures along Meadow Run, Shenandoah Valley, Virginia	Presentation at Dept. Student Forum <i>SE Geological Society of America abstract sectional meeting</i> Publication in Landslides Journal
	Erin Peebles	Geomorphic history of Meadow Run Flood Plain, Crimora, Virginia	Presentation at Dept. Student Forum <i>SE Geological Society of America abstract sectional meeting</i>
	Joanie Clark	Karst processes of Southeast Asia	Presentation at Dept. Student Forum

JMU Undergraduates Collaborating in Research with L. Scott Eaton (continued)

2003-04	John Lacombe	Defining the Rosgen Method of Stream Restoration	Presentation at Dept. Student Forum
2002-03	Sargent Bray Harry Hibbitts	Rotational slides in saprolitized alluvium on the western flank of the Blue Ridge near Grottoes, Virginia.	Presentation at Dept. Student Forum <i>Journal Article in conjunction with USGS (in progress)</i>
	Stephen Reynolds	Trends in Vegetation Reestablishment on the Kinsey Run Debris Fan, Madison County, Virginia	Presentation at Dept. Student Forum <i>SE Geological Society of America abstract sectional meeting</i>
2001-02	Russel Pace	The Study and Application of Fracture Trace Analysis, Harrisonburg Quad.	Presentation at Dept. Student Forum
	Andrew McNown	Analysis of Longitudinal Variations of Particle Size, Shape, and Orientation of the Blackrock Block Slope, Shenandoah National Park, Virginia	Presentation at Dept. Student Forum. <i>Geological Society of America abstract National meeting</i>
	Jennifer Allen Matthew Tymchak	Developing Regional Curves for Stream Hydraulic Geometry in the Central Blue Ridge, and their Application in Stream Restoration	Presentation at Dept. Student Forum <i>Pilot study for Jeffress grant proposal; submitted April, 2003.</i>
	Brian Neeley	Grain Size Analysis of Debris Fans, Madison County, Virginia	Presentation at Dept. Student Forum Presentation at Virginia Academy of Sciences,
2000-01	Chris Printz	Karst development of the Hurricane Ridge and Union Cave Spring Drainage Basin, Monroe County, WV.	Presentation at Dept. Student Forum Presentation at Virginia Academy of Sciences
	Todd Burton	Fracture Trace Analysis of the Dayton, Virginia Area	Presentation at Dept. Student Forum
1999-00	Todd Waldrop	Fracture Trace Analysis: Effectiveness and Application	Presentation at Dept. Student Forum
	Chris Printz	Characterization of the Isopod Habitat, Shenandoah Valley, VA	<i>Report Prepared for US Fish and Wildlife Service</i> Presentation at Dept. Student Forum
	Ryan Sensenig	Integrated Earth Science Field Study for Teachers: An Online Resource.	Web Page for State High School Applications.
1998-99	Christy McQuiddy Mary Sherrill	A periglacial stratified slope deposit in Madison County, Virginia	Presentation at Dept. Student Forum <i>Data used for Geomorphology Publication (Eaton et al., 2003)</i>
	Stephanie Booth	Trends of river terraces of the Rapidan River	<i>Data used for Geomorphology Publication (Eaton et al., 2003)</i>
1997-98	Heather Shroyer	Selected sedimentologic aspects of the June, 1995 flood event of Madison County, Virginia	<i>Publication in Geomorphology (Springer et. al., 2001)</i>

Publications (*indicates peer-reviewed)

- ***Eaton, L.S.**, Kochel, R.C., Hubbard, D.A., Simoni de Cannon, F.V., and Mose, D.G., (in press), Geologic Hazards of Virginia, in Bailey, C.M., Eaton, L.S., and Sherwood, W.C. (eds.), *The Geology of Virginia*, Virginia Division of Geology and Mineral Resources, Charlottesville.
- *Whittecar, G.R., Newell, W.L., and **Eaton, L.S.**, (in press), Landscape evolution in Virginia, in Bailey, C.M., Eaton, L.S., and Sherwood, W.C. (eds.), *The Geology of Virginia*, Virginia Division of Geology and Mineral Resources, Charlottesville.
- *Heller, M., and **Eaton, L.S.**, (2010), Surficial Geology of the Elkton West Quadrangle, Virginia: Virginia Division of Geology and Mineral Resources Publication.
- *Sherwood, W.C., Hartshorn, A., and **Eaton, L.S.**, 2010, Geology, Soils, and Land Use in the Eastern Blue Ridge and Western Piedmont of Central Virginia, Geological Society of America, Boulder, CO.
- Bailey, C.M., Southworth, S., **Eaton, L.S.**, Hancock, G., Lamoreaux, M.H., Litwin, R.J., Burton, W.C., and Whitten, J., 2009, The Geology of the Shenandoah National Park Region, Virginia Geological Field Conference Guide Book.
- *Wieczorek, G.F., **Eaton, L.S.**, Morgan, B.A., Wooten, R.M., and Morrissey, M., 2009, An examination of selected historical rainfall-induced debris flow events within the central and southern Appalachian Mountains of the Eastern United States, *U.S. Geological Survey Professional Report Series 2009-1155*.
- *Kochel, R.C., Nickelsen, R.P., and **Eaton, L.S.**, 2009, Catastrophic Middle Pleistocene Jökulhlaups in the Upper Susquehanna River: Distinctive Landforms from Breakout Floods in the Central Appalachians, *Geomorphology*, v. 110, p. 80-95.
- *May, C.L., **Eaton, L.S.**, and Whitmeyer, S., 2009, Integrating student-led research in environmental geology into traditional field courses: a case study from James Madison University's field course in Ireland, In S.J. Whitmeyer, D.W. Mogk, & E.J. Pyle (Eds.), *Field geology education: Historical perspectives and modern approaches*: GSA Special Paper 461. Boulder, CO: Geological Society of America.

Publications (continued)

- *Sas, R.J., Jr., and **Eaton, L.S.**, 2008, Quartzite terrains, geologic controls, and basin denudation by debris flows: their role in long-term landscape evolution in the central Appalachians, *Journal of Landslides*, v. 5, no. 1, p. 97-106.
- *Sas, R.J., Jr., Sklar, **L.S.**, **Eaton, L.S.**, and Davis, J., 2008, A Method for Developing Regional Road-Fill Failure Hazard Assessments Using GIS and Virtual Fieldwork, *Environmental and Engineering Geosciences*; v. 14:221-229.
- *Wieczorek, G.F., **Eaton, L.S.**, Yanowsky, T.M., and Turner, E.J., 2006, Landslide activity along Meadow Run, Shenandoah Valley, Virginia, *Journal of Landslides*, v. 3, pp. 95-106.
- Eaton, L.S.**, 2005, Assessment of the Geologic and Geomorphologic Resources of Shenandoah National Park, Virginia, *Technical Report*, National Park Service.
- Eaton, L.S.**, Bailey, C.M., and Gilmer, A. K. 2004, The Debris Flows of Madison County, Virginia. Virginia Geological Field Conference Guidebook., 27 p.
- *Litwin, R.J., Morgan, B.A., **Eaton, L.S.**, and Wieczorek, G.F., 2004, Assessment of Late Pleistocene to recent climate-induced vegetation changes in and near the Shenandoah National Park (Blue Ridge Province, VA), *USGS Open File Report 2004-1351*.
- ***Eaton, L.S.**, Morgan, B.A., Kochel, R.C., and Howard, A.D., 2003, Role of debris flows in long-term landscape denudation in the central Appalachians of Virginia. *Geology*, v. 31, p. 339-342.
- ***Eaton, L.S.**, Morgan, B.A. Kochel, R.C., and Howard, A.D., 2003, Quaternary deposits and landscape evolution of the central Blue Ridge of Virginia, *Geomorphology*, v. 56, p. 139-154.
- *Morgan, B.A., **Eaton, L.S.**, Wieczorek, G.F., 2003, Pleistocene and Holocene colluvial fans and terraces in the Blue Ridge region of Shenandoah National Park, Virginia, *U. S. Geological Survey, Report: OF 03-0410*, 25 pp., 1 Sheet.
- ***Eaton, L.S.**, Morgan, B.A. Kochel, R.C., and Howard, A.D., 2003, Quaternary deposits and landscape evolution of the central Blue Ridge of Virginia, *Geomorphology*.
- *Wieczorek, G.F., Larsen, M.C., **Eaton, L.S.**, Morgan, B.A. and Blair, J. L., 2002, Debris-flow and flooding deposits in coastal Venezuela associated with the storm of December 14-16, 1999: U.S. Geological Survey, Geologic Investigation Series Map I-2772.

Publications (continued)

- ***Eaton, L.S.**, Morgan, B.A., and Blair, J.L., 2001, Surficial geology of the Fletcher, Madison, Stanardsville, and Swift Run Gap, 7.5-minute quadrangles, Madison, Greene, Albemarle, Rockingham, and Page Counties, Virginia, US Geol. Surv. OFR 01-92. 1 table, 1 appendix, 4 plates, 1 CD.
- *Larsen, M.C., Wieczorek, G.F., **Eaton, L.S.**, Torres-Sierra, H., Morgan, B.A. 2001, Natural Hazards on Alluvial Fans; The Venezuela Debris Flow and Flash Flood Disaster, USGS Fact Sheet.
- *Larsen, M.C., Wieczorek, G. F., **Eaton, L.S.**, Morgan, B.A., and Torres-Sierra, H., 2001, Natural hazards on alluvial fans: the debris-flow and flash-flood disaster of northern Venezuela, December 1999: EOS, Transactions: American Geophysical Union, v. 82, p. 572-574.
- *Springer, G.S., Dowdy, H.S., and **Eaton, L.S.**, 2001, Sediment budgets for two mountainous basins affected by a catastrophic storm: Blue Ridge Mountains, Virginia: Geomorphology, v. 37, p. 135–148.
- *Wieczorek, G.F., Larsen, M.C., **Eaton, L.S.**, Morgan, B.A. and Blair, J. L., 2001, Debris-flow and flooding hazards associated with the December 1999 storm in coastal Venezuela and strategies for mitigation: U.S. Geological Survey Open File Report 01-144, 40p., 3 tables, 2 appendices, 3 plates, 1 CD.
- *Larsen, M.C., Wieczorek, G. F., **Eaton, L.S.**, and Torres-Sierra, H., 2000, The Venezuela landslide and flash flood disaster of December 1999, In: Mugnai, A., Guzzetti, R., and Roth, E. (Eds.), Mediterranean Storms, Proceedings of the 2nd Plinius Conference, October, 2000, Siena, Italy, p. 519-529.
- Eaton, L.S.**, 1999, Debris flows and Landscape evolution in the Upper Rapidan Basin, Blue Ridge Mountains, Central Virginia, Ph.D. thesis, University of Virginia, 154 p.
- Eaton, L.S.**, Lin, M.A., and Lynn, C., 1998, Assessment of opportunities for enhanced cooperation in acquiring and disseminating weather data among selected Virginia government agencies; Virginia Transportation Research Council, Report Number VTRC 98-R16.

Abstracts

(JMU student authors are shown in **bold**)

Eaton, L.S., Baedke, S.J., Haynes, J., Johnson, E.A., Leslie, S.A., Pyle, E.J., Whitmeyer, S., Whitmeyer, S.J., 2009, Dueling Topics: Success using a two track option in the James Madison University Ireland Field Course, Geological Society of America Abstracts with Programs, Portland, OR.

Eaton, L. S., **Polivka, H., and Weisbrot, L.**, 2009, Using soils and sedimentology for deciphering the origins of geomorphic surfaces near Massanutten Mountain, central Shenandoah Valley, Virginia, , Geological Society of America Abstracts with Programs, Portland, OR.

Eaton, L.S., 2008, Long term rates of landscape denudation of the central Appalachians, and their significance on sedimentation in the Chesapeake Bay , US EPA Proceedings on Fine Grain Sedimentation within the Chesapeake Bay, Baltimore, MD. *INVITED SPEAKER.*

Eaton, L.S., 2008, Effects of land use changes and channelization on the stability of streams: A case study from the Shawnee Hill country of southern Illinois, Geohazards in Transportation in the Appalachian Region, Charleston, WV, Aug. 5-7, 2008. *SESSION ORGANIZER AND CHAIR.*

Eaton, L.S., May, C.L., Moore, K.R., Harris, M.J., and Whitmeyer, S.J., 2007, Integrating student-led research in environmental geology into traditional field courses: a case study from James Madison University's field course in Ireland, Geological Society of America Abstracts with Programs, Vol. 39, No. 6, p. 622.

Sas, R.J., Jr., and Eaton, L. S., 2007, An integrative approach to assessing potential road-fill failures and downslope hazards, Geological Society of America Abstracts with Programs, Vol. 39, No. 6, p. 363.

Harris, M.J., Whitmyer, S., Kelly, S., Whitmyer, S. J., Feely, M., and Eaton, L. S., 2006, Digital Mapping and 3D Visualization in a geology summer field course, Geological Society of America Abstracts with Programs.

Roberts, S. M., May, C. L., Eaton, L. S., and Hudy, M., 2006, Mixing Geomorphology and Ecology: Relationships between fish populations and stream bed permeability, Geological Society of America Abstracts with Programs.

Sas, R.J., Jr. and Eaton, L. S., 2006, Landslide Warning Action Plan: Prioritizing Areas of High Risk Along Blue Ridge Parkway Using VisiData, Eos, Transactions, American Geophysical Union.

Abstracts (continued)

- Eaton, L.S., 2005, Rates of landscape denudation of the central Appalachians, International Consortium on Landslides, National Academy of Sciences, Washington, D.C. *INVITED SPEAKER*.
- Sas, R.J., Jr.** and Eaton, L. S., 2005, Geologic controls of basin denudation from debris flows in Rockbridge County, Virginia, Geological Society of America Abstracts with Programs.
- Eaton, L.S., 2004, The role of debris flows in long-term denudation and landscape evolution in the central Appalachians, *Eos, Transactions, American Geophysical Union*.
- Felker, K.C., Benedict, M.L.,** and Eaton, L.S., 2004, Sedimentology and geomorphology of Blackrock block stream, Shenandoah National Park, Virginia, Geological Society of America Abstracts with Programs, Vol. 36, No. 2, p. 73.
- Frangos, W., and Eaton, L.S., 2004, Case History: Merging the Tools of DC Resistivity and Fracture Trace Analysis for Locating High Yield Domestic Water Wells in Karst Terrain, Shenandoah Valley, Virginia, USA, (abstract), AGU Montreal Meeting, May, 2004.
- Litwin, R.J., Morgan, B.A., and Eaton, L.S., 2004, Proxy climate trends in the Blue Ridge of Virginia, 0-45 KA, and comparison to the Greenland ice core record, Geological Society of America Abstracts with Programs, Vol. 36, No. 2, p. 114.
- Peebles, E.K.,** and Eaton, L.S., 2004, The past, present, and future locations of the stream of Meadow Run, Blue Ridge Mountains, Virginia, Geological Society of America Abstracts with Programs, Vol. 36, No. 2, p. 114.
- Turner, E.J.,** and Eaton, L.S., 2004, Reactivation of slope failures along Meadow Run, Shenandoah Valley, Virginia: Geological Society of America Abstracts with Programs, Vol. 36, No. 2, p. 120.
- Wieczorek, G.F., Eaton, L.S., and **Turner, E.J.** 2004, Landslide activity along Meadow Run, Shenandoah Valley, Virginia, Geological Society of America, vol.36, no.2, pp.149.
- Eaton, L. S., Yanosky, T.M, and Wieczorek, G.F., 2003, Use of dendrochronology for determining the chronology of landslide activity along Meadow Run, Shenandoah Valley, Virginia, USA, *Eos, Transactions, American Geophysical Union*, vol.84, no.46.

Abstracts (continued)

- Kochel, R.C., Nickelsen, R.P., Eaton, L.S., 2003, Elongated low-gradient debris fans; jokulhlaups resulting from tributary damming by pre-Wisconsinan glacial ice lobes moving up the Buffalo Creek valley in central Pennsylvania, Abstracts with Programs - Geological Society of America, vol.35, no.6, pp.335.
- Eaton, L.S., Yanosky, T.M., and Wieczorek, G.F., 2003, Use of Dendrochronology for Determining the Chronology of Landslide Activity along Meadow Run, Shenandoah Valley, Virginia USA, Invited Talk, AGU Annual Meeting, San Francisco.
- Kochel, R.C., Nickelsen, R.P., and Eaton, L.S., 2003, Elongated low-gradient debris fans: Jokulhlaups resulting from tributary damming by Pre-Wisconsinan glacial ice lobes moving up the Buffalo Creek Valley in central Pennsylvania, Geological Society of America, National Annual Meeting, Program Abstracts, Seattle, WA, October 2003.
- Bierman, P.R., Pavich, M., Eaton, L.S., Finkel, R., and Larsen, J., 2002, The boulders of Madison County, Abstracts with Programs - Geological Society of America, 34(6), p.127; Geological Society of America, 2002 annual meeting, Denver, CO, Oct. 27-30, 2002.
- Eaton, L.S., 2002, Denudation from catastrophic flooding in northern Venezuela, December, 1999, Virginia Journal of Science, 52(2), p.113; 79th annual meeting of the Virginia Academy of Science, Harrisonburg, VA, May 22-25, 2001.
- Eaton, L.S., Wieczorek, G.F., Morgan, B.A., **McNown, A.W.**, Smoot, J.P., and Litwin, R.J., 2002, Periglacial slope processes and deposits in the Blue Ridge Mountains of central Virginia, Abstracts with Programs - Geological Society of America, 34(6), p.276; Geological Society of America, 2002 annual meeting, Denver, CO, Oct. 27-30, 2002.
- Eaton, L.S.; **Reynolds, S.H.**, 2002, Trends in vegetation recovery of the Kinsey Run debris fan, Madison County, Virginia, Abstracts with Programs - Geological Society of America, 34(2), p.8; Geological Society of America, Southeastern Section, 51st annual meeting; Geological Society of America, North-Central Section, 36th annual meeting, Lexington, KY, Apr. 3-5, 2002.
- Neely, B.H.**, and Eaton, L.S., 2002, Soil pedogenesis of debris fans, Graves Mill, VA Virginia Journal of Science, 52(2), p.111; 79th annual meeting of the Virginia Academy of Science, Harrisonburg, VA, May 22-25, 2001.

Abstracts (continued)

- Printz, C.M.**, and Eaton, L.S., 2002, The karst development of the Union and Hurricane Ridge Cave systems, Dickson Spring drainage basin, Monroe County, West Virginia, Virginia Journal of Science, 52(2), p.111; 79th annual meeting of the Virginia Academy of Science, Harrisonburg, VA, May 22-25, 2001.
- Eaton, L.S., Wieczorek, G.F., and Morgan, B.A., 2001, Weathering characteristics and ages of debris-flow deposits at Graves Mill, Virginia, SE Geological Soc. America Abs. with programs.
- Larsen, M.C., Wieczorek, G.F., Eaton, L.S., and Torres-Sierra, H., 2001, Natural hazards on alluvial fans: the debris flow and flash flood disaster of December 1999, Vargas State, Venezuela, in W.F. Sylva, ed., Proceedings of the 6th Caribbean Islands Water Resources Congress, Mayaguez, Puerto Rico, February 22-23, 2001, unpaginated CD.
- Larsen, M.C., Wieczorek, G.F., Eaton, L.S., and Torres-Sierra, H., 2001, The rainfall-triggered landslide and flash-flood disaster in northern Venezuela, December 1999: 7th Federal Interagency Sedimentation Conference, March, 2001, Reno, Nevada, p. IV-9 to IV-16.
- Eaton, L.S., Larsen, M.C., Wieczorek, G.F., Torres-Sierra, H., 2000, Landslides and catastrophic flooding in northern Venezuela, December, 1999, Geological Society of America Abstracts with Programs, v. 32.
- Larsen, M.C., Wieczorek, G. F., Eaton, L.S., and Torres-Sierra, H., 2000, The Venezuela landslide and flash flood disaster of December 1999, 2nd Plinius Conference, October, 2000, Siena, Italy.
- Wieczorek, G.F., Larsen, M.C., Eaton, L.S., Garcia-Martinez, R., Jimenez-Diaz, V., Perez-Hernandez, D., Rodriquez, J.A., and Urbani, F., 2000, Catastrophic landslides and flooding in coastal Venezuela, December 16, 1999, Abstracts with Program, Association of Engineering Geologists Annual Meeting, San Jose, California, Sept. 21-24, p. 120.
- Eaton, L.S., Howard, A.D., Kochel, R.C., and Sherwood, W.C., 1997, Debris flow and stratified slope wash deposits in the central Blue Ridge of Virginia, Geological Society of America, National Annual Meeting, Program Abstracts, Salt Lake City, UT, October 20 - 23, 1997.
- Eaton, L.S., and McGeehin, J.P., 1997, Frequency of debris flows and their role in long term landscape evolution in the central Blue Ridge, Virginia; Geological Society of America, National Annual Meeting, Program Abstracts, Salt Lake City, UT, October 20 - 23, 1997.

Abstracts (continued)

Kochel, R.C., Eaton, L.S., Daniel, N., and Howard, A.D., 1997, Impact of 1995 debris flows on geomorphic evolution of Blue Ridge debris fans, Madison County, Virginia, Geological Society of America, National Annual Meeting, Program Abstracts, Salt Lake City, UT, October 20 - 23, 1997.

Nash, C.L., and Eaton, L.S., 1997, Rapid mass movement events in the central Blue Ridge and landscape evolution: implications for the study of native settlement patterns in upland fan locations, Program Abstracts, Third International Conference on Soils, Geomorphology, and Archeology, Annual Meeting, Woodstock, Virginia, May 22 - 24, 1997.

Sherwood, W.C., and Eaton, L.S., 1997, Landscape evolution and land use in the Blue Ridge Mountains of central Virginia, Program Abstracts, Symposium on Culture-History of the Mountainous Eastern United States, Harrisonburg, VA, May 16-18, 1997.

Eaton, L.S., 1996, Prehistoric debris flows and landscape evolution in Madison County, Virginia; Virginia Association of Professional Soil Scientists Fall Meeting, Culpeper, VA, November 13, 1996.

Kochel, R.C., Eaton, L.S., and Howard, A.D., 1996, Catastrophic debris flows in the central Appalachians: Considerations of their role in the evolution of Piedmont geomorphology, Geological Society of America, National Annual Meeting, Program Abstracts, Denver, CO, October 28 - 31, 1996.

Invited Presentations:

General Topic: *The role of debris flows in landscape evolution of the Blue Ridge Mountains, central Virginia.*

- Dept. of Geology and Environmental Science, JMU, 2009
- US EPA Fine Sediment and the Chesapeake Bay Conference, 2008
- National Academy of Sciences, Washington, D.C., 2005
- Dept. of Geology, Humboldt State University, Sept. 2003
- Dept. of Geology, South Carolina University, Feb. 2002
- Dept. of Geology, East Carolina University, Nov. 2001
- Stewards of the upper Rapidan, Madison, VA July 2002.
- Dept. of Environmental Sciences, Univ. of Virginia, Jan. 2001
- Dept. of Geology, College of William and Mary, Nov. 1999
- Harrisonburg Rotary Club, April 25, 1999.

Invited Presentations (continued):

General Topic: *Groundwater resources of Virginia*

- West Virginia Dept. of Natural Resources, September 2009.
- Naturalist, Old Rag Chapter, October 2006
- Virginia Nursery Association Annual Meeting, Middletown, VA, April 2003.
- Virginia and West Virginia State Horticulture Society Annual Meeting, Williamsburg, VA, January 24, 2001.
- Winchester Rotary Club, March 15, 2001.
- US Natural Resources Conservation Service-Sponsored *Drip Irrigation Conference*, Middletown, VA, December, 1999.

General Topic: *Integrating student-led research in environmental geology into traditional field courses: a case study from James Madison University's field course in Ireland.*

- The Cutting Edge: Teaching Geoscience in the Field in the 21st Century; Bozeman, MT, 2010.

General Topic: *Effects of land use changes and channelization on the stability of streams:*

- Geohazards in Transportation in the Appalachian Region, Charleston, WV, Aug. 2008.

General Topic: Landslides and catastrophic flooding in northern Venezuela, December, 1999.

- Dept. of Geology, South Carolina University, Feb. 2002.

Funding:

Meierjurgan Faculty Fellowship, University of Oregon, (\$15,000), spring/summer 2011.

Virginia Division of Geology and Mineral Resources, *Surficial Geology of the Luray Quadrangle, Virginia*, (\$7500), fall/spring, 2010-11.

Virginia Division of Mineral Resources, *Surficial Geology of the Elkton West Quadrangle, Virginia*, (\$8000*), summer and fall, 2008.

*of which \$1000 for **student support**

College of Science and Mathematics, JMU, *A novel approach for measuring and predicting streambed mobility during natural and experimental floods in a large regulated river* (\$4000), summer, 2008.

Funding (continued):

US Geological Survey, *Landslide Warning Action Plan: Prioritizing areas of high risk along Blue Ridge Parkway*, (~\$10,000), 2006-2007. (Grant covers travel expenses, and supports one faculty and **two students**)

Canaan Valley Institute, Geomorphology of Smith Creek, Rockbridge County Virginia
Student support (\$3000) summer, 2006.

US Geological Survey, *Geologic Controls of Basin Denudation from Debris Flows in Rockbridge County, VA.*
Student support (\$1500) for field research, 2004/2005 academic year

US Geological Survey, *Surficial Geology of Shenandoah National Park*,
Faculty research support (\$2,000), Fall, 2005

National Park Service, *Assessment of the Geologic and Geomorphologic Resources of Shenandoah National Park, Virginia*,
Faculty research support (\$10,000) summer/fall 2005

Virginia Division of Mineral Resources, *Surficial Geologic Investigation on the Grottoes and Vesuvius 7.5-minute Quadrangles*
Faculty support (\$2500), 2005/2006.
Student support (\$1000) 2006/2007

US Geological Survey, *Surficial Geology of Shenandoah National Park*,
Student research support (\$2,500), Fall, 2004

SERVICE (major contributions)

Department

- **Chair:** Search Committee; Soils and Engineering Geology (Fall 2009)
- **Chair:** Academic Program Review (spring 2007- Spring 2008)
- **Chair:** Department Newsletter (2008-present)
- Member: Department Recruitment (2007-present)
- Member: Ali Dortery Scholarship committee (2006-present)
- Member: Search Committee; Geophysics position (2005)
- Member: Search Committee; Structural Geology position (2004)
- Member: Search Committee; Geologic Education Position (2003)
- Geologic Education Position Search Committee (2003)
- Geophysics Search Committee (2000, 2005)

Service (continued):

College

- Member: College Council (1999; 2007-2010)
 - **Chair (2009 -2010)**
- Member: Faculty Assistance Committee (2000-2007)
- Member: Search Committee (Biology); Stream Ecology position search (2007)
- Cluster 3, Package A representative, General Education (2000-2003)
- Cluster 3, Package A, Mathematics subcommittee representative (2002-2003)

University

- Member: Faculty Senate (2005-2007)
- Member: General Education Cluster 3 committee (2003-2005)
- Member: General Education Faculty Assistance Committee (2005)

Profession

- **Co-editor:** *The Geology of Virginia* (2008-present)
- **Leader:** Virginia Geological Field Conference (2004, 2009)
- **Leader:** GSA regional field trip (2010)
- **Board of Directors:** Geohazards in Transportation in the Appalachians (2008-present)
- Member: Eastern landslide rapid response team (2000-present)
- Member: USGS storm team advisory board (2004-present)
- Chair: Fluvial processes session, Geohazards in Transportation in the Appalachians conference (2008).

Professional Affiliations

- Member: Geological Society of America
- Member: American Geophysical Union
- Member: Virginia Association of Professional Soil Scientists