

## VITA

**Stephen F. Greb**

University of Kentucky/ Kentucky Geological Survey,  
228 Mining and Mineral Resources Building, University of Kentucky,  
Lexington, KY 40506-0107

Work phone: (859) 323-0542 E-mail: greb@uky.edu

**Education**

Ph.D., Geology, 1992, University of Kentucky, Lexington, Ky.

M.S., Geology, 1985, University of Kentucky, Lexington, Ky.

B.S., Geology, 1982, University of Illinois, Urbana, Ill.

**Professional Experience**

Geologist (V), Energy and Minerals Section, 1986-present, Kentucky Geological Survey, University of Kentucky.

Adjunct Professor, 1998-present, Department of Geological Sciences, University of Kentucky.

GLY 130–*Dinosaurs and disasters* (spring and fall semesters, 2000-2016), GLY 715–*Coal Geology* (occasionally, 1995-present). Associate Professor standing (2015).

Instructor, Earth History, spring 1985 and research assistant (1983-1984), Department of Geological Sciences, University of Kentucky

Research Assistant, Coal Section, 1982, Illinois Geological Survey, Urbana, Ill.

**Research Awards and Honors** (see abstract list for complete citations)

AAPG–Division Environmental Geosciences Best Poster Award, 2020, for Nuttall, B.C., Sparks, T.N., and Greb, S.F., “Explorations in TOC for assessment of CO<sub>2</sub> storage and enhanced gas recovery....”

First International Conference on Exploration and Utilization of Underground Space–Best Paper, 2020, for Bowersox, J.R., Greb, S.F., and Harris, D.C., “Geomechanical properties will constrain CO<sub>2</sub> injection...”

Gilbert H. Cady Award, 2019, Geological Society of America, national award for coal-science research

Distinguished Achievement in Geoscience Award, 2018, Geological Society of Kentucky, for contributions to Kentucky geology.

AAPG–A.I. Leverson Memorial Award (Best overall paper), 2017, for Parris, T.M., Hackley, P.C., Greb, S.F., and Eble, C.F., “Molecular and isotopic composition of... gases...in the Berea Sandstone, Eastern Kentucky.”

AAPG–Division of Environmental Geosciences Best Poster Award, 2017, for Bowersox, J.R., Greb, S.F., and Harris, D.C., “Porosity and CO<sub>2</sub> storage capacity of the Maryville–Basal sandstone section...”

Ralph I. Miller Memorial Award-Best Energy Minerals Division AAPG Paper, 2016, for Floyd, J., and Greb, S.F., “Subsurface analyses of the Bedford-Berea petroleum system in eastern Kentucky.”

AAPG–Certificate of Merit, 2016, AAPG, meeting organizing committee, field trip chair

Gordon Wood Memorial Award, 2014, American Association of Petroleum Geologists, Eastern Section Meeting, London, Ontario, Canada, for contributions to energy research in eastern United States.

GSA Coal Division Best Paper Award, 2013, Geological Society of America National Meeting, Denver, CO.

Geological Society of America Fellow, 2008, Geological Society of America National Meeting, Houston, TX.

AAPG–Energy Minerals Division Best Poster Award, 2007, Eastern Section meeting, American Association of Petroleum Geologists to Solis and Greb

GSA Distinguished Service Award, 2007, Geological Society of America National Meeting, Denver, CO.

GSA Division of Environmental Sciences Best Paper Award, 2006, for Greb, Harris, Solis, Parris, Drahovzal, Eble, Harris, Hickman, Lake, Overfield, and Takac, 2005, “Siting coal-fired power plants in a carbon-managed future...” presented at eastern section AAPG, Morgantown, WV.

John C. Frye Memorial Award-Best Environmental Awareness Publication, 2005 for Ruthven, Kiefer, Greb, and Andrews, 2003, “Geologic maps and geologic issues...” presented at GSA Annual Meeting, Salt Lake City.

GSA Coal Division Best Paper Award, 2001, Geological Society of America National Meeting, Boston, MS.

Best Cartographic Design-Single Map Product, 3<sup>rd</sup> Place, 1999, ESRI User Conference, to Anderson and others

Ralph I. Miller Memorial Award-Best Energy Minerals Division AAPG Paper, 1999, Eastern Section Meeting, American Association of Petroleum Geologists, to Greb and Williams

GSA Coal Division Best Paper Award, 1998, Geological Society of America National Meeting, Toronto

Ralph I. Miller Memorial Award-Best Energy Minerals Division AAPG Paper, 1998, Eastern Section Meeting, American Association of Petroleum Geologists, to Greb and Weisenfluh

AAPG–Certificate of Merit, 1997, AAPG, AAPG, meeting organizing committee, field trip chair

Ralph I. Miller Memorial Award-Best Energy Minerals Division AAPG Paper, 1996, Eastern Section Meeting, American Association of Petroleum Geologists.

AAPG–Energy Minerals Division Best Poster Award, 1996, Eastern Section Meeting, American Association of Petroleum Geologists, to Greb, Eble, Hower, and Phillips

AAPG–Energy Minerals Division Best Poster Award, 1989, Eastern Section Meeting, American Association of Petroleum Geologists, to Greb and Chesnut

Vincent E. Nelson Memorial Award, 1988, Eastern Section Meeting, American Association of Petroleum Geologists.

AAPG–Energy Minerals Division Best Poster Award, 1988, Eastern Section Meeting, American Association of Petroleum Geologists.

Pirtle Academic Award, 1984, Department of Geology, University of Kentucky, Lexington, Ky.

### **Professional Societies and Certification**

Certified Kentucky Geologist (1994 to present)

Geological Society of America (1988 to present)

Coal Division, Officer, Chairman (2002-2003), various offices (1997-2002), co-webmaster (2004 to present)

Education Division, Kentucky delegate to Southeastern Education Committee (1996)

Professional Development Committee (2012 to present)

Sedimentology Division

American Association of Petroleum Geologists

Energy Minerals Division

Society of Sedimentary Geologists

International Association of Sedimentologists

Geological Society of Kentucky

Kentucky Paleontological Society

### **Grants and awards**

Greb, S.F., 10/1/2019-9/30/22, Regional initiative to accelerate CCUS development (Midwest Regional Carbon Initiative, MRCI): Battelle Memorial Institute and the Illinois State Geological Survey, from U.S. DOE, \$120,000. Compilation of data and resources for Midwest and eastern US, as well as regional basement and fault mapping to better understand potential state of stress at basement.

Greb, S.F., 2016-2017, Kentucky Coal Education-Core and mining geology: KY Energy and Environment Cabinet, \$44, 828. Provide web content and tutorials on core description and mining geology.

Harris, D.C., Parris, T.M., and Greb, S.F., 2016, Berea Consortium Project. UK-industry consortium to study Berea Sandstone and source rocks in eastern Kentucky, \$180,000.

Greb, S.F., 2015-2020, Kentucky coal and energy data for NCRDS: U.S. Geological Survey, \$75,000 (\$15,000/year for 5 years).

Greb, S.F., and Nuttall, B.C., 9/2013-2018, Kentucky part of Phase 3 regional characterization project, Midwest Regional Carbon Sequestration Partnership (MRCSP), Battelle Memorial Institute from U.S. DOE, \$400,000 (\$100,00/year for 4 years) Regional characterization of Devonian shales, and CO<sub>2</sub> for enhanced gas and oil recovery.

Harris, D.C., Bowersox, R.C., and Greb, S.F., summer/2012-spring/2013, Eastern Kentucky deep well for carbon storage assessment, part of Kentucky House Bill 1 funding, State of Kentucky, \$1.2 million. Drill stratigraphic test well to collect data on potential CO<sub>2</sub> storage reservoirs and seals in northeastern Kentucky.

Eble, C.F., and Greb, S.F., 7/1/2011-6/30/2012, Petrographic and geochemical examination of Pennsylvanian marine beds as a potential petroleum (gas, oil) resource in the Appalachian and Illinois basins, USGS National Grants Branch, \$26, 730. Sampling and analyses of carbonaceous Pennsylvanian shales.

Greb, S.F., 7/1/10-7/30/11, Geologic carbon storage data in Kentucky for use in the USGS National Carbon Dioxide Sequestration Assessment (COTSA). \$50,000. Provide USGS with regional subsurface analyses and data for their national CO<sub>2</sub> capacity assessments. Grant PI was transferred to W. Anderson in 2011.

Greb, S.F., 6/10/10-8/31/11, Kentucky part of Phase 3 regional characterization project, Midwest Regional Carbon Sequestration Partnership (MRCSP), Battelle Memorial Institute from U.S. DOE. \$183,404/year. Regional characterization of St. Peter Sandstone and Trenton-Black River Formations, as well as development of a regional implementation plan.

Greb, S.F., 12/1/09-19/30/12, Kentucky part of the simulation framework for regional carbon storage infrastructure along Arches Province of the Midwestern United States, Battelle Memorial Institute from U.S. DOE. \$150,000. Sampling and analyses of Mount Simon Sandstone and Eau Claire/Conasauga Formations for regional injection modeling.

- Greb, S.F., and Eble, C.F., 7/1/07-9/30/09, Kentucky part of the Southeast Regional Carbon Sequestration Partnership Phase II Task 10 Proposal Southeast Regional Carbon Sequestration Partnership (SECARB), funded by Marshall Miller and Assoc. from U.S. DOE. \$66,668. Analyses of deep Big Lime oil fields in southeastern Kentucky and desorption, adsorption, and petrography of selected coals.
- Greb, S.F., 7/1/2007-9/30/09, Matching grant from Kentucky Governor's Office of Energy Policy, \$12,500. Awarded matching indirect funds for SECARB grant.
- Parris, T.M., Greb, S.F., and Nuttall, B.C., 7/1/07-6/30/08 (x11/30/09) Evaluation of geologic CO<sub>2</sub> sequestration potential and CO<sub>2</sub> enhanced oil recovery in Kentucky: Kentucky Department for Energy Development and Independence, Kentucky Energy and Environment Cabinet, Contract No. PO2-855-0700010071. \$163,446, Summary of geologic sequestration options across Kentucky.
- Harris, D.C., Greb, S.F., and Drahovzal, J.A., 1/1/06—6/30/06, FutureGen project for Kentucky: Kentucky Office of Energy Policy, \$200,000. Collect data and aid in evaluating and writing proposal of a Kentucky site for the U.S. DOE FutureGen initiative.
- Greb, S.F., and Eble, C.F., 10/1/2005-9/30/09, Kentucky portion of field project 2-Coal and CBM, Southeast Regional Carbon Sequestration Partnership (SECARB), Phase 2 research: Virginia Tech from U.S. DOE. \$89,338. Analyses of subsurface stratigraphy of deep coals in southeastern Kentucky and correlations into western Virginia.
- Greb, S.F., and Eble, C.F., 1/1/06-6/30/08, Matching funds for Kentucky portion of field project 2, Southeast Regional Carbon Sequestration Partnership (SECARB): Kentucky Office of Energy Policy, \$23,338. Awarded matching indirect funds for MRCSP grant.
- Greb, S.F., and Nuttall, B.C., 7/01/07-6/30/08, Shale gas production and oil shale potential in Kentucky: U.S. Geological Survey, \$5,000, NCRDS add-on to sample Devonian Ohio Shale core and outcrop for USGS analyses.
- Weisenfluh, J., and Greb, S.F., 7/01/07-6/30/08, Training workshop for NCRDS cooperative partners: U.S. Geological Survey, \$30,000, NCRDS add-on to host meeting of national partners.
- Eble, C.F., and Greb, S.F., 7/01/07-6/30/08, Geology and paleontology of the Stoney Fork Member and surrounding strata in eastern Kentucky: U.S. Geological Survey, \$5,000, NCRDS add-on for sample collection and palynological analyses.
- Greb, S.F., and Drahovzal, J.A., 10/1/2005-9/30/09, Kentucky project team part of the Midwest Regional Carbon Sequestration Partnership (MRCSP): Battelle from U.S. DOE, Phase 2 Regional Carbon Sequestration Projects, \$354,114. Manage Kentucky part of the regional team, researching subsurface stratigraphy for potential CO<sub>2</sub> sequestration with regional site testing.
- Greb, S.F., 1/1/06-6/30/08, Matching funds for Kentucky portion of the MRCSP-DOE project: Kentucky Office of Energy Policy, \$72,625. Awarded matching indirect funds for MRCSP grant.
- Greb, S.F., and Drahovzal, J.A., 11/1/2005-3/1/06, Preliminary geologic assessment of the Cincinnati Arch site for Phase II research, Midwest Regional Carbon Sequestration Partnership: Battelle Memorial Institute from U.S. DOE, \$10,000. Geologic evaluation for the East Bend-Cincinnati Arch area demonstration well.
- Greb, S.F., Eble, C.F., and Overfield, B., 7/01/05-6/30/10, Kentucky Coal Data for the National Coal Resources Data System, sponsored by the USGS, NCRDS program 15-808, \$75,000. Manage student data collection and input for database. Several GIS projects involving coal beds.
- Fryar, A., and Greb, S.F., 7/01/03-6/30/05, Development of a conceptual stratigraphic model for the Paducah Gaseous Diffusion Plant and vicinity: Kentucky Research Consortium for Energy and Environment-U.S. DOE, \$116, 200. Research stratigraphy and near-surface geology around plant with student for student thesis.
- Drahovzal, J.A., and Greb, S.F., 10/01/03-9/30/04, Kentucky project team part of the Midwest Regional Carbon Sequestration Partnership: Battelle Memorial Institute from U.S. DOE, Phase 1 Regional Carbon Sequestration Projects, \$64, 336. Manage Kentucky part of the regional team, researching subsurface stratigraphy (oil and gas isopachs and structure) for potential CO<sub>2</sub> sequestration.
- Greb, S.F., Eble, C.F., and Drahovzal, J., 7/01/02-6/30/05, Cooperative Research-Appalachian Basin Framework, sponsored by the USGS, NCRDS program 15-808, \$74, 848. Manage funds for three separate projects on Appalachian basin in eastern Kentucky (coal quality database, conodont study, coal bed study).
- Greb, S.F., and Eble, C.F., 7/01/02-6/30/05, Kentucky coal data for National Coal Resource Data System, sponsored by the USGS, NCRDS program 15-808, \$45, 000 (\$15K/year). Manage student data collection and input for database. Several GIS projects involving coal beds.
- Greb, S.F., 5/29/03-6/30-03, Award to Department of Geological Sciences from University of Kentucky, \$22,200.00. UK growth fund award for night class enrollment, spring semester 2002, GLY 130 class.
- Greb, S.F., 8/01/02-12/29/02, Award to Department of Geological Sciences from University of Kentucky, \$22,365.00. UK growth fund for night class enrollment, fall semester 2001 GLY 130 class.
- Greb, S.F., 9/01/2001-3/01/2002, Geology and stratigraphy of the Breathitt Formation in Eastern Kentucky, along US Highway 23, sponsored by Hibernia Management Company, New Foundland, Canada. \$7,000. Research and construction of GIS database for sequence stratigraphic modeling as analogue to Hibernia field in Canada.
- Greb, S.F., 8/01/01-12/29/01, Award to Department of Geological Sciences from University of Kentucky. \$18,398. UK growth fund for night class enrollment, spring semester 2001, GLY 130 class.
- Greb, S.F., 1/0/01-6/30/01, Award to Department of Geological Sciences from University of Kentucky. \$18,900. UK growth fund for night class enrollment, fall semester 2000 GLY 130 class.
- Greb, S.F., and Eble, C.F., 7/01/00-6/30/02, Computerized Kentucky coal data for the National Coal Resource Data System, sponsored by the USGS, NCRDS program 15-808, \$78, 000. Manage student data collection and input for database. Also, manage and research on several Kentucky coal beds with deliverable GIS database.
- Greb, S.F., Eble, C.F., and Weisenfluh, G., 7/01/00-6/30/01, Revision (add-on) to Computerized Kentucky coal data for the National Coal Resource Data System, sponsored by the USGS, NCRDS program 15-808, \$15, 000. Manage student data collection and input for database. Several GIS projects involving coal beds.
- Greb, S.F., 8/01/98-9/01/98, Earth science workshop: ALPS Program, Montgomery County Education Foundation, \$1,500. Plan and teach summer earth science workshop for middle school program.
- Greb, S.F., and Eble, C.F., 4/97-4/98, Computerization of Kentucky coal resource data for National Coal Resource Data System, sponsored by the USGS, NCRDS program 15-808, \$123, 949. Manage student data collection and input for database.
- Chesnut, D.R., Jr., and Greb, S.F., 11/96-12/97, Geographic Information System (GIS) program and database for coal preparation plants in Kentucky, sponsored by Tennessee Valley Authority, \$29,500. Manage and research on slurry ponds in western Kentucky with deliverable GIS database.
- Weisenfluh, G. A., and Greb, S. F., 10/95-3/97, Mineability of the Hazard No. 8 coal study, sponsored by Cypress-Cumberland Mining Co., \$27,720. Research mining geology of the coal and surrounding strata in the study area.

- Greb, S. F., 11/95-11/96, Computerized coal resource data for the National Coal Resource Data System, sponsored by the USGS, NCRDS program 15-808, \$15,000. Manage student data collection and input for database.
- Weisenfluh, G. A., and Greb, S. F., 12/94-12/95, Mine Investigation of the Hazard No. 4 Rider coal study, sponsored by Unicorn Mining Co., \$12,000. Research mining geology of the coal and surrounding strata in the study area.
- Greb, S. F. and Chesnut, D. R., Jr., 11/94-95, Computerized coal resource data for the National Coal Resource Data System, sponsored by the USGS, NCRDS program 15-808, 11/95-11/96, \$15,000. Manage student data collection and input for database.

## Publications

### Refereed Journal or Textbook articles

- Bowersox, J.R., Greb, S.F., Shu, J., and Harris, D.C., *in press*, Geomechanical properties will constrain CO<sub>2</sub> injection into the Lower Ordovician Rose Run Sandstone deep saline reservoir, Appalachian Basin, Kentucky, U.S.A.: *Journal of Rock Mechanics and Geotechnical Engineering*.
- Greb, S.F., Nelson, W.J., and Elrick, S.D., *in press*, Mining geology of the principal resource coals of the Illinois Basin: *International Journal of Coal Geology*
- Haneberg, W.C., Wiggins, A., Curl, D.C., Greb, S.F., Andrews, W.A. Jr., Rademacher, K., Rayens, M.K., and Hahn, E.J., *accepted*, A Geologically based indoor-Radon potential map of Kentucky: *Geohealth*.
- Greb, S.F., Harris, D.C., and Bowersox, J.R., *accepted*, Reservoir geology of the Berea Sandstone (Uppermost Devonian), eastern Kentucky, *in* Parris, T.M., ed., *Devonian Ohio Shale-Berea Sandstone Petroleum System, Appalachian Basin USA: American Association of Petroleum Geologists, Special Publication*.
- Eble, C.F., Hackley, P.C., Parris, T.M., and Greb, S.F., *accepted*, Organic Petrology and Geochemistry of the Sunbury and Ohio Shales in Eastern Kentucky and Southeastern Ohio, *in* Parris, T.M., ed., *Devonian Ohio Shale-Berea Sandstone Petroleum System, Appalachian Basin USA: American Association of Petroleum Geologists, Special Publication*.
- Parris, T.M., Hackley, P.C., Greb, S.F., Eble, C.F., *accepted*, Molecular and Isotopic Gas Composition of the Devonian Berea Sandstone and Implications for Gas Evolution, Eastern Kentucky, *in* Parris, T.M., ed., *Devonian Ohio Shale-Berea Sandstone Petroleum System, Appalachian Basin USA: American Association of Petroleum Geologists, Special Publication*.
- Hackley, P.C., Parris, T.M., Eble, C.F., Greb, S.F., and Harris, D.C., *accepted*, Oil-source correlation studies in the shallow Berea Sandstone petroleum system, eastern Kentucky, *in* Parris, T.M., ed., *Devonian Ohio Shale-Berea Sandstone Petroleum System, Appalachian Basin USA: American Association of Petroleum Geologists, Special Publication*.
- Valian, A. Groppo, J.G., Honaker, R., Eble, C.F., Hower, J.C., and Greb, S.F., *accepted*, Distribution of rare earth elements in the Illinois Basin Coals: Mining, Metallurgy, and Exploration.
- Thomas, W.A., Gehrels, G.E., Sundell, K.E., Greb, S.F., Finzel, E.S., Clark, R.J., Malone, D.H., Hampton, B.A., and Romero, M.C., 2020, Detrital zircons and sediment dispersal in the eastern Midcontinent of North America: *Geosphere*, v. 16(3), p. 1–27.
- Eble, C.F., Greb, S.F., Williams, D.A., Hower, J.C. and O’Keefe, J.M., 2019, Palynology, organic petrology and geochemistry of the Bell coal bed in Western Kentucky, Eastern Interior (Illinois) Basin, USA: *International Journal of Coal Geology*, v. 213, p.103264.
- Bowersox, J.R., Greb, S.F., and Harris, D.C., 2019, Porosity and CO<sub>2</sub> storage capacity of the Maryville–Basal Sands section (Middle Cambrian), southern Appalachian Basin, Kentucky: *Environmental Geoscience*, v. 26, p. 21–40.
- LeCottonnec, A., Ventra, D., Lathion, R., Greb, S., Moscariello, A., 2019, Progradational and retrogradational trends in Pennsylvanian fluvio-deltaic successions of the Grundy Formation (Appalachian foreland, SE Kentucky): Implications for the interpretation of cyclothems of the Breathitt Group: *Southeastern Geology*, v. 53, no. 2, p. 131–169.
- Eble, C.F., Greb, S.F., Williams, D.A., Hower, J.C. and O’Keefe, J.M., 2019, Palynology, organic petrology and geochemistry of the Bell coal bed in Western Kentucky, Eastern Interior (Illinois) Basin, USA: *International Journal of Coal Geology*, v. 213, p.103264.
- Greb, S.F., Eble, C.F., and Hower, J.C., 2018, Coal: *Encyclopedia of Geochemistry*, Springer International Publishing, 20 p.
- Eble, C.F., and Greb, S.F., 2018, Geochemical, petrographic and palynologic characteristics of two late middle Pennsylvanian (Asturian) coal-to-shale sequences in the eastern Interior Basin, USA: *International Journal of Coal Geology*, v. 90, p. 99–125.
- Eble, C.F. and Greb, S.F., 2017, Compositional variability of Middle Pennsylvanian coal beds near the north-west margin of the Eastern Kentucky Coal Field, Central Appalachian Basin, USA: *Palynology*, v. 41(sup1), p. 221–246.
- Thomas, W.A., Gehrels, G.E., Greb, S.F., Nadon, G.C., Satkoski, A., and Romero, M.C., 2017, Detrital zircons and sediment dispersal in the Appalachian foreland: *Geosphere* (online GSA publication), v. 13, no. 6, p. 2206–2230.
- Jerrett, R.M., Bennie, L.I., Flint, S.S. and Greb, S.F., 2016, Extrinsic and intrinsic controls on mouth bar and mouth bar complex architecture: Examples from the Pennsylvanian (Upper Carboniferous) of the central Appalachian Basin, Kentucky, USA: *Geological Society of America Bulletin*. v. 128, no. 11-12, p.1696–1716.
- Eble, C.F., and Greb, S.F., 2016, Palynologic, petrographic, and geochemical composition of the Vancleve coal bed in its type area, Eastern Kentucky Coal Field, Central Appalachian Basin: *International Journal of Coal Geology*, v. 158, p. 1–12.
- Greb, S.F., Storrs, G.W., Garcia, W.J. and Eble, C.F., 2015, Late Mississippian vertebrate palaeoecology and taphonomy, Buffalo Wallow Formation, western Kentucky, USA: *Lethaia*, v. 49, no. 2, p. 199–218.
- Greb, S.F., 2013, Coal more than a resource: Critical data for understanding a variety of earth-science concepts: *International Journal of Coal Geology*, v. 118, p. 15–32.
- Nelson, W.J., Greb, S.F., and Weibel, C.P., 2013, Pennsylvanian subsystem in the Illinois Basin: *Stratigraphy*, v. 10, p. 41–54.
- Greb, S.F., Riley, R. A., Bowersox, J.R., Solis, M.P., Rupp, J.A., Kelley, M., Harris, D.C., and Gupta, N., 2012, Extended Abstract—Ordovician Knox carbonates and sandstones of the eastern midcontinent: Potential geologic carbon storage reservoirs and seals, *in* Derby, J.R., Fritz, R.D., Longacre, S.A., Morgan, W.A., and Sternbach, C.A., eds., *The Great American Carbonate Bank: The Geology and Economic Resources of the Cambrian—Ordovician Sauk Megasequence of Laurentia: AAPG Memoir 98*, no. 45, p. 469a–478a.
- Greb, S.F., Riley, R. A., Bowersox, J.R., Solis, M.P., Rupp, J.A., Kelley, M., Harris, D.C., and Gupta, N., 2012, Ordovician Knox carbonates and sandstones of the eastern midcontinent: Potential geologic carbon storage reservoirs and seals, *in* Derby, J.R., Fritz, R.D., Longacre, S.A., Morgan, W.A., and Sternbach, C.A., eds., *The Great American Carbonate Bank: The Geology and Economic Resources of the Cambrian—Ordovician Sauk Megasequence of Laurentia: AAPG Memoir 98*, no. 45, p. 1077-1101.

- Archer, A.W., and Greb, S.F., 2012, Hypertidal facies from the Pennsylvanian Period: Eastern and Western Interior coal basins, USA, *in* Davis, R.A., and Dalrymple, R.W., eds., *Principles of Tidal Sedimentology*: Springer Publishing, p. 421-436.
- Greb, S.F., and Archer, A.W., 2011, Apogean-perigean signals encoded in tidal flats at the fluvio-estuarine transition of Glacier Creek, Turnagain Arm, Alaska: implications for ancient tidal rhythmites: *Sedimentology*, v. 58, p. 1434-1452.
- Falcon-Lang, H.J., Heckel, P.H., Dimichele, W.A., Blake Jr., B.M., Easterday, C., Eble, C.F., Elrick, S., Gastaldo, R.A., Greb, S.F., Martino, R.L., Nelson, W.J., Pfefferkorn, H.W., Phillips, T.L., and Rosscoe, S.J., 2011, No major stratigraphic gap exists near the Desmoinesian-Missourian Stage boundary in North America: *Palaaios*, v. 26, p. 125-139.
- Greb, S.F., Riley, R. A., Solano-Acosta, W., Gupta, N., Solis, M.P., Rupp, J.A., Anderson, W.H., Harris, D.C., Drahovzal, J.A., and Nuttall, B.C., 2009, Cambro-Ordovician Knox carbonates as seal and potential targets for carbon sequestration in the eastern Midcontinent U.S.A., *in* Grobe, M., Pashin, J.C., and Dodge, R.L., eds., *Carbon Dioxide Sequestration in Geological Media—State of the Science*: American Association of Petroleum Geologists Studies 59, 19 p.
- Hower, J.C., Greb, S.F., Kuehn, K.W., and Eble, C.F., 2009, Did the Middlesboro, Kentucky, bolide impact event influence coal rank? *International Journal of Coal Geology*, v. 79, p. 92-96.
- Martino, R.L., and Greb, S.F., 2009, Walking trails of the giant terrestrial arthropod *Arthropleura* from the Upper Carboniferous of Kentucky: *Journal of Paleontology*, v. 83, (1) p. 140-146.
- Finkelman, R., and Greb, S., 2008, Chapter 10-Environmental and health impacts [of coal], *in* Suárez-Ruiz, I., and Crelling, J.C., eds., *Applied Coal Petrology-The Role of Petrology in Coal Utilization*: El Sevier Publications, p. 263-287. \*Volume awarded the 2009 Ralph Gray award from the Society of Organic Petrology.
- LaSage, D.M., Sexton, J.L., Mukherjee, A., Fryar, A.E., and Greb, S.F., 2008, Groundwater discharge along a channelized Coastal Plain stream: *Journal of Hydrology*, v. 360, p. 252-264.
- Greb, S.F., Pashin, J. C., Martino, R.M., and Eble, C.F., 2008, Appalachian sedimentary cycles during the Pennsylvanian: Changing influences of sea level, climate, and tectonics, *in* Fielding C.F., Frank, T.D., and Isbell, J. L., ed., *Resolving the Late Paleozoic Gondwanan Ice Age in Time and Space*: Geological Society of America Special Publication 441, p. 235-248.
- Greb, S.F., and Anderson, W.H., 2008, Kentucky (Annual mining review 2007): *Mining Engineering*, v. 60, p. 95-99.
- Greb, S.F., and Archer, A.W., 2007, Soft-sediment deformation produced by tides in a hypertidal estuary in a meizoseismic area, Turnagain Arm, Alaska: *Geology*, v. 35, p. 435-438.
- Greb, S.F., and Anderson, W.H., 2007, Kentucky (Annual mining review 2006): *Mining Engineering*, v. 60, p. 89-93.
- Greb, S.F., Eble, C.F., Peters, D.C., and Papp, A.R., 2006, *Coal and the Environment*: American Geological Institute, Environmental Education Series, 64 p.
- Greb, S.F., and Anderson, W.H., 2006, Kentucky (Annual mining review 2005): *Mining Engineering*, v. 58, p. 92-95.
- Greb, S.F., and DiMichele, W.A., 2006, Preface, *in* Greb, S.F., and DiMichele, W.A., eds., *Wetlands through Time*: Geological Society of America Special Paper 399, 3 p.
- Greb, S.F., DiMichele, W.A., and Gastaldo, R. A., 2006, Evolution and importance of wetlands in earth history, *in* Greb, S.F., and DiMichele, W.A., eds., *Wetlands through Time*: Geological Society of America Special Paper 399, p.1-40.
- Garcia, W.J., Storrs, G.W., and Greb, S.F., 2006, The Hancock County tetrapod locality, a new Mississippian (Chesterian) wetlands fauna from western Kentucky, *in* Greb, S.F., and DiMichele, W.A., eds., *Wetlands through Time*: Geological Society of America Special Paper 399, p. 155-168.
- Hower, J.C., and Greb, S.F., 2005, Editorial—Geologic hazards in coal mining: prediction and prevention: *International Journal of Coal Geology*, v. 64, p. 1-3 (volume editors).
- Greb, S.F., and Anderson, W.H., 2005, Kentucky (Annual mining review, 2004): *Mining Engineering*, v. 57, p. 92-96.
- Greb, S.F., Eble, C.F., and Hower, J.C., 2005, Subtle structural influences on coal thickness and distribution: examples from the Stockton coal (Bolsovian), Eastern Kentucky Coal Field, U.S.A., *in* Warwick, P., ed., *Coal System Analysis*, Geological Society of America, Special Publication 387, p. 31-50.
- Greb, S.F., and Martino, R.L., 2005, Fluvial-estuarine transitions in fluvial-dominant successions; examples from the Lower Pennsylvanian of the Central Appalachian Basin, *in* Blum, M., Marriott, S.B., and Leclair, S., eds., *Fluvial Sedimentology VII*: Blackwell Publishing, International Association of Sedimentologists, Special Publication No. 35, p. 425-452.
- Fan, D.D., Li, C.X., Wang, D.J., Wang, P., Archer, A.W., and Greb, S.F., 2004, Morphology and sedimentology of open-coast intertidal flats of the Changjiang Delta, China: *Journal of Coastal Research*, v. 43, p. 23-35
- Greb, S.F., Chesnut, D.R., Jr., and Eble, C.F., 2004, Temporal changes in coal-bearing depositional sequences (Lower and Middle Pennsylvanian) of the Central Appalachian Basin, U.S.A., *in* Pashin, J.C. and Gastaldo, R., eds., *Coal-bearing Strata: Sequence Stratigraphy, Paleoclimate, and Tectonics of Coal-bearing Strata*: American Association of Petroleum Geologists, Studies in Geology, v. 51, p. 89-120.
- Gastaldo, R.A., Stevanović-Walls, I.M., Ware, W.N., and Greb, S.F., 2004, Community heterogeneity of Early Pennsylvanian peat mires: *Geology*, v. 32, p. 693-696.
- Greb, S.F., and Anderson, W.H., 2004, Kentucky (Annual mining review, 2003): *Mining Engineering*, v. 56, p. 71-74.
- Greb, S.F., Andrews, W.M., Eble, C.F., DiMichele, W., Cecil, C.B., and Hower, J.C., 2003, Desmoinesian coal beds of the Eastern Interior and surrounding basins: the largest tropical peat mires in earth history, *in* Chan, M.A., and Archer, A.W., eds., *Extreme Depositional Environments: Mega-end members in Geologic Time*: Geological Society of America, Special Publication 370, p. 127-150.
- Greb, S.F., and Anderson, W.H., 2003, Kentucky (Annual mining review, 2002): *Mining Engineering*, v. 55, p. 75-78.
- Greb, S.F., 2002, Coal science—The formation of Kentucky coals, *in* Goode, J.B., ed., *Mining in the 21<sup>st</sup> Century—The Cutting Edge*: Ashland, Kentucky, Jesse Stuart Foundation Books, p. 85-92.
- Greb, S.F., Eble, C.F., and Chesnut, D.R., Jr., 2002, Comparison of the Eastern and Western Kentucky Coal Fields, U.S.A—Why are coal distribution patterns and sulfur contents so different in these coal fields?: *International Journal of Coal Geology*, v. 50, p. 89-118.
- Greb, S.F., Chesnut, D.R., Jr., Dever, G.R., Jr., Harris, D.C., Etensohn, F.R., Mason, C.E., Andrews, W.M., Howell, P.D., Eble, C.F., Caudill, M.R., Houck, K.J., and Nelson, W.J., 2002, Pound Gap—a new reference section for Mississippian strata on Pine Mountain, central Appalachian Basin, U.S.A., *in* Hills, L.V., Henderson, C.M., and Bamber, E.W., eds., *Carboniferous and Permian of the World*: Canadian Society of Petroleum Geologists, Memoir 19, p. 696-709.
- Etensohn, F.R., Greb, S.F., Chesnut, D.R., Jr., Harris, D.C., Eble, C.F., Howell, P.D., Watson, A.E., and Johnson, W.K., 2002, Mississippian stratigraphy, depositional environments, and tectonic framework of the Central Appalachian Basin, eastern Kentucky,

- U.S.A., 2002, *in* Hills, L.V., Henderson, C.M., and Bamber, E.W., eds., Carboniferous and Permian of the World: Canadian Society of Petroleum Geologists, Memoir 19, p. 22–40.
- Grebe, S.F., and Dever, G.R., Jr., 2002, Critical evaluation of possible seismites—Examples from the Carboniferous of the Appalachian Basin, *in* Etensohn, F.R., Rast, N., and Brett, C., eds., Ancient Seismites: Geological Society of America Special Publication 35, p. 109–126.
- Grebe, S.F., Eble, C.F., Hower, J.C., and Andrews, W.M., 2002, Multiple-bench architecture and interpretations of original mire phases in Middle Pennsylvanian coal seams—Examples from the Eastern Kentucky Coal Field: *International Journal of Coal Geology*, v. 49, p. 147–175.
- Grebe, S.F., and Dever, G.R., Jr., 2002, Kentucky (Annual mining review, 2001): *Mining Engineering*, v. 54, no. 5, p. 63–64.
- Eble, C.F., Grebe, S.F., and Williams, D.A., 2001, The geology and palynology of Lower and Middle Pennsylvanian Strata in the Western Kentucky Coal Field: *International Journal of Coal Geology*, v. 47, p. 189–206.
- Grebe, S.F., and Dever, G.R., Jr., 2001, Kentucky (Annual mining review, 2000): *Mining Engineering*, v. 52, no. 5, p. 78–80.
- Grebe, S.F., Eble, C.F., Williams, D.A., and Nelson, W.J., 2001, Dips, ramps, and rolls—Evidence for paleotopographic and syndepositional-fault control on the Western Kentucky No. 4 coal bed, Tradewater Formation (Bolsovian), Illinois Basin: *International Journal of Coal Geology*, v. 45, p. 227–246.
- Chesnut, D.R., Jr., Andrews, W.M., Jr., Weisenfluh, G.A., Grebe, S.F., Eble, C.F., and Andrews, R.E., 2001, Coal geology of Kentucky: Mining Media Inc., Chicago, IL, 2001 Keystone Coal Industry Manual, p. 539–555 (reprinted in 2002, p. 537–553; 2003, p. 528–544; 2004, p. 506–522).
- Hower, J.C., Grebe, S.F., Cobb, J.C., and Williams, D.A., 2000, Origin of vanadium in coals—Parts of the western Kentucky (USA) No. 9 coal rich in vanadium; discussion: *Journal of the Geological Society, London*, v. 157, p. 1257–1259.
- Grebe, S.F., and Popp, J. T., 1999, Mining geology of the Pond Creek seam, Pikeville Formation, Middle Pennsylvanian, in part of the Eastern Kentucky Coal Field: *International Journal of Coal Geology*, v. 41, p. 25–50.
- Grebe, S.F., Eble, C.F., Chesnut, D.R., Jr., Phillips, T.L., and Hower, J.C., 1999, An *in situ* occurrence of coal balls in the Amburgy coal bed, Pikeville Formation (Duckmantian), Central Appalachian Basin, U.S.A.: *Palaos*, v. 14, p. 433–451.
- Grebe, S.F., Eble, C.F., and Hower, J.C., 1999, Depositional history of the Fire Clay coal bed (Late Duckmantian), eastern Kentucky, USA: *International Journal of Coal Geology*, v. 40, p. 255–280.
- Eble, C.F., Grebe, S.F., Williams, D.A., and Hower, J.C., 1999, Observations on the palynology, petrography, and geochemistry of the Western Kentucky Number 4 coal bed: *International Journal of Coal Geology*, v. 39, p. 121–139.
- Grebe, S.F., and Archer, A.W., 1998, Annual sedimentation cycles in rhythmites of Carboniferous tidal channels, *in* Alexander, C.R., Davis, R.A., and Henry, V.J., eds., Tidalites—Processes and Products: Society of Economic Paleontologists and Mineralogists, Special Publication 61, p. 75–83.
- Eble, C.F., and Grebe, S.F., 1997, Channel-fill coals on the western margin of the Eastern Kentucky Coal Field: *International Journal of Coal Geology*, v. 33, p. 183–207.
- Chesnut, D.R., Jr., Weisenfluh, G.A., Grebe, S.F., and Eble, C.F., 1997, Coal geology of Kentucky: Mining Media Inc., Chicago, IL, 1997 Keystone Coal Industry Manual, p. 585–601 (reprinted in 1998, p. 613–629; 1999, p. 607–623; 2000, p. 587–603).
- Grebe, S.F., and Weisenfluh, G.A., 1996, Paleoslumps in coal-bearing strata of the Breathitt Group (Pennsylvanian) in the Eastern Kentucky Coal Field, U.S.A.: *International Journal of Coal Geology*, v. 31, p. 115–134.
- Grebe, S.F., and Chesnut, D.R., Jr., 1996, Lower and lower Middle Pennsylvanian fluvial to estuarine deposition, Central Appalachian basin—Effects of eustacy, tectonics, and climate: *Geological Society of America Bulletin*, v. 108, p. 303–317.
- Archer, A.W., and Grebe, S.F., 1995, An Amazon-scale drainage system in the early Pennsylvanian of central North America: *Journal of Geology*, v. 103, p. 611–627. *This manuscript was also summarized and featured as a popular science article by Jim Arenz, 1996, A river ran through it: Earth, v. 5, p.14.*
- Grebe, S.F., and Archer, A.W., 1995, Rhythmic sedimentation in a mixed tide and wave deposit, eastern Kentucky, U.S.A.: *Journal of Sedimentary Research*, v. B65, p. 96–106.
- Grebe, S.F., 1995, Arthropod trackways in a crossbedded sandstone, Breathitt Formation (Middle Pennsylvanian), Eastern Kentucky Coal Field: *Southeastern Geology*, v. 34, p. 201–209.
- Grebe, S.F., and Chesnut, D.R., Jr., 1994, Paleocology of an estuarine sequence in the Breathitt Formation (Pennsylvanian), Central Appalachian Basin: *Palaos*, v. 9, p. 388–402.
- Grebe, S.F., 1994, A river runs through them—the fossil beds of the Falls of the Ohio: *Rocks and Minerals*, v. 69, p. 170–177.
- Grebe, S.F., 1992, Heterogeneity in seam and roof related to mineability prediction—Hazard No. 8 coal, a case study, *in* Platt, J., Price, J., and Miller, M., and Suboleski, S., eds., One point two—New geologic perspectives on Central Appalachian low-sulfur coal supply: Fairfax, Virginia, Techbooks, Sponsored by the American Association of Petroleum Geologists Coal Decisions Forum Publication, p. 102–124.
- Grebe, S.F., and Chesnut, D.R., Jr., 1992, Transgressive channel filling in the Breathitt Formation (Upper Carboniferous), Eastern Kentucky Coal Field, U.S.A.: *Sedimentary Geology*, v. 75, p. 209–221.
- Chesnut, D.R., Jr., Cobb, J.C., and Grebe, S.F., 1992, "Pipe-organ structures" in the Lee Formation (Pennsylvanian) of the central Appalachian basin—Animal or plant?: *Journal of Paleontology*, v. 66, no. 1, p. 148–156.
- Grebe, S.F., 1991, Roof falls and hazard prediction in eastern Kentucky coal mines, *in* Peters, D.C., ed., *Geology in coal utilization*: Fairfax, Virginia, Techbooks Publishing, American Association of Petroleum Geologists, Energy Minerals Division, p. 245–262.
- Lumm, D.K., Nelson, W.J., and Grebe, S.F., 1991, Structure and chronology of the Pennyryle Fault System, western Kentucky: *Southeastern Geology*, v. 32, no. 1, p. 43–59.
- Taulbee, D.N., Hower, J.C., and Grebe, S.F., 1991, An examination of micrinite concentrates from the Cannel City coal bed of eastern Kentucky—proposed mechanism of formation: *Organic Geochemistry*, v. 17, no. 4, p. 557–565.
- Grebe, S.F., Chesnut, D.R., Jr., Davidson, O.B., and Rodriguez, Rene', 1990, An anomalous mass-flow deposit in the Lee Formation (Pennsylvanian), Eastern Kentucky Coal Field: *Southeastern Geology*, v. 31, no. 2, p. 79–92.
- Grebe, S.F. and Cobb, J.C., 1989, Geologic classification and modeling of potential roof-control problems in underground coal mines of eastern Kentucky, *in* Lineberry, G.T., and Unrug, K.F., eds., *Proceedings of the Multinational Conference on Mine Planning and Design*: Lexington, Ky., OES Publications, p. 27–32.
- Grebe, S.F., 1989, Structural controls on the formation of the sub-Absaroka unconformity in the Eastern Interior basin: *Geology*, v. 17, no. 10, p. 889–892.

- Greb, S.F., 1989, A sub-rectangular paleovalley system, Caseyville Formation, Eastern Interior Basin, western Kentucky: *Southeastern Geology*, v. 30, no. 1, p. 59–75.
- Ettensohn, F.R., Amig, B.C., Pashin, J.C., Greb, S.F., Harris, M.Q., Black, J.C., Cantrell, D.J., Smith, C.A., McMahan, T.M., Axon, A.G., and McHargue, G.J., 1986, Paleocology and paleoenvironments of the bryozoan-rich Sulpher Well Member, Lexington Limestone (Middle Ordovician), central Kentucky: *Southeastern Geology*, v. 26, no. 4, p. 199–219.
- Shepherd, R.G., Pashin, J.C., and Greb, S.F., 1986, Comment on "Terrestrial vs. marine depositional model—A new assessment of subsurface Lower Pennsylvanian rocks of southwestern Virginia": *Geology*, v. 14, no. 9, p. 800–801.

### Field Guides

- Eble, C.F., and Greb, S.F., 2019, Lower and Middle Pennsylvanian coal geology in the Illinois Basin: Kentucky Geological Survey: Bloomington, Indiana, Field trip guidebook for The Society of Organic Petrology, 9/11/2019, 79 p.
- Greb, S.F., Mason, C.E., Eble, C.F., and Martino, R.L., 2019, Geology of Carboniferous strata in northeastern Kentucky along Kentucky Highways 9 and 10, Carter, Greenup, and Lewis Counties: Geological Society of Kentucky, annual field trip, 105 p.
- Eble, C.F., and Greb, S.F., 2018, Lower and Middle Pennsylvanian coal geology in the Illinois Basin: Kentucky Geological Survey, Field trip guidebook for the Geological Society of America Annual Meeting, Indianapolis, In., 11/8/2018.
- Greb, S.F., Eble, C.F., Mason, C., and Ettensohn, F.E., 2017, The Berea petroleum system in northeastern Kentucky: Geological Society of Kentucky Annual Field Trip, Oct, 7, 50 p.
- Greb, S.F., and Eble, C.F., 2016, Coal geology and sequence stratigraphy of Pennsylvanian strata in eastern Kentucky near Jackson, Kentucky: Post-meeting field trip for eastern American Association of Petroleum Geologists meeting, Sept. 28, 2016, 40 p.
- Greb, S.F. and Eble, C.F., 2016, Petroleum geology of the Bedford-Berea petroleum system: Final Berea Consortium project meeting, 10/27/2016.
- Greb, S.F., and Eble, C.F., 2016, Coal geology and sequence stratigraphy of Pennsylvanian strata in eastern Kentucky: Field trip for Eastern American Association of Petroleum Geologists Meeting, Lexington, Ky., 9/28/2016.
- Greb, S.F., and Eble, C.F., 2016, Geology of coal and black shale in eastern Kentucky: Field trip for PetroChina as part of Coal and Gas basins project with Mike McGlue, Earth and Environmental Sciences, 10/17-10/19/2016.
- Greb, S.F., Jerrett, R.M., Flint, S., and Eble, C.F., 2013, Sequence stratigraphy, architecture and coal geology of paralic to terrestrial sedimentary successions, Middle Pennsylvanian, Central Appalachian Basin: American Association of Petroleum Geologists, National Meeting, Pittsburgh, PA, 93 p.
- Andrews, W.M., Jr., Thompson, M.F., Ettensohn, F.R., and Greb, S.F., 2012, The Jephtha Knob cryptoexplosive structure, Shelby County, Kentucky and fossil collecting at Grant Lake and Calloway Creek Limestone outcrops: National Association of State Boards of Geology Council of Examiners Workshop, April 15, sponsored by the Kentucky Board of Registration for Professional Geologists and Kentucky Geological Survey 31 p.
- Greb, S.F., Storrs, G. W., Eble, C.F., King, N.R., and Greer, P., 2009, Carboniferous geology and paleontology on the eastern margin of the Illinois basin: Ninth North American Paleontological Convention, Cincinnati, Ohio, June 20, 2009: 68 p.
- Goldstein, A., Greb, S.F., and Conkin, J.E., 2009, Stratigraphy and paleontology of the Silurian and Devonian strata in the central Ohio Valley, Falls of the Ohio, and quarries in Clark County, Indiana: Ninth North American Paleontological Convention, Cincinnati, Ohio, June 24, 2009: 44 p.
- Greb, S.F., Potter, P.E., Meyer, D.L., and Ausich, W.I., 2008, Mud mounds, paleoslumps, crinoids, and more; the geology of the Fort Payne Formation at Lake Cumberland, south-central Kentucky: Field trip for the Kentucky Chapter of the American Institute of Professional Geologists, May 17-18, 2008: 45 p.
- Greb, S.F., and Eble, C.F., 2007, Coal geology along Kentucky Highway 15: Field trip for the Eastern Section American Association of Petroleum Geologists, Lexington, Kentucky, Sept. 19, 2007: varied pagination.
- Greb, S.F., Andrews, W.A., and Smath, R., 2006, Geology and geomorphology of the Breaks Interstate Park area: Field trip for the annual meeting of the American Institute of Professional Geologists, May 20, 2006: 43 p.
- Greb, S.F., and Mason, C.E., 2005, Geology of the Red River Gorge Geological Area and Natural Bridge State Park: Field trip for the annual meeting of the American Institute of Professional Geologists, Oct. 11, 2005, Lexington, Kentucky: 43 p.
- Greb, S.F., and Eble, C.F., 2005, Carboniferous geology on the eastern margin of the Illinois Basin—Paleovalleys, faulting, and the humble beginnings of the Coal Age: Field trip for the annual meeting of The Society of Organic Petrology (TSOP), Louisville, Kentucky, Sept. 14, 2005: 40 p.
- Greb, S.F., 2003, Mining and construction obstacles in the Middlesboro basin, Kentucky, *in* Kuehn, K.W., Milam, K.A., and Smath, M.L., eds., *Geologic impacts on the history and development of Middlesboro, Kentucky*: Kentucky Society of Professional Geologists, Annual Field Conference, Sept. 18-20, p. 17–22.
- Eble, C.F., Greb, S.F., Martino, R.L., Lawson, J., and Tully, L., 2002, Middle and Upper Pennsylvanian stratigraphy, sedimentology, and coal geology in eastern Kentucky *in* Ettensohn, F.R., and Smath, M.L., eds., *Guidebook for Geology Field Trips in Kentucky and Adjacent Areas, 2002 Joint Meeting of the North-central section and Southeastern section of the Geological Society of America*, Lexington, Kentucky: University of Kentucky, Lexington, p. 74–107.
- Greb, S.F., and Eriksson, K.A., 2001, Carboniferous depositional systems and sequences of the central Appalachian foreland basin (USA): Field trip guidebook for the 7<sup>th</sup> International Fluvial Sedimentology Conference, Aug. 12–16, varied pagination.
- Greb, S.F., Dever, G.R., Jr., and Paylor, R., 2001, Scenic and karstic geology of south-central Kentucky, *in* Braley, L.K., ed., *A Cave Odyssey, 2001 National Speleological Society Convention Guidebook*: Huntsville, Alabama, National Speleological Society, p. 70–91.
- Greb, S.F., 1999, Virtual Field Trip of Natural Bridge State Park: Kentucky Geological Survey, web site.
- Eble, C.F., Greb, S.F., and Dever, G.R., Jr., 1998, Geology of the Pound Gap Roadcut, Letcher County, Kentucky: Kentucky Society of Professional Geologists, Annual Field Trip, Guidebook, 166 p. Lead author on numerous papers within this volume.
- Greb, S. F., Dever, G. R., Jr., and Anderson, W. A., 1997, Economic geology of the Inner Blue Grass: Eastern Section American Association of Petroleum Geologists and The Society of Organic Petrologists Joint Meeting, Sept. 27, 47 p.
- Eble, S.F., Greb, S.F., and Hower, J.C., 1995, Coal geology of the Eastern Kentucky Coal Field: Lexington, Ky., Annual Field Conference of the Geological Society of Kentucky Field Trip Guidebook, 62 p.

- Greb, S.F., 1993, Peat accumulation in the Livingston Paleovalley (Morrowan), central Appalachian Basin, *in* Archer, A.W., Feldman, H.R., and Linear, W.P., eds., *Incised paleovalleys of the Douglas Group in northeastern Kansas and related contributions*, Society of Economic Paleontologists and Mineralogists midyear meeting field trip: Kansas Geological Survey Open-file report 9321, p. 15.1–15.6.
- Hendricks, R.T., Ettensohn, F.R., Stark, T.J., and Greb, S.F., 1993, Geology of the Devonian strata of the Falls of the Ohio area, Kentucky–Indiana–Stratigraphy, sedimentology, paleontology, structure, and diagenesis: Lexington, Ky., Annual Field Conference of the Geological Society of Kentucky, Field Trip Guidebook, 53 p.
- Greb, S.F., Chesnut, D.R., Jr., and Eble, C.F., 1992, Coastal and terrestrial environments of the lower Breathitt and Lee Formations (lower Middle Pennsylvanian), near Frenchburg, Kentucky *in* Cecil, C.B., and Eble, C.F., eds., *Paleoclimate controls on Carboniferous sedimentation and cyclic stratigraphy in the Appalachian basin*: U.S. Geological Survey Open File Report 92-546, p. 90–101.
- Chesnut, D.R., Jr., Greb, S.F., Eble, C.F., and Rice, C.L., 1992, Gregoryville exposure on I-64 in Kentucky—An examination of two middle Carboniferous depositional models, *in* Rice, C.L., Martino, R.L., and Slucher, E.R., eds., *Regional aspects of Pottsville and Allegheny stratigraphy and depositional environments*: U.S. Geological Survey Open File Report 92-558, p. 47–55.
- Chesnut, D.R., Jr., Greb, S.F., and Eble, C.F., 1992, Breathitt Formation and coal-forming environments, *in* Ettensohn, F.R., ed., *Changing interpretations of Kentucky geology—Layer cake, facies, flexure, and eustasy*: Lexington, Ky., Geological Society of America–University of Kentucky Department of Geological Sciences Centennial Field Trip Guidebook, p. 113–114.
- Ettensohn, F.R., and others [including Greb, S.F.], *Changing interpretations of Kentucky geology; layer cake, facies, flexure, and eustasy*: Miscellaneous Report Ohio Division of Geological Survey, no. 5, 184 p.
- Eble, C.F., Greb, S.F., and Chesnut, D.R., Jr., 1991, Coal-bearing rocks along the western margin of the Eastern Kentucky Coal Field: Annual Meeting of The Society of Organic Petrologists, Lexington, Sept. 29-Oct. 2, Field Trip Guidebook, 34 p.
- Greb, S.F., and Chesnut, D.R., Jr., 1990, Sedimentological evidence for a seismic event in the Lower Pennsylvanian of the Eastern Kentucky Coal Field, *in* Dever, G.R., Jr. and others, eds., *Tectonic implications of depositional and erosional features in Carboniferous rocks of south-central Kentucky*: Kentucky Geological Survey, Annual Field Conference of the Geological Society of Kentucky, Sept. 28-29, Ser. 11, p. 31–37.
- Greb, S.F., and Chesnut, D.R. Jr., 1989, Geology of Lower Pennsylvanian strata along the western outcrop belt of the Eastern Kentucky Coal Field, *in* Cobb, J.C., coord., *Geology of the Lower Pennsylvanian in Kentucky, Indiana, and Illinois*: Lexington, Illinois Basin Consortium, v.1, p. 6–15.
- Greb, S.F., 1989, Stevens Hill Cut—Alternating Upper Mississippian terrestrial and marine sequences, *in* Cecil, C.B., Cobb, J.C., Chesnut, D.R., Jr., Damberger, H., and Englund, K.J., (trip leaders), *Carboniferous Geology of the Eastern United States*: Washington, D.C., American Geophysical Union, 28th International Geological Congress, Field Trip Guidebook no. 143, p. 39–43.
- Greb, S.F., 1989, Saint Charles—Economically important Springfield (Kentucky No.9) coalbed and distributary sandstone, *in* Cecil, C.B., Cobb, J.C., Chesnut, D.R., Jr., Damberger, H., and Englund, K.J., (trip leaders), *Carboniferous Geology of the Eastern United States*: Washington, D.C., American Geophysical Union, 28th International Geological Congress, Field Trip Guidebook no. 143, p. 43–44.
- Greb, S.F., 1989, Peth—Paleosump along the upland unconformity surface, *in* Cecil, C.B., Cobb, J.C., Chesnut, D.R., Jr., Damberger, H., and Englund, K.J., (trip leaders), *Carboniferous Geology of the Eastern United States*: Washington, D.C., American Geophysical Union, 28th International Geological Congress, Field Trip Guidebook no. 143, p. 4–47.
- Greb, S.F., 1989, Nolin Reservoir—Channel fill at regional unconformity surface, *in* Cecil, C.B., Cobb, J.C., Chesnut, D.R., Jr., Damberger, H., and Englund, K.J., (trip leaders), *Carboniferous Geology of the Eastern United States*: Washington, D.C., American Geophysical Union, 28th International Geological Congress, Field Trip Guidebook no. 143, p. 47–49.
- Greb, S.F., 1989, Mammoth Cave, *in* Cecil, C.B., Cobb, J.C., Chesnut, D.R., Jr., Damberger, H., and Englund, K.J., (trip leaders), *Carboniferous Geology of the Eastern United States*: Washington, D.C., American Geophysical Union, 28th International Geological Congress, Field Trip Guidebook no. 143, p. 50.
- Greb, S.F., and Chesnut, D.R., Jr., Stop 18—Unconformity and Lower Pennsylvanian depositional features, *in* Cecil, C.B., Cobb, J.C., Chesnut, D.R., Jr., Damberger, H., and Englund, K.J., (trip leaders), *Carboniferous Geology of the Eastern United States*: Washington, D.C., American Geophysical Union, 28th International Geological Congress, Field Trip Guidebook no. 143, p. 60–64.

### Geological Survey and Selected Contract Reports

- Williams, D.A., and Greb, S.F., *submitted*, Geology, log analysis, core descriptions and photographs of MegaWest Energy Kentucky Corp. boreholes 102 and 104, Warren County, Kentucky.
- Carter, K.M., Moore, J.P., Lewis, J.E., Nuttall, B.C., Dinterman, P., Daft, G.W., Jr., Anthony, R.V., Schmid, K.W., Dunst, B.J., Sparks, T.N., Greb, S.F., Solis, M.P., McDonald, J., and Ortt, R.A., 2019, Midwest Regional Carbon Sequestration Partnership Phase III—Regional geologic characterization enhanced recovery opportunities in the Appalachian Basin: Contract report to U.S. DOE, Cooperative Agreement No. DE-FC26-05NT42589, 103 p.
- Nuttall, B., Sparks, T.N., and Greb, S.F., 2019, Chapter 5—Organic-rich shale storage and enhanced recovery assessment, *in* Carter et al., eds., *Midwest Regional Carbon Sequestration Partnership Phase III—Regional geologic characterization enhanced recovery opportunities in the Appalachian Basin*: Contract report to U.S. DOE, Cooperative Agreement No. DE-FC26-05NT42589, p. 26–87.
- Dinterman, P.A., Greb, S.F., Lewis, J.E., Schmelz, W.J., Sparks, T.N., Solis, M.P., Medina, C., Carter, K.M., Barnes, D.A., Harper, J.A., Harrison, W.B., Moore, J.P., Miller, K.G., Hickman, J., Riley, R.A., McDowell, R., Rupp, J., and Browning, J.V., 2019, Regional Geology Topical Report: MRCSP Phase III Topical Report, DOE Cooperative Agreement No. DE-FC26-05NT42589, 26 p.
- Greb, S.F., Sparks, T.N., Barnes, D.A., Harrison, W.B., III, Hickman, J., Medina, C.R., and Rupp, J.A., 2019, Subsurface geology for carbon storage in part of the Midwest Regional Carbon Sequestration Partnership region: Northern Michigan to south-central Kentucky (section A-A'), *in* Dinterman et al., eds., *Regional Geology Topical Report: MRCSP Phase III Topical Report*, DOE Cooperative Agreement No. DE-FC26-05NT42589, one sheet.
- Greb, S.F., Sparks, Harper, J.A., Solis, M.R., Riley, R.A., Medina, C.R., and Rupp, J.A., 2019, Subsurface geology for carbon storage in part of the Midwest Regional Carbon Sequestration Partnership region: Northern Indiana, Ohio, and Pennsylvania (section B-B'), *in* Dinterman et al., eds., *Regional Geology Topical Report: MRCSP Phase III Topical Report*, DOE Cooperative Agreement No. DE-FC26-05NT42589, one sheet.
- Lewis, E., Greb, S.F., Dinterman, P., Solis, M.R., Medina, C.R., Carter, K., Harrison, W.B., III, Moore, J., McDowell, R., and Sparks, T.N., 2019, Subsurface geology for carbon storage in part of the Midwest Regional Carbon Sequestration Partnership region: Southern



- Michigan to West Virginia (section C-C'), *in* Dinterman et al., eds., Regional Geology Topical Report: MRCSP Phase III Topical Report, DOE Cooperative Agreement No. DE-FC26-05NT42589, one sheet.
- Greb, S.F., Sparks, T.N., Dinterman, P., Lewis, E., Medina, C.R., Solis, M.R., and Hickman, J., 2019, Subsurface geology for carbon storage in part of the Midwest Regional Carbon Sequestration Partnership region: Central Indiana to West Virginia (section D-D'), *in* Dinterman et al., eds., Regional Geology Topical Report: MRCSP Phase III Topical Report, DOE Cooperative Agreement No. DE-FC26-05NT42589, one sheet.
- Greb, S.F., Sparks, T.N., Solis, M.R., Harper, J.A., Carter, K.M., Dinterman, P., Lewis, E., and Medina, C.R., 2019, Subsurface geology for carbon storage along the Ohio River in part of the Midwest Regional Carbon Sequestration Partnership region: Central Indiana to West Virginia (section E-E'), *in* Dinterman et al., eds., Regional Geology Topical Report: MRCSP Phase III Topical Report, DOE Cooperative Agreement No. DE-FC26-05NT42589, one sheet.
- Bowersox, J.R., Greb, S.F. and Harris, D.C., 2018, Overview of the Kentucky Geological Survey No. 1 Hanson Aggregates Well, Carter County, Kentucky: Kentucky Geological Survey, ser. 13, Information Circular 1, 30 p.
- Bowersox, J.R., Greb, S.F., and Harris, D.C., *submitted*, Reservoir properties and CO<sub>2</sub> storage capacity of the Rose Run Sandstone (Late Cambrian, Knox Group) in the Kentucky Geological Survey 1 Hanson Aggregates Stratigraphic Research Well, Carter County, Kentucky: KGS.
- Greb, S.F., 2017, Kentucky Stratigraphy: Kentucky Geological Survey, Ser. 12, Map and Chart 211, 1 sheet.
- Greb, S.F., 2017, Kentucky Stratigraphy with Stage Correlations: Kentucky Geological Survey, Ser. 12, Map and Chart 210, 1 sheet.
- Greb, S.F., 2017, Injecting liquids and gases deep underground: Kentucky Geological Survey, Series 12, Map and Chart 209, 1 sheet.
- Greb, S.F., 2017, Storing CO<sub>2</sub> deep underground: Kentucky Geological Survey, Series 12, Map and Chart 208, 1 sheet.
- Greb, S.F., Harris, D.C., and Bowersox, J.R., 2017, Is there space inside solid rock?: Kentucky Geological Survey, Series 12, Map and Chart 207, 1 sheet.
- Carey, D.I., Noger, M.C., Haney, D.C., and Greb, S.F., 2012, Geology along the Wendell H. Ford, Western Kentucky Parkway: Kentucky Geological Survey, Ser. 12, Special Publication 13, 16 p.
- Kelley, M., Place, M., Bacon, D., Greb, S.F., and Bradbury, J., 2011, CO<sub>2</sub> injection test in the Cambrian-age Mt. Simon Formation, Duke Energy East Bend generating station conducted by the Midwest Regional Carbon Sequestration Partnership (MRCSP): Final Report to U.S. Department of Energy, National Energy Technology Laboratory, DOE-NETL Cooperative Agreement DE-FC26-05NT42589, varied pagination, 890 p. total, [http://216.109.210.162/userdata/phase\\_II\\_reports/east\\_bend\\_report\\_final.pdf](http://216.109.210.162/userdata/phase_II_reports/east_bend_report_final.pdf)
- Sparks, T.N., Solis, M.P., Crawford, M.M., Greb, S.F., and Anderson, W.H., 2011, Geologic map of the Kentucky parts of the Evansville and West Frankfort 30 x 60-minute quadrangles, western Kentucky: Kentucky Geological Survey, Map and Chart Series, no. 29, 1 sheet.
- Greb, S.F., Eble, C.F., Slucher, E.R., Carter, K.M., and Avary, K.L., 2010, Storing and using CO<sub>2</sub> for enhanced coalbed methane recovery in unmineable coal beds of the northern Appalachian basin and parts of the central Appalachian basin: U.S. Department of Energy Cooperative Agreement No. DE-FC26-05NT42589, MRCSP Phase 2 topical report (October 2005-October 2010), 41 p.
- Wickstrom, L.H., Venteris, E.R., Harper, J.A., McDonald, J., Slucher, E.R., Carter, K.M., Greb, S.F., Wells, J.G., Harrison, W.B., Nuttall, B.C. and Riley, R.A., 2005, Characterization of geologic sequestration opportunities in the MRCSP region: U.S. Department of Energy, MRCSP Phase I Task Report, October 2003–September, 2005, 160 p.
- Carter, K.M., Kostelnik, J., Laughrey, C., Harper, J.A., Barnes, D.A., Harrison, W.B., III, Venteris, E.R., McDonald, J., Wells, J., Wickstrom, L.H., Perry, C.J., Avary, K.L., Lewis, E., Hohn, M.E., Stolorow, A., Slater, B.E., and Greb, S.F., 2010, Characterization of geologic sequestration opportunities in the MRCSP Region: Middle Devonian-Middle Silurian formations: U.S. Department of Energy Cooperative Agreement No. DE-FC26-05NT42589, MRCSP Phase 2 topical report (October 2005-October 2010), 350 p.
- Parris, T.M., Greb, S.F., and Nuttall, B.C., 2009, Evaluation of Geologic CO<sub>2</sub> Sequestration Potential and CO<sub>2</sub> Enhanced Oil Recovery in Kentucky: Final Report for the Kentucky Department for Energy Development and Independence, Kentucky Energy and Environment Cabinet, Contract No. PO2-855-0700010071, varied pagination.
- Greb, S.F., and Harris, D.C., 2009, Chapter 1-Introduction, *in* Parris, T.M., Greb, S.F., and Nuttall, B.C., 2009, Evaluation of geologic CO<sub>2</sub> sequestration potential and CO<sub>2</sub> enhanced oil recovery in Kentucky: Final Report for the Kentucky Department for Energy Development and Independence, Kentucky Energy and Environment Cabinet, Contract No. PO2-855-0700010071, 19 p.
- Greb, S.F., and Solis, M. P., 2009, Geologic carbon storage (sequestration) potential in Kentucky, *in* Parris, T.M., Greb, S.F., and Nuttall, B.C., 2009, Evaluation of geologic CO<sub>2</sub> sequestration potential and CO<sub>2</sub> enhanced oil recovery in Kentucky: Final Report for the Kentucky Department for Energy Development and Independence, Kentucky Energy and Environment Cabinet, Contract No. PO2-855-0700010071, 203 p.
- Greb, S.F., Drahovzal, J.A., and Sparks, T.N., Appendix-Geologic data sources, *in* Parris, T.M., Greb, S.F., and Nuttall, B.C., 2009, Evaluation of geologic CO<sub>2</sub> sequestration potential and CO<sub>2</sub> enhanced oil recovery in Kentucky: Final Report for the Kentucky Department for Energy Development and Independence, Kentucky Energy and Environment Cabinet, Contract No. PO2-855-0700010071, 8 p.
- Greb, S.F., and Chesnut, D.R., Jr., 2009, Carboniferous geology and biostratigraphy of the Appalachian and Black Warrior basins: Kentucky Geological Survey, ser. 12, Special Publication 10, 101 p.
- Greb, S.F., Chesnut, D.R., Jr., Eble, C.F., and Blake, B.M., 2009, Pennsylvanian of the Appalachian basin, *in* Greb, S.F., and Chesnut, D.R., Jr., eds., Carboniferous geology and biostratigraphy of the Appalachian and Black Warrior basins: Kentucky Geological Survey, ser. 12, Special Publication 10, p.32-45.
- Greb, S.F., Davidson, B., Carey, D., 2005, Generalized geology and land-use map of Oldham County, Kentucky Geological Survey, ser. 12, Map and Chart Series
- Carey, D., Greb, S.F., Davidson, B., 2005, Generalized geology and land-use map of Shelby County, Kentucky Geological Survey, ser. 12, Map and Chart Series
- Greb, S. F., Davidson, Bart, and Carey, Daniel I., 2005, Generalized geology for land-use planning: Spencer County, Kentucky: Kentucky Geological Survey, ser. 12, Map and Chart 100, 1 sheet.
- Greb, S.F., Davidson, B., Carey, D., 2005, Generalized geology and land-use map of Nelson County: Kentucky Geological Survey, ser. 12, Map and Chart 97, 1 sheet.
- Davidson, B., Greb, S.F., and Carey, D., 2005, Generalized geology and land-use map of Bullitt County: Kentucky Geological Survey, ser. 12, Map and Chart 90, 1 sheet.
- Davidson, B., Carey, D., Greb, S.F., and Lacey, P.S., 2004, Generalized geology and land-use map of Jefferson County: Kentucky Geological Survey, ser. 12, Map and Chart 81, 1 sheet.

- Ruthven, C.L., Kiefer, J.D., Greb, S.F., and Andrews, W.M., 2003, Geologic maps and geologic issues in Kentucky—A citizen's guide: Kentucky Geological Survey, ser. 12, Special Publication 3, 27 p.
- Tri-State Committee on Correlation of the Pennsylvanian System in the Illinois Basin, 2002, Toward a more uniform stratigraphic nomenclature for rock units (formations and groups) of the Pennsylvanian system in the Illinois basin: Illinois Basin Consortium Study 5, Joint Publication of the Illinois State Geological Survey, Indiana Geological Survey, and Kentucky Geological Survey, 26 p. or CD-rom version.
- Greb, S.F., 2002, Mining geology of the Fire Clay coal bed: Kentucky Geological Survey, ser. 12, Map and chart series, 1 sheet.
- Greb, S.F., and Weisenfluh, G.A., 2000, Mining geology of the Lower Elkhorn coal bed: Kentucky Geological Survey, ser. 12, Map and chart series 4, 1 sheet.
- Greb, S.F., and Williams, D.A., 2000, Mining geology of western Kentucky coals: Kentucky Geological Survey, ser. 12, Map and chart series 12, 1 sheet.
- Thacker, E.E., Weisenfluh, Greb, S.F., and Esterle, J.A., 2000, Total coal thickness of the Fire Clay coal and Fire Clay Rider coals in eastern Kentucky: Kentucky Geological Survey, ser. 12, Map and chart series 5, 1 sheet.
- Thacker, E.E., Weisenfluh, Esterle, J.A., Greb, S.F., and Hiatt, J.K., 2000, Coal resources of the Fire Clay coal zone in eastern Kentucky: Kentucky Geological Survey, ser. 12, Map and chart series 6, 1 sheet.
- Andrews, W., Jr., Greb, S.F., and Andrews, R.E., 2000, Structure and overburden of the Springfield coal bed in western Kentucky: Kentucky Geological Survey, ser. 12, Map and chart series 11, 1 sheet.
- Greb, S.F., and Weisenfluh, G.A., 2000, Mining geology of the Lower Elkhorn coal: Kentucky Geological Survey, ser. 12, Map and Chart series 4, 1 sheet.
- Greb, S.F., Hiatt, J.K., Weisenfluh, G.A., Andrews, R.E., and Sergeant, R.E., 1999, Geology of the Fire Clay coal in part of the Eastern Kentucky Coal Field: Kentucky Geological Survey, ser. 12, Report of Investigations 2, 37 p.
- Greb, S.F., Weisenfluh, G.A., Andrews, R.A., R.E., Hiatt, J.K., Cobb, J.C., and Sergeant, R.E., 1999, Coal Availability study of the Fire Clay coal in part of the Eastern Kentucky Coal Field: Kentucky Geological Survey, ser. 12, Report of Investigations 3, 18 p.
- Greb, S.F., and Archer, A.W., 1995, Rhythmic sedimentation in a mixed tide and wave deposit, eastern Kentucky, USA: Kentucky Geological Survey, ser.11, Reprint 41, p.96–106.
- Chesnut, D. R., Jr., Cobb, J. C., and Greb, S. F., 1994, "Pipe-organ structures" in the Lee Formation (Pennsylvanian) of the central Appalachian basin—Animal or plant?: Kentucky Geological Survey, ser. 11, Reprint 40, 148–156.
- Greb, S.F., Hendricks, R.T., and Chesnut, D.R., Jr., 1993, Fossil beds of the Falls of the Ohio: Kentucky Geological Survey, ser.11, Special Publication 19, 39 p.
- Weisenfluh, G.A., Andrews, R.E., Hiatt, J.K., Greb, S.F., Sergeant, R.E., and Chesnut, D.R., Jr., 1992, Available coal resources of the Boonesville 7.5-minute quadrangle, Owsley County, Kentucky: Kentucky Geological Survey, ser. 11, Information Circular 42.
- Greb, S.F., Williams, D.A., and Williamson, A.D., 1992, Geology and stratigraphy of the Western Kentucky Coal Field: Kentucky Geological Survey, ser.11, Bulletin 2, 77 p.
- Dever, G.R., Jr., Greb, S.F., Moddy, J.R., Chesnut, D.R., Jr., Kepferle, R.C., and Sergeant, R.E., 1990, Tectonic implications of depositional and erosional features in Carboniferous rocks of south-central Kentucky: Annual field conference of the Geological Society of Kentucky, Sept. 28-29, Kentucky Geological Survey, 53 p.
- Greb, S.F., 1989, The progression of life—with notes on the history of life in Kentucky: Kentucky Geological Survey, ser.11, Special Publication 13, 44 p.
- Greb, S.F., 1988, Hydrocarbon production from the sub-Pennsylvanian paleovalleys of western Kentucky: Kentucky Geological Survey Open-file Report, OF-88-11, 18 p.
- Greb, S.F., 1988, The progression of life: KGS poster.
- Greb, S.F., Geology of roof falls in Kentucky coal mines: Kentucky Geological Survey Open-File Report-GIMES, OF-88-04, 25 p.
- Greb, S.F., 1988, Kettlebottoms: Kentucky Geological Survey Open-File Report-GIMES, OF-88-03, 15 p.
- Greb, S.F., 1988, Classification and modeling of roof-control problems in an eastern Kentucky coal mine: Kentucky Geological Survey Open-File Report-GIMES, OF-88-02, 21 p.
- Greb, S.F., 1988, Reference list of published information on the geology of underground coal-mine roof falls: Kentucky Geological Survey Open-file report-GIMES, OF-88-01, 19 p.

#### Published Abstracts

- Nuttall, B.C., Sparks, T.N., and Greb, S.F., 2019, Explorations in TOC for Assessment of CO<sub>2</sub> Storage and Enhanced Gas Recovery for the Middle Devonian Marcellus and Upper Ordovician Utica Shales for the Midwest Regional Carbon Sequestration Partnership: American Association of Petroleum Geologists, Search and Discovery Article, no. 80689 \*winner DEG best poster
- Nuttall, B.C., Sparks, T.N. and Greb, S.F., 2019, Mapping Storage and Enhanced Gas Recovery for Organic Shale in the Midwest Regional Carbon Sequestration Partnership. American Association of Petroleum Geologists, Search and Discovery Article 80667, poster.
- Medina, C., Rupp, J.A., Ellett, K.M., McLaughlin, P., Greb, S.F., Harrison III, W., Barnes, D., Waid, C. and Dunst, B.J., Storage Resource Estimates and Seal Evaluation of Cambrian-Ordovician Units in the MRCSP Region. American Association of Petroleum Geologists, Search and Discovery Article 80678, poster.
- Bowersox, R.J., Greb, S.F., and Harris, D.C., 2019, Geomechanical properties of the lower Copper Ridge Dolomite (Upper Cambrian-Lower Ordovician Knox Group), a potential CO<sub>2</sub> sequestration reservoir in the Appalachian Basin, northeastern Kentucky: Geological Society of America, Abstracts with Programs, v. 51, no. 5.
- Eble, C.F., Greb, S., Williams, D.A., Hower, J.C., and O'Keefe, J., 2019, Palynology, organic petrology, and geochemistry of the Bell coal bed in western Kentucky, Eastern Interior (Illinois) basin: Geological Society of America, Abstracts with Programs.
- Nuttall, B.C., Sparks, T.N., and Greb, S.F., 2019, Carbon storage estimates in organic-rich shales of the Marcellus and Utica-Point Pleasant intervals in the eastern United States: Geological Society of America, Abstracts with Programs.
- Valian, A., Groppo, J.G., Eble, C.F., Greb, S.F., Hower, J.C., Honaker, R.Q., 2019, Spatial and temporal trends of rare earth element abundance in Illinois Basin coal beds: Geological Society of America, Abstracts with Programs.
- Greb, S.F., Sparks, T.N., Solis, M.P., Harper, J.A., Carter, K.M., Dinterman, P., and Lewis, E., 2018, Regional cross section beneath the Ohio River Valley for carbon storage evaluation: American Association of Petroleum Geologists, Eastern Section Meeting, Pittsburgh, Pa., Abstracts with Programs.

- Nuttall, B.C., Sparks, T., and Greb, S.F., 2018, Explorations in TOC for Assessment of CO<sub>2</sub> Storage and Enhanced Gas Recovery for the Middle Devonian Marcellus and Upper Ordovician Utica Shales for the Midwest Regional Carbon Sequestration Partnership: American Association of Petroleum Geologists, Eastern Section Meeting, Pittsburgh, Pa., Search and Discovery Article no. 80666.
- Sparks, T., Nuttall, B.C., and Greb, S.F., 2018, Mapping storage and enhanced gas recovery for organic shale in the Midwest Regional Carbon Sequestration Partnership: American Association of Petroleum Geologists, Eastern Section Meeting, Pittsburgh, Pa., Abstracts with Programs, Search and Discovery Article no. 80667.
- Medina, C.R., Rupp, J.A., Ellett, K., McLaughlin, P., Greb, S.F., Harrison, W., III, Barnes, D., Waid, C., and Dunst, B.J., 2018, Storage resource estimates and seal evaluation of Cambrian-Ordovician units in the MRCSP region: American Association of Petroleum Geologists, Eastern Section Meeting, Pittsburgh, Pa., Search and Discovery Article, no. 90335.
- Bowersox, J.R., Greb, S.F., and Harris, D.C., 2018, Preliminary assessment of the CO<sub>2</sub> storage capacity in the lower Copper Ridge Dolomite (Upper Cambrian), Northeastern Kentucky (abs.): American Association of Petroleum Geologists, eastern section meeting, Pittsburgh, Pa., Search and Discovery Article, no. 90335.
- Greb, S.F., and Eble, C.F., 2018, Illinois basin coal resources and mining geology: Geological Society of America, Annual Meeting, Indianapolis, Indiana, Abstracts with Programs.
- Greb, S.F., Sparks, T.N., Solis, M.P., Harper, J.A., Carter, K.M., Dinterman, P., and Lewis, E., 2018, The potential for deep CO<sub>2</sub> storage along the Ohio River industrial corridor: Geological Society of America, Annual Meeting, Indianapolis, Indiana, Abstracts with Programs.
- Greb, S.F., Weisenfluh, G.A., and Curl, D.C., Calculating and communicating coal reserve information for western Kentucky: Geological Society of America, Annual Meeting, Indianapolis, Indiana, Abstracts with Programs.
- Eble, C.F., and Greb, S.F., 2018, Palynological reconnaissance of Lower and Middle Pennsylvanian strata in the Eastern Interior (Illinois Basin) USA: Geological Society of America, Annual Meeting, Indianapolis, Indiana, Abstracts with Programs.
- Greb, S.F., Sparks, T.N., Solis, M.P., Harper, J.A., Carter, K.M., Dinterman, P., and Lewis, E., 2018, Regional cross section beneath the Ohio River Valley for carbon storage evaluation: Midwest Regional Carbon Storage Partnership, Annual Partners Meeting, Annapolis, Maryland, poster presentation.
- Nuttall, B.C., Sparks, T., and Greb, S.F., 2018, Explorations in TOC for Assessment of CO<sub>2</sub> Storage and Enhanced Gas Recovery for the Middle Devonian Marcellus and Upper Ordovician Utica Shales for the Midwest Regional Carbon Sequestration Partnership: Midwest Regional Carbon Storage Partnership, Annual Partners Meeting, Annapolis, Maryland, poster presentation.
- Bowersox, J.R., Greb, S.F., and Harris, D.C., 2017, Porosity and CO<sub>2</sub> storage capacity of the Maryville–Basal sandstone section in the Kentucky Geological Survey 1 Hanson Aggregates stratigraphic research well, Carter County, Kentucky: American Association of Petroleum Geologists, Search and Discovery Article, no. 80610, 3 p., →winner E. AAPG Div Environmental Science Best Poster Award
- Bowersox, J.R., Greb, S.F., and Harris, D.C., 2017, Step-rate test results from the Kentucky Geological Survey 1 Hanson Aggregates stratigraphic research well, Carter County, Kentucky (abst.): Eastern Section, Am. Assoc. of Petroleum Geologists 46th Annual Meeting Program with Abstracts, p. 30-31.
- Eble, C.F., Hackley, P.C., Greb, S.F., and Parris, T.M., 2017, Organic matter content and thermomaturtion trends in the Ohio and Sunbury Shales, eastern Kentucky, Central Appalachian Basin: Eastern Section American Association of Petroleum Geologists, 46th Annual Meeting, Morgantown, West Virginia, Program with Abstracts, p. 34; Search and Discovery Article, no. 90338.
- Greb, S.F., Bowersox, J.R., and Harris, D.C., 2017, Analysis of the Conasauga Group and Basal sandstone (U. Cambrian) in the KGS No. 1 Hanson Aggregates well, Carter County: Eastern Section American Association of Petroleum Geologists, 46th Annual Meeting, Morgantown, West Virginia, Program with Abstracts, p. 37-38.
- Greb, S.F., Davis, E.S.L., and Harris, D.C., 2017, Porosity and permeability of Berea reservoirs (Upper Devonian) in Eastern Kentucky: Eastern Section American Association of Petroleum Geologists, 46th Annual Meeting, Morgantown, West Virginia, Program with Abstracts, p. 38.
- Hackley, P.C., Parris, T.M., Greb, S.F., Eble, C.F., and Harris, D.C., 2017, Oil-source rock correlation studies in the shallow Berea Sandstone, northeastern Kentucky: Eastern Section American Association of Petroleum Geologists, 46th Annual Meeting, Morgantown, West Virginia, Program with Abstracts, p. 40.
- Parris, T.M., Hackley, P.C., Greb, S.F., and Eble, C.F., 2017, Molecular and isotopic composition of associated and nonassociated gases and evolution of gas in the Berea Sandstone, Eastern Kentucky: Eastern Section American Association of Petroleum Geologists, 46th Annual Meeting, Morgantown, West Virginia, Program with Abstracts, p. 48-49; Search and Discovery Article, no. 90308. → A.I. *Levorson Memorial Award (best overall paper) at eAAPG, 2017, Morgantown, W.V.*
- Greb, S.F., and Eble, C.F., 2017, Differences in the duration of carboniferous eustatic cycles may explain some differences in coal and lithofacies distribution through time: Geological Society of America, Abstracts with Programs, v. 49, no. 6,
- Weisenfluh, G.A., Greb, S.F., and Wang, R., 2017, Coal geology information: coal core description and mining geology: Geological Society of America, Abstracts with Programs, v. 49, no. 6,
- Greb, S.F., and Eble, C.F., 2017, Potential paleotopographic influences on sulfur distribution in the Elm Lick coal zone, Tradewater Formation (Middle Pennsylvanian) western Kentucky: Geological Society of America, Abstracts with Programs, v. 49, no. 6.
- Dinterman, P.A., Moore, J.P., Lewis, J.E., Greb, S.F., and Miller, K.G., 2017, Cross-sections from the Midwest Regional Carbon Sequestration Partnership: Visualizing subsurface carbon storage opportunities across the central and eastern United States: Geological Society of America, Abstracts with Programs, v. 49, no. 6.
- Ellis, G.S., Xia, D., Dai, J., Ni, Y., Mi, J., Hu, G., Greb, S.F., Eble, C.F., Hower, J.C. and McGlue, M.M., 2017, Geological and geochemical controls on coal-sourced natural gas accumulations in the United States and China: (extended abstract) European Association of Organic Geochemists, 28th International Meeting on Organic Geochemistry 17 – 22 September 2017, Florence, Italy, 2 p.
- Eble, C.F. and Greb, S.F., 2016, Palynology, organic petrology and geochemistry of two coal-to-shale sequences in the Eastern Interior (Illinois) Basin, mid-Continent, USA. Program with Abstracts for a joint meeting of The Society for Organic Petrology (TSOP), The International Committee for Coal and Organic Petrology (ICCP), and The Palynological Society (AASP), September 18-23, 2016, Houston, TX, USA, pp. 50-51.
- Greb, S.F., and Eble, C.F., 2016, Changing duration of Carboniferous cyclothem; Implications for coal and lithofacies distribution: Eastern section American Association of Petroleum Geologists, Program with Abstracts, p. 38-39.
- Greb, S.F., Jerrett, R.M., and Eble, C.F., 2016, Thinning marine zones of the Breathitt Group along Kentucky Highway 15, Breathitt County, Kentucky: Eastern section American Association of Petroleum Geologists, Program with Abstracts, p. 39.
- Weisenfluh, G.A., Greb, S.F., Essex, C., Sparr, J.P., and Williams, D.A., 2016, Deep cores through the Pennsylvanian section of Western Kentucky, Illinois Basin: Eastern section American Association of Petroleum Geologists, Program with Abstracts, p. 62.

- Floyd, J., and Greb, S.F., 2016, Subsurface analyses of the Bedford-Berea petroleum system in eastern Kentucky: Eastern section American Association of Petroleum Geologists, Program with Abstracts, p. 36. →*awarded Ralph I. Miller Memorial Award-Best Energy Minerals Division AAPG Paper*
- Medina, C.R., Rupp, J.A., Ellett, K., Barnes, D.A., Rine, M.J., Erenpreiss, M.S., and Greb, S.F., 2016, Hierarchical evaluation of geologic carbon storage resource estimates: Cambrian-Ordovician units within the MRCSP Region: Eastern section American Association of Petroleum Geologists, Abstracts, p. 47-48.
- Eble, C.F. and Greb, S.F., 2016, Palynology, organic petrology and geochemistry of two coal-to-shale sequences in the Eastern Interior (Illinois) Basin, mid-Continent, USA: Program with Abstracts for a joint meeting of The Society for Organic Petrology (TSOP), The International Committee for Coal and Organic Petrology (ICCP), and The Palynological Society (AASP), September 18-23, 2016, Houston, TX, USA, pp. 50-51.
- Greb, S.F., Bowersox, J.R., and Harris, D.C., 2016, Subsurface storage potential of the Rose Run Sandstone (Lower Ordovician) and Copper Ridge Dolomite (Upper Cambrian), Knox Group, in northeastern Kentucky (abs.): Geological Society of America, Abstracts with Programs, v. 48, no. 5.
- Greb, S.F. and Eble, C.F., 2015, Palynology of Lower and Middle Pennsylvanian coal beds in the Central Appalachian Basin: Paleobotanic and biostratigraphic implications. Geological Society of America Abstracts with Programs, v. 47, no.7, p. 606.
- Greb, S.F., 2015, Peatlands through time: C-Peat Workshop, Lamont-Doherty Observatory, Columbia University, New York, Abstracts on line.
- Thomas, W.A., Gehrels, G., Hampton, B.A., Greb, S.F., and Romero-Armenta, M.C., 2015, Detrital-zircon populations and Mississippian-Permian sediment dispersal pathways in eastern Laurentia (abs.): Geological Society of America Abstracts with Programs, v. 47, no. 2, p.82.
- Le Cottonnec, A., Moscariello, A., Ventra, D., Bracinni, E., Greb, S., and La Font, F., 2015, Architecture and rock typing of coal-bearing successions in Late Carboniferous fluvio-deltaic deposits (southeast Kentucky, USA) (abs.): American Association of Petroleum Geologists, Abstracts, Denver, Colorado.
- Greb, S.F., DiMichele, W.A., Elrick, S.D., and Eble, C.F., 2014, In support of early peat to coal compaction; Evidence from Pennsylvanian strata of the Appalachian and Illinois Basins (abs.): Geological Society of America Abstracts with Programs, v. 46 (6), p. 604.
- Backus, J., Eble, C.F., and Greb, S.F., 2014, Composition and inferred origin of the Vanclve coal bed in the Eastern Kentucky Coalfield, Central Appalachian Basin (abs.): Geological Society of America Abstracts with Programs, v. 46 (6), p. 604.
- Greb, S.F., and Eble, C.F., 2014, Cannel coals of the Cannel City-Amburgy coal bed (Pikeville Formation, Middle Pennsylvanian); Evidence for possible fault-generated lakes (abs.): Geological Society of America Abstracts with Programs, v. 46 (6), p. 604.
- Bowersox, J.R., Greb, S.F., Moecher, D.P., and Hickman, J.B., 2014, The Precambrian Middle Run Formation in Kentucky: Evidence for fluvial and tidal facies (abs.): Geological Society of America Abstracts with Programs, v. 46 (6), p. 767.
- Eble, C.F., and Greb, S.F., 2014, Comparative organic petrography of Pennsylvanian marine shales from the Central Appalachian and Eastern Interior Basins (abs.): Geological Society of America Abstracts with Programs, v. 46 (6), p. 767.
- Bowersox, J.R., Greb, S.F., Anderson, W.H., and Harris, D.C., 2013, Assessing the CO<sub>2</sub> storage capacity in the Central Appalachian Basin: results of the Kentucky Geological Survey test well, Carter County, Kentucky (abs.): Geological Society of America Abstracts with Programs, v. 45, no. 7, p. 99.
- Greb, S.F., and Eble, C.F., 2013, Evidence of syndepositional faulting during deposition of the Hyden Formation (Middle Pennsylvanian), Eastern Kentucky Coal Field, Central Appalachian Basin (abs.): Geological Society of America Abstracts with Programs, v. 45, no. 7, p. 742.
- Greb, S.F., 2013, The role of accommodation space on the preservation of *in situ* trees in the coal fields of the Appalachian Basin (abs.): Geological Society of America Abstracts with Programs, v. 45, no. 7, p. 650.
- Greb, S.F., and Archer, A.W., 2013, Influences on the fluvial-estuarine transition; examples from hypertidal Cook Inlet and Turnagain Arm, Alaska (abs.) Manchester, England, International Association of Sedimentologists Annual Meeting, T4S3\_01, *keynote address for tidal estuarine sedimentology session*.
- Greb, S.F., Eble, C.F., and Weisenfluh, G.A., 2012, Geology and coal-bench architecture of the Little Caney, Van Lear, and Upper Elkhorn No. 3 coal beds (Breathitt Group, Pennsylvanian) in the Eastern Kentucky Coal Field, Central Appalachian Basin; A basinward transition from single bed to coal zone (abs.): Geological Society of America Abstracts with Programs, v. 44, no. 7, 194-8.
- Greb, S.F., and Eble, C.F., 2012, Compositional groups and coal-bench architecture analyses to reconstruct Pennsylvanian wetland environments (abs.): Geological Society of America Abstracts with Programs, v. 44, no. 7, p. 265.
- Eble, C.F., and Greb, S.F., 2012, Palynology, petrography, sedimentology, and inferred paleoecology of a Middle Pennsylvanian age mire to mire transect, Peach Orchard coal zone, Central Appalachian Basin (abs.): Geological Society of America, 2012 Annual Meeting, Abstracts with Programs, v. 44, no. 7, p. 465.
- Greb, S.F., and Solis, M.P., 2012, Understanding the geology beneath Kentucky's rivers for carbon storage and other applications (abs): Kentucky Academy of Sciences 2012 Annual Meeting Program, Eastern Kentucky University, Richmond, Ky., 9/28/2012, p. 35, and online, <http://www.kyacademyofscience.org/members/viewabs.php?page=all>
- Greb, S.F., 2012, Fish fossils from Kentucky (abs.): Kentucky Academy of Sciences 2012 Annual Meeting Program, Eastern Kentucky University, Richmond, Ky., 9/28/2012, p. 35, and online, <http://www.kyacademyofscience.org/members/viewabs.php?page=all>
- Greb, S.F., 2012, Stratigraphic correlation charts for Kentucky (abs.): Kentucky Academy of Sciences 2012 Annual Meeting Program, Eastern Kentucky University, Richmond, Ky., 9/28/2012, , p. 35, and online, <http://www.kyacademyofscience.org/members/viewabs.php?page=all>
- Greb, S.F., Sparks, T., Barnes, D., Harrison, W. III, Medina, C., Rupp, J., Baranoski, M., Riley, R., Solis, M., Perry, C., Lewis, E., Carter, K., and Harper, J., 2012, Regional cross section and correlation chart of subsurface geology from the Michigan to Appalachian Basin for understanding carbon sequestration possibilities (abs.): American Association of Petroleum Geologists, Eastern Section meeting, Cleveland, OH, Sept. 24.
- Greb, S.F., Bandy, R.E., Bowersox, J.R., and Hickman, J.B., 2012, Structural influences on the Cambrian Mount Simon Sandstone and overlying strata: Insights from carbon sequestration research in the Midwest United States: (abs.): Proceedings of the 34<sup>th</sup> International Geological Congress, Brisbane, Australia, 5-10 August, 2012, p. 401.
- Greb, S.F., 2012, Coal-bearing strata: Data for evaluating changing sea level, tectonics, sediment flux, climate, and more in the geologic past (abs.): Proceedings of the 34<sup>th</sup> International Geological Congress, Brisbane, Australia, 5-10 August, 2012, p. 3759. *Keynote address for coal session*.

- Greb, S. F., Weisenfluh, G., Etensohn, F., and Ciampaglio, C., 2011, *Edestus giganteus* shark fossils from the Carbondale Formation (Middle Pennsylvanian, Desmoinesian), western Kentucky, Illinois Basin (abs): Kentucky Academy of Science Annual Meeting, Meeting Program, Murray State University, Nov. 4-5, 2011.
- Bandy, R. E., III, Greb, S.F., and Solis, M.P., 2011, Characterization of the Cambrian Eau Claire Formation as caprock for carbon sequestration into the Mount Simon Sandstone in Kentucky (abs): Geological Society of America Abstracts with Programs, v. 43, no. 5, p. 279.
- Sminchak, J., Patterson, K., Kelley, S., Medina, C., Rupp, J., and Greb, S., 2011, Geocellular model development for simulation of CO<sub>2</sub> storage in the Arches Province of the midwestern United States (abs): U.S. Department of Energy, National Energy Technology Laboratory, 10th Annual Carbon Capture and Sequestration Conference, Pittsburgh, PA, May 2-5, 2011.
- Hannibal, J.T., Greb, S.F., and Chesnut, D.R., Jr., 2011, A large myriacanthepetid archipolypod from Kentucky and its defensive mechanisms (abs): Geological Society of America Abstracts with Programs, v. 43, no. 3, p. 5.
- Greb, S.F., Solis, M.P., Hickman, J.B., Drahovzal, J. A., and Bowersox, J.R., 2010, mapping and testing the southern margin of the Mount Simon Sandstone (Cambrian); a major target for CO<sub>2</sub> storage in the Midwest: Geological Society of America, Abstracts with Programs, Paper No. 166-11, v. 42, no. 5, p. 383.
- Bowersox, J., Hickman, J.B., Greb, S.F., Drahovzal, J.A., and Harris, D.C., 2010, Precambrian Middle Run Sandstone in western Kentucky: Results from the Kentucky Geological Survey #1 Marvin Blan CO<sub>2</sub> sequestration well: Geological Society of America, Abstracts with Programs, v. 42, no. 5, p. 608.
- Eble, C.F., Greb, S.F., McClure, M., Conrad, M., and Grimm, Ry., 2010, Factors affecting the gas content of Pocahontas basin coal beds, SW Virginia: Implications for coal-based carbon capture/storage and enhanced coal bed methane production: Geological Society of America, Abstracts with Programs, v. 42, no. 5, p. 491.
- Eble, C.F., Nuttall, B.C., Greb, S.F., and Bustin, R.M., 2010, Petrography and geochemistry of the Devonian Ohio Shale from a drill core in eastern Kentucky: Implications for potential CO<sub>2</sub> sequestration and enhanced methane production: Geological Society of America, Abstracts with Programs, v. 42, no. 5, p. 383.
- Greb, S.F., Solis, M.P., and Bowersox, J.R., 2009, Geologic cross section beneath the lower Ohio River; highlighting the possibilities for carbon storage along an industrial corridor: Geological Society of America, Abstracts with Programs, v. 41, no. 7, p. 435.
- Solis, M.P., and Greb, S.F., 2009, Regional analyses of Lower Pennsylvanian strata in southeastern Kentucky to assess the potential for enhanced coalbed methane production with carbon dioxide, Geological Society of America, Abstracts with Programs, v. 41, no. 7, p. 333.
- Smath, R., Greb, S.F., Crawford, M.M., Curl, D.C., and Wang, R., 2009, Educational resources and GIS data for the geology of the Daniel Boone National Forest, eastern Kentucky: Geological Society of America, Abstracts with Programs, Paper No. 118-18.
- Greb, S.F., 2009, Fossils and prehistoric life at the Earth Science Education Network, Kentucky Geological Survey (abs.): Ninth North American Paleontological Convention Abstracts, University of Cincinnati, Cincinnati, Ohio, June 21-26, 2009, p.285-286.
- Wickstrom, L.H., Gupta, Neeraj, Ball, D.A., Barnes, D.A., Rupp, J.A., Greb, S.F., Sminchak, J.R., and Cumming, L.J., 2009, Geologic storage field demonstrations of the Midwest Regional Carbon Sequestration Partnership (abs): Environmental Geosciences, v. 16, no. 2, p. 119 (abstract presented at AAPG annual convention).
- Drahovzal, J.A., Nuttall, B.C., Greb, S.F., Parris, T.M., Harris, D.C., and Eble, C.F., 2009, Carbon sequestration challenges in Kentucky: Environmental Geosciences, v. 16, no. 2, p. 83 (abstract presented at AAPG annual convention).
- Greb, S.F., and Solis, M.P., 2009, Geologic cross sections beneath Kentucky's major rivers to determine potential carbon storage options along industrial corridors: Eastern Section American Association of Petroleum Geologists, Abstracts, Evansville, Indiana, p.38.
- Solis, M.P., and Greb, S.F., 2009, The geology of deep saline reservoirs and their confining intervals in Kentucky for regional assessment of carbon storage: Eastern Section American Association of Petroleum Geologists, Abstracts, Evansville, Indiana, p.51.
- Archer, A.W., Greb, S.F., and DeBoer, D., 2008, Depositional zonation and hypertidal sedimentation within Turnagain Arm, Cook Inlet, Alaska, USA: Geological Society of America, Abstracts with Programs, Houston, TX, v. 40, no. 6, p. 227.
- Greb, S.F., and Eble, C.F., 2008, Interpreting specific types of paleowetlands; Examples from the Pennsylvanian of the Central Appalachian Basin: Geological Society of America, Abstracts with Programs, Houston, TX
- Solis, M.P., Greb, S.F., and Eble, C.F., 2008, Analyses of the Grundy Formation (Lower Pennsylvanian) in Eastern Kentucky for deep coal, potential CBM, and carbon storage, Geological Society of America, Abstracts with Programs, Houston, TX
- Lynch, M.J., Greb, S.F., and Wang, R., 2008, Draw *T-rex*, and other hands-on paleontological and earth history activities at the Earth Science Education Network, Kentucky Geological Survey (abs), North-Central Section, Geological Society of America, Evansville, IN, Abstracts with Programs, v. 40, no. 5, p. 9-10.
- Solis, M. P. and Greb, S. F., 2008, Correlating deep Pennsylvanian strata in the Eastern Kentucky coal field for potential CBM and CO<sub>2</sub> storage: North-Central Section, Geological Society of America, Abstracts with Programs, vol. 40, no. 5, p. 14.
- Eble, C.F., Greb, S.F., Mastalerz, M., and Meighen, P., 2008, Palynology, stratigraphy, and paleoecology of Late Atokan coals in southwestern Indiana and western Kentucky (abs), North-Central Section, Geological Society of America, Evansville, IN, Abstracts with Programs, v. 40, no. 5, p. 80-81.
- Greb, S.F., Solis, M.P., Drahovzal, J.A., Harris, D.C., Anderson, W.A., Nuttall, B.C., Riley, R.A., Rupp, J.A., and Gupta, N., 2008, Looking for carbon storage in the Cambro-Ordovician Knox carbonates of the Eastern Midcontinent, U.S.A. (abs.), North-Central Section, Geological Society of America, Evansville, IN, Abstracts with Programs, v. 40, no. 5, p. 82.
- Greb, S.F., and Eble, C.F., 2008, Geology of the Vanclève coal bed, Betsie Shale Member, and Frozen Sandstone Member (Grundy and Pikeville Formations) near Vanclève, Kentucky (abs.), North-Central Section, Geological Society of America, Evansville, IN, Abstracts with Programs, v. 40, no. 5, p. 81.
- Bowersox, J.R., Williams, D.A., Greb, S.F., Nuttall, B.C., Parris, T.M., Anderson, W.A., Drahovzal, J.A., Harris, D.C., 2008, Solving the carbon storage puzzle in Kentucky (abs.), North-Central Section, Geological Society of America, Evansville, IN, Abstracts with Programs, v. 40, no. 5, p. 82
- Drahovzal, J.A., Nuttall, B.C., Greb, S.F., Parris, T.M., Harris, D.C., and Eble, C.F., 2007, Carbon sequestration challenges in Kentucky (abs): American Association of Petroleum Geologists Annual Convention, San Antonio, Texas, <http://www.searchanddiscovery.com/documents/2008/08169drahovzal/index.htm>
- Eble, C.F., Greb, S.F., and Blake, B.M., 2007, Palynological correlation of Late Middle Pennsylvanian coal beds in the Central Appalachian Basin Resources (abs): Eastern Section American Association of Petroleum Geologists Meeting, Lexington, KY,
- Greb, S.F., Eble, C.F., and Weisenfluh, G.W., 2007, Carbon sequestration, CBM, and coal-to-liquids conversion in Appalachia; Critical need for understanding unmineable and deep coal resources (abs): Eastern Section American Association of Petroleum Geologists Meeting, Lexington, KY,



- Greb, S.F., Drahovzal, J.A., Rupp, J.A., Solano, W., Wickstrom, L., Gupta, N., Jagucki, P., and Sminchak, J.R., 2007, Geology of the planned carbon sequestration demonstration well, Boone County, Kentucky; a test of the Mount Simon Sandstone on the Cincinnati Arch (abs): Eastern Section American Association of Petroleum Geologists Meeting, Lexington, KY.
- Solis, M.P., and Greb, S.F., 2007, Analyzing the deep coal resources of Eastern Kentucky for their carbon sequestration potential (abs): Eastern Section American Association of Petroleum Geologists Meeting, Lexington, KY.
- Drahovzal, J.A., Harris, D.C., Greb, S.F., and Nuttall, B.C., 2009, Assessment of geologic CO<sub>2</sub> sequestration at a proposed FutureGen site in Kentucky: Environmental Geosciences, v. 16 (no. 2), p. 78 (abstract presented at AAPG annual convention).
- Greb, S.F., and Archer, A. W., 2006, Apogee-perigee cycles preserved in the fluvio-estuarine transition in Turnagain Arm, Alaska; implications for ancient tidal rhythmites (abs): Geological Society of America Annual Meeting, Philadelphia, PA, GSA Abstracts with Programs, v. 38, no. 7, p. 185.
- Slucher, E.R., Greb, S.F., Venteris, E.R., Brezinski, D.K., Markowski, A.K., Blake, B.M., Jr., and Fedorko, N., III, 2006, The potential for carbon sequestration in coal beds in the northern and parts of the central Appalachian Basin (abs): Geological Society of America, North-Central Meeting, Abstracts with Programs, v. 38, no. 4, p. 14.
- Greb, S.F., Eble, C.F., and Hower, J.C., 2006, The environmental impacts of mining, processing, and using coal (abs): Geological Society of America Annual Meeting, Philadelphia, PA, Geological Society of America, Abstracts with Programs, v. 38, no. 7, p. 94-95.
- Eble, C.F., Greb, S.F., and Hower, J.C., 2006, New perspectives on Kentucky's coal resources: future trends (abs): Geological Society of America Annual Meeting, Geological Society of America, Abstracts with Programs, v. 38, no. 7, p. 96.
- Slucher, E.R., Wickstrom, L.H., Venteris, E.R., Carter, K.M., Rupp, J.A., Greb, S.F., Rege, J.P., Barnes, D.A., and Avary, K.L., 2006, What to do with carbon dioxide emissions from coal-fired utilities? Geologic sequestration investigations of the Midwest Regional Carbon Sequestration Partnership (abs): Geological Society of America Annual Meeting, Abstracts with Programs, v. 38, no. 7, p. 95-96.
- Chesnut, D.R., Jr., Nuttall, B.C., Harris, D.C., and Greb, S.F., 2006, Late Devonian through Middle Pennsylvanian strata in the Central Appalachian Basin, USA--Transition from basinal, to platform, and to terrestrial settings, in Aretz, M. and Herbig, H.G. [eds], Carboniferous Conference Cologne, From Platform to Basin, Sept. 4-10, 2006, Kölner Forum für Geologie und Paläontologie, v. 15, p. 18.
- Garcia, W., Storrs, G., and Greb, S.F., 2006, Lungfish burrows from the Mississippian (Chesterian) of north-western Kentucky (abs.): Journal of Vertebrate Paleontology, v. 26, p. 65.
- Drahovzal, J.A., Greb, S.F., Harris, D.C., Solis, M.P., Wickstrom, L.H., and Nuttall, B.C., 2006, The Knox Group: A potential saline reservoir for carbon sequestration in the eastern Midcontinent (abs): Eastern Section Meeting American Association of Petroleum Geologists.
- Greb, Stephen F., Slucher, Ernie, Venteris, Erik R., Brezinski, D.K., Markowski, Toni, Blake, B.M., Fedorko, Nick, 2006, The potential for carbon sequestration in coal beds in the northern and parts of the central Appalachian Basin (abs): Geological Society of America, North-Central Section meeting, Akron, Ohio.
- Greb, S.F., 2006, Fluvial-estuarine channels in the Paragon Formation and Pennington Group, Upper Mississippian, eastern Kentucky (abs): Geological Society of America, North-Central Section meeting, Abstracts with Programs, v. 38, no. 4, p.5.
- Rupp, J., Solano, W., Greb, S.F., Wickstrom, L., and Gupta, N., 2006, Midwest Regional Carbon Sequestration Partnership, Preliminary assessment of potential CO<sub>2</sub> storage reservoirs and confinement, Cincinnati Arch site (abs) International Symposium on Site Characterization for CO<sub>2</sub> Geologic Storage, Berkeley, USA, March 20-22, 2006.
- Greb, S.F., 2006, Trace fossils in Middle Pennsylvanian coastal-estuarine facies, Tradewater Formation, western Kentucky (abs): Geological Society of America, Southeastern Section Meeting, Abstracts with Programs, v. 38, no. 3, p. 86.
- Martino, R.L., and Greb, S.F., 2006, Walking trails of the giant terrestrial arthropod *Arthropleura* from the Upper Carboniferous of Kentucky (abs): Geological Society of America, Southeastern Section Meeting, Abstracts with Programs, v. 38, no. 3, p. 85-86.
- Sexton, J., Fryar, A., and Greb, S.F., 2006, Geologic mapping of near-surface sediments in the northern Mississippi Embayment, McCracken County, Kentucky (abs): Geological Society of America, Southeastern Section Meeting, Abstracts with Programs, v. 38, no. 3, p. 76.
- Beck, G.E., Carey, D.I., Crawford, M.M., Davidson, B., Greb, S.F., Noger, M.C., Smath, R.A., Williams, D.A., Stickney, J.F., Adams, J., Howell, P., 2005, Land-use planning: Soils and geology; Kentucky Academy of Sciences Abstracts with Programs:
- Greb, S.F., Slucher, E.R., Venteris, E.R., Brezinski, D.K., Markowski, T., Blake, B.M., Jr., and Fedorko, Nick, III, 2005, Assessing the carbon sequestration potential of "unmineable" coal beds in the Appalachian Basin (abs): Geological Society of America Abstracts with Programs, v. 37, no. 7, p. 83.
- Carey, D.I., Beck, E.G., Crawford, M.M., Davidson, O.B., Greb, S.F., Noger, M.C., Smath, R.A., and Williams, D.A., 2005, Land-use maps: soils and geology (abs): Geological Society of America Abstracts with Programs, v. 37, no. 7, p. 541.
- Greb, S.F., 2005, Its about time and other earth history activities at the Earth Science Education Network, Kentucky Geological Survey (abs): Geological Society of America Abstracts with Programs, v. 37, no. 7, p. 151.
- Greb, S.F., Weisenfluh, G., and Eble, C.F., 2005, Assessing the carbon sequestration potential of "unmineable" coals in eastern Kentucky (abs): Abstracts American Association of Petroleum Geologists, Eastern Section Meeting, Charleston, W.V., unpaginated.
- Greb, S.F., Nutall, B.C., Solis, M., Parris, M., Drahovzal, J.A., Eble, C.F., Harris, D.C., Hickman, J.B., Lake, P.D., Overfield, B., and Takacs, K.G., 2005, Siting coal-fired power plants in a carbon-managed future; the importance of geologic sequestration reservoirs (abs): Abstracts American Association of Petroleum Geologists, Eastern Section Meeting, Morgantown, W.V., unpaginated.
- Drahovzal, J.C., Harris, D. C., Nuttall, B.C., Solis, M.P., and Greb, S.F., 2005, Potential carbon sequestration targets in saline reservoirs of Kentucky (abs): American Association of Petroleum Geologists, Eastern Section Meeting, Morgantown, W.V., unpaginated.
- Solis, M.P., Drahovzal, J.C., Greb, S.F., and Hickman, J.B., 2005, Western Kentucky Precambrian structure map (abs): American Association of Petroleum Geologists, Eastern Section Meeting, Morgantown, W.V., Sept. 18-20, Abstracts with Programs, p. 34, [http://www.wvgs.wvnet.edu/www/esaapg05/docs/2005\\_ESAAPG\\_Program.pdf](http://www.wvgs.wvnet.edu/www/esaapg05/docs/2005_ESAAPG_Program.pdf)
- Wickstrom, L.H., Baum, G.R., Greb, S.F., Gupta, N., Harper, J.A., Harrison, W.B.III, Hohn, M.E., and Rupp, J.A., 2005, Geologic CO<sub>2</sub> sequestration characterization of America's "engine room" (abs): Abstracts American Association of Petroleum Geologists Annual Meeting, Calgary, Alberta, v. 14, p. A152.
- Wickstrom, L.H., Venteris, E.K., Rupp, J.A., Greb, S.F., Baum, G.R., Harrison, W.B.III, Carter, K.M., and Hohn, M.E., 2005, Mapping and characterization for geologic sequestration by the Midwest Regional Carbon Sequestration Partnership (MRCSP): Alexandria, Virginia, U.S. Department of Energy, National Energy Technology Laboratory Fourth Annual Carbon Conference.
- Greb, S.F., Harris, D.C., and Weisenfluh, G.A., 2004, Delineating subtle structural trends in the central Appalachian basin, a comparison of Pennsylvanian coal bed and Mississippian carbonate isopach maps (abs): Geological Society of America Abstracts with Programs, v. 36, no. 5, p. 215.

- Eble, C.F and Greb, S.F., 2004, Palynostratigraphy and paleoecology of a vertebrate locality at the Mississippian-Pennsylvanian boundary, Western Kentucky (abs.): Geological Society of America Abstracts with Programs, v. 36, no. 5, p. 84.
- Greb, S.F., 2004, Virtual Field Trips: Bringing scenic geology into the classroom (abs.): Geological Society of America Abstracts with Programs, v. 36, no. 5, p. 415.
- Eble, C.F and Greb, S.F., 2004, Coalbed methane potential in eastern Kentucky (abs.): Geological Society of America Abstracts with Programs, v. 36, no. 2, p. 53.
- Greb, S.F., Eble, C.F., and Hower, J.C., 2003, Paleofracture and structural influences on the accumulation of the Stockton coal (Bolsovian), Four Corners Formation, Eastern Kentucky Coal Field (abs.): Geological Society of America Abstracts with Programs, v. 35, no. 6, p. 230.
- Hosey, K.T., Weisenfluh, G.A., and Greb, S.F., 2003, Assessment of mineable coal in Robinson Forest, eastern Kentucky (abs.): Geological Society of America Abstracts with Programs, v. 35, no. 6, p. 229.
- Overfield, B.L., Curl, D.C., Greb, S.F., Weisenfluh, G.A., and Eble, C.F., 2003, Availability of coal data on the web at the Kentucky Geological Survey (abs.): Geological Society of America Abstracts with Programs, v. 35, no. 6, p.140.
- Ruthven, C.L., and Greb, S.F., 2003, Capturing the full value of geologic maps (abs.): Geological Society of America, Abstracts with Programs, v. 35, no. 6, p. 248.
- Chesnut, D.R., Jr, Greb, S., Storrs, G.W., and Garcia, W.J., 2003, Sedimentology and palaeoecology of a Namurian-A tetrapod site, Buffalo Wallow Formation, Western Kentucky, USA (abs.): International Congress on Carboniferous and Permian Stratigraphy, Utrecht, The Netherlands, 10-16 August 2003, Universiteit Utrecht, p. 90-91.
- Fan, D.D., Archer, A.W., Greb, S.F., and Li, C.X., 2003, Sedimentation on open-coast intertidal flats of the Changjiang Delta, China (abs.): 3<sup>rd</sup> Latin American Congress of Sedimentology, Belem, Brazil.
- Greb, S.F., Andrews, W.M., Eble, C.F., DiMichele, W., Cecil, C.B., and Hower, J.C., 2002, Desmoinesian coal beds of the Illinois Basin and Midcontinent—the broadest and thickest tropical peatlands in earth history (abs.): Geological Society of America, Abstracts with Programs, v. 34, no. 6, p. 211.
- Greb, S.F., and Eble, C.F., 2002, Coal-bench splits vs. merges—a complication to predicting trends in multiple-bench coal beds (abs.): Geological Society of America Abstracts with Programs, v. 34, no. 6, p. 284-285.
- Anderson, W.H., Greb, S.F., Chesnut, D.R., Jr., Smath, R.A., and Ruthven, C.L., 2002, Rocks and minerals at the Earth Science Education Network, Kentucky Geological Survey (abs.): Geological Society of America, Abstracts with Programs, v. 34, no. 6, p. 198.
- Greb, S.F., 2002, Tidal-estuarine sedimentation in the Pennington Group, Upper Mississippian, at Pound Gap, eastern Kentucky (abs.): Abstracts of Conference Papers, International Conference on Tidal Dynamics and Environment, Key Laboratory of Coast and Island Development, Ministry of Education China, Nanjing University, Hangzhou, China, B18-19.
- Chesnut, D.R., Jr, Greb, S., Storrs, G.W., Garcia, W.J., and Bellan, J., 2002, Sedimentology and palaeoecology of a Namurian A tetrapod site, Buffalo Wallow Formation, Western Kentucky (abs.): First International Palaeontological Congress (IPC2002), Geological Society of Australia. Abstracts 68, p. 195.
- Greb, S.F., Eble, C.F., and Martino, R. L., 2002, Structural and paleotopographic controls on Princess Nos. 8 and 9 coals, Breathitt Group (Middle Pennsylvanian), along the northern margin of the central Appalachian basin (abs.): Geological Society of America Abstracts with Programs, Combined North-central–Southeastern section meeting, Lexington, Ky., v. 34, no. 2, p. 104.
- Ruthven, C.L., and Greb, S.F., 2002, K–12 Paleontological activities and information at the Earth Science Education Network, Kentucky Geological Survey (abs.): Geological Society of America Abstracts with Programs, Combined North-central–Southeastern section meeting, Lexington, Ky., v. 34, no. 2, p. 5.
- Chesnut, D.R., Jr., Greb, S.F., and Storrs, G.W., 2002, Sedimentology and paleoecology of a Chesterian tetrapod site, Buffalo Wallow Group, western Kentucky (abs.): Geological Society of America Abstracts with Programs, Combined North-central–Southeastern section meeting, Lexington, Ky., v. 34, no. 2, p. 88.
- Greb, S.F., Ettensohn, F.R., Obermeier, S.F., 2002, Developing a classification scheme for seismites (abs.): Geological Society of America Abstracts with Programs, Combined North-central–Southeastern section meeting, Lexington, Ky., v. 34, no. 2, p. 102.
- Greb, S.F., Eble, C.F., and Chesnut, D.R., Jr., 2001, Spatial and temporal trends of Lower and Middle Pennsylvanian coals, central Appalachian Basin (abs.): Geological Society of America Abstracts with Programs, v. 33, p. A56. *\*Awarded GSA Coal Division Best Paper Award.*
- Eble, C.F., Greb, S.F., and Williams, D.A., 2001, Geologic and paleobotanical evolution of early and middle Pennsylvanian strata in the Western Kentucky Coal Field (abs.): Geological Society of America Abstracts with Programs, v. 33, p. A56.
- Ruthven, C.L., Greb, S.F., Chesnut, D.R., Jr., 2001, K–12 hands-on earth history activities at the Earth Science Education Network, Kentucky Geological Survey (abs.): Geological Society of America Abstracts with Programs, v. 33, p. A245.
- Greb, S.F., Chesnut, D.R., Jr., and Eriksson, K.A., 2001, Fluvial to estuarine transitions in Lower Pennsylvanian strata of the Breathitt Group, Eastern Kentucky Coal Field, Central Appalachian Basin, USA (abs.), in Mason, J.A., Diffendal, R.F., and Joeckell, R.M., eds., *Fluvial Sedimentology, 2001, 7<sup>th</sup> International Fluvial Sedimentology Congress, Program and Abstracts: University of Nebraska-Lincoln, Nebraska, Conservation and Survey Division, Open-file Report, OFR-60, p. 114.*
- Greb, S.F., and Chesnut, D.R., Jr., 2001, Changing alluvial architecture in response to changing accommodation and sediment sources—Examples from the Lower Pennsylvanian of the Illinois and Central Appalachian Basin (abs.), in Mason, J.A., Diffendal, R.F., and Joeckell, R.M., eds., *Fluvial Sedimentology, 2001, 7<sup>th</sup> International Fluvial Sedimentology Congress, Program and Abstracts: University of Nebraska-Lincoln, Nebraska, Conservation and Survey Division, Open-file Report, OFR-60, p. 113.*
- Andrews, W.M., and Greb, S.F., 2001, Kentucky coal resources CD-ROM (abs.), Geological Society of America, Abstracts with Programs, v. 33, no. 2, p. 61.
- Greb, S.F., Weisenfluh, G.A., Thacker, E.E., Andrews, W.M., and Eble, C.F., 2000, Mining geology of the Pond Creek–Lower Elkhorn coal, Pikeville Formation, Eastern Kentucky Coal Field (abs.): Kentucky Academy of Sciences, Annual Meeting, Lexington.
- Greb, S.F., Chesnut, D.R., Jr., and Ruthven, C.L., 2000, Teaching resources of the web-based Earth-Science Education Network at the Kentucky Geological Survey (abs.): Geological Society of America, Abstracts with Programs, v. 32, no. 7, p. 420.
- Greb, S.F. and Chesnut, D.R., Jr., 2000, K–12 outreach at the Kentucky Geological Survey and the web-based Earth Science Education Network (abs.): American Association of Petroleum Geologists Bulletin, Official Program, v. 9, A-59.
- Greb, S.F., Chesnut, D.R., Jr., and Eble, C.F., 2000, Comparison of coal-bearing sequences in basins of different tectonic styles—Pennsylvanian strata of the Illinois and Appalachian Basins in Kentucky (abs.): American Association of Petroleum Geologists Bulletin, American Association of Petroleum Geologists Bulletin, Official Program, v. 9, A-59.
- Eble, C.F., and Greb, S.F., 1999, Palynology of lower Breathitt Group coals along the southwestern margin of the Eastern Kentucky Coal Field—Paleoenvironmental and biostratigraphic implications (abs.): Geological Society of America, Abstracts with Programs, v. 31, p. A-92.

- Greb, S.F., Chesnut, D.R., Jr., Dever, G.R., Jr., Harris, D.C., Etensohn, F.R., Mason, C.E., Andrews, W.M., Howell, P.D., Eble, C.F., Caudill, M.R., Houck, K., and Nelson, W.J., 1999, Pound Gap—The first distinguished geologic site in Kentucky (abs.): American Association of Petroleum Geologists Bulletin, v. 83, p. 1368.
- Greb, S.F., and Williams, D.A., 1999, Mining geology of western Kentucky coals: American Association of Petroleum Geologists Bulletin, v. 8, p. 1368. *\*Awarded AAPG Eastern Section EMD best talk award.*
- Ruthven, C.L., and Greb, S.F., 1999, Kentucky Geological Survey—A resource for teachers (abs.): American Association of Petroleum Geologists Bulletin, v. 8, p. 1373.
- Etensohn, F.R., Greb, S.F., Chesnut, D.R., Jr., Harris, D.C., Dever, G.R., Jr., Mason, C.E., Howell, P.D., Eble, C.F., Caudill, M.R., Houck, K., and Watson, A.E., 1999, Mississippian stratigraphy, depositional environments, and tectonic framework of the Central Appalachian Basin, eastern Kentucky, U.S.A (abs.): XIV International Congress on the Carboniferous-Permian, August 17-21, Calgary, Canada, University of Calgary, Programme With Abstracts, p. 36.
- Greb, S.F., Chesnut, D.R., Jr., Dever, G.R., Jr., Harris, D.C., Etensohn, F.R., Mason, C.E., Andrews, W.M., Howell, P.D., Eble, C.F., Caudill, M.R., Houck, K., and Nelson, W.J., 1999, Pound Gap—A new reference section for Devonian-Carboniferous strata on Pine Mountain, Central Appalachian Basin, U.S.A (abs.): XIV International Congress on the Carboniferous-Permian, August 17-21, Calgary, Canada, University of Calgary, Programme With Abstracts, p. 45.
- Greb, S.F., Eble, C.F., and Nelson, W.J., 1999, Controls on Pennsylvanian paleoenvironments in the Illinois Basin (abs): North-central Geological Society of America Meeting, Champaign-Urbana, Geological Society of America, Abstracts with Programs, v. 31, no.5, A-18.
- Anderson, W., and others [including Greb, S.F.], 1999, Digital geologic map of the Harrodsburg 30 x 60 minute quadrangle, central Kentucky: ESRI User Conference.
- Ruthven, C.L., and Greb, S.F., 1999, Responding to the need for earth science information—Public outreach and technology transfer at the Kentucky Geological Survey (abs): North-central Geological Society of America Meeting, Champaign-Urbana, Geological Society of America, Abstracts with Programs, v. 31, no.5, A-68.
- Ruthven, C.L., and Greb, S.F., 1999, An earth science education network—Build it and they will come: (abs): North-central Geological Society of America Meeting, Champaign-Urbana, Geological Society of America, Abstracts with Programs, v. 31, no.5, A-68.
- Eble, C.F., and Greb, S.F., 1999, Palynology and correlation of the “Block Coal” interval, southwest Indiana (abs): North-central Geological Society of America Meeting, Champaign-Urbana, Geological Society of America, Abstracts with Programs, v. 31, no.5, A-14.
- Ruthven, C.L., and Greb, S.F., 1999, The Earth Science Education Network (abs) in Manson, C.J., (ed.), Science editing and information management: Proceedings of the Second International AESE/CBE/EASE joint meeting, Sixth International Conference on Geoscience Information and Thirty-second annual meeting of the Association of Earth Science Editors, Washington State Department of Natural Resources, v. 6, p. 66.
- Caudill, M.R., and Greb, S.F., 1999, Upper Mississippian (Pennington Formation) paleosol-vertisols, Pound Gap Roadcut, Letcher County, KY: Geological Society of America, Abstracts with Programs, v. 31, no. 3, p. A-10.
- Chesnut, D.R., Jr., Greb, S.F., Storrs, G.W., Phelps, D.J., Hendricks, R.T., 1999, New vertebrate site (Late Mississippian) in Kentucky (abs): Calgary, International Carboniferous Congress.
- Greb, S.F., Chesnut, D.R., Jr., Dever, G.R., Jr., Harris, D., Etensohn, F.R., Andrews, W.J., Jr., Mason, C., Howell, P., Eble, C.F., Caudill, M.R., Houck, K., and Nelson, W.J., 1999: Pound Gap—A new reference section for the Middle Carboniferous of the central Appalachian Basin (abs): Calgary, International Carboniferous Congress.
- Greb, S.F., Chesnut, D.R., Jr., Eble, C.F., Nelson, W.J., and Blake, B.M., 1998, Changing influences of tectonics, eustasy, and climate on Pennsylvanian coals in the Illinois and Appalachian basins (abs): Geological Society of America Annual Meeting, Toronto, Geological Society of America, Abstracts with Programs, v. 30, p. A-47. *\*Awarded GSA Coal Division Best Paper Award*
- Greb, S. F., 1998, Paleoslope movements in Pennsylvanian coal-bearing strata of the central Appalachian basin—Are any signatures of ancient earthquakes? (abs): Geological Society of America Annual Meeting, Toronto, Geological Society of America, Abstracts with Programs, v. 30, no. 2, p. A-400.
- Eble, C.F., Chesnut, D.R., Jr., and Greb, S.F., 1998, Cycles in Middle Pennsylvanian coal-bearing strata of the Breathitt Group, Eastern Kentucky Coal Field (abs.): Geological Society of America, North-central section meeting, Abstracts with Programs, v. 30, no. 2, p. 16.
- Ruthven, C.L., and Greb, S.F., 1998, Build it and they will come—Creating an earth science education network (abs): Geological Society of America Annual Meeting, Toronto, Geological Society of America, Abstracts with Programs, v. 30, p. A-347.
- Chesnut, D.R., Jr., Greb, S.F., Storrs, G.W., Phelps, D.J., Hendricks, R.T., 1998, New vertebrate site (Late Mississippian) in Kentucky (abs): Geological Society of America Annual Meeting, Toronto, Geological Society of America, Abstracts with Programs, v. 30, p. A-32.
- Greb, S.F., and Chesnut, D. R., Jr., 1998, Impact of an astrobleme on coal mining in part of the Eastern Kentucky Coal Field: (abs) American Association of Petroleum Geologists Bulletin, v. 81, n. 9, p. 1767.
- Greb, S.F., and Weisenfluh, G.A., 1998, Mining geology of the Hazard No. 8 coal, Four Corners Formation, Middle Pennsylvanian, Eastern Kentucky Coal Field, (abs): American Association of Petroleum Geologists Bulletin, v. 81, n. 9, p. 1767. *\*Awarded Ralph L. Miller (AAPG-EMD best paper) award.*
- Eble, C.F., and Greb, S.F., 1998, Evidence for syndepositional faulting and the petrographic and geochemical characteristics of the Western Kentucky No. 4 coal, Tradewater Formation (Desmoinesian), Western Kentucky (abs): American Association of Petroleum Geologists Bulletin, v. 81, n. 9, p. 1767.
- Greb, S.F., and Galcerán, C.M., 1998, Mapping coal infrastructure with GIS: GIS Conference, Somerset, Ky. Abstract program, no pagination.
- Greb, S.F., and Ruthven, C.L., 1998, Earth science education network (abs.): Geological Society of America, Southeastern section meeting, Abstracts with Programs, v. 30, no. 4, p. 15.
- Greb, S.F., and Weisenfluh, G.A., 1998, Origin of paleoslump and flow-roll structures above the Hazard No. 8 coal, Four Corners Formation (Middle Pennsylvanian), Eastern Kentucky Coal Field (abs.): Geological Society of America, Southeastern section meeting, Abstracts with Programs, v. 30, no. 4, p. 15.
- Greb, S.F., Eble, C.F., Popp, J.T., Hoer, J.C., and Padgett, P.L., 1998, Geology of the Pond Creek coal, Pikeville Formation (Middle Pennsylvanian), Eastern Kentucky Coal Field (abs.): Geological Society of America, Southeastern section meeting, Abstracts with Programs, v. 30, no. 4, p. 15.
- Greb, S.F., Eble, C.F., and Hower, J.C., 1997, Architectural analysis of coal—A method for recognizing paleomire successions in coal beds: (abs) Geological Society of America Abstracts with Programs, v. 29, no. 7, p. A-203.



- Greb, S. F., and Chesnut, D. R., Jr., 1997, Earth science education—Linking Kentucky to the World: (abs.) American Association of Petroleum Geologists Bulletin, v. 81, p. 1552.
- Chesnut, D.R., Jr., Nuttall, B.C., Eble, C.F., Hower, J.C., Greb, S.F., and Hiatt, J.K., 1997, Coalbed methane in Kentucky: (abs) American Association of Petroleum Geologists Bulletin, v. 81, n. 9, p. 1547.
- Chesnut, D.R., Jr., Nuttall, B.C., Hower, J.C., Greb, S.F., Eble, C.F., Hiatt, J.K., and Williams, D.A., 1997, Coalbed methane in Kentucky (abs): Proceedings of the International Coalbed Methane Symposium, Tuscaloosa, Alabama.
- Eble, C.F., Greb, S.F., Williams, D.A., and Hower, J.C., 1996, Palynologic, petrographic, and geochemical characteristics of the Western Kentucky No. 4 coal bed: (abs) Geological Society of America Abstracts with Programs, v. 28, no. 7, p. A-208.
- Greb, S. F., and Eble, C.F., 1996, The role of accommodation space in Pennsylvanian peat accumulation along the flanks of the Central Appalachian basin: (abs) Geological Society of America Abstracts with Programs, v. 28, no. 7, p. A-209.
- Greb, S. F., Eble, C. F., and Hower, J. C., 1996, Coal-bench architecture as a means of understanding regional changes in coal thickness and quality: (abs) Bulletin American Association of Petroleum Geologists, v. 80, no.9, p. 1524. \*Awarded Ralph L. Miller (AAPG-EMD Best Paper) Award.
- Greb, S. F., Eble, C. F., Hower, J. C., Phillips, T. L., and Chesnut, D. R., Jr., 1996, Mining conditions and deposition of the Amburgy (Westphalian B) Coal, Breathitt Group, Central Appalachian Basin: (abs) Bulletin American Association of Petroleum Geologists, v. 80, no. 9, p. 1524. \*Awarded AAPG-EMD Best Poster Award for the Eastern Section meeting.
- Greb, S.F., Weisenfluh, G.A., Andrews, R.E., and Hiatt, J.K., 1996, Availability of the Fire Clay (Hazard No. 4) coal in part of the Eastern Kentucky Coal Field: (abs) University of Pittsburgh, 13<sup>th</sup> Annual Pittsburgh Coal Conference, Pittsburgh PA., p.198-203.
- Greb, S.F., and Archer, A.W., 1996, Preservation of shallow-water, cyclic rhythmites--Examples from the Carboniferous, USA: (abs) International Tidal Sedimentology Conference, Savannah, Georgia, Abstracts, p. 41-42.
- Greb, S.F., and Chesnut, D.R., Jr., 1995, Tectonic, climatic and eustatic controls on Morrowan sedimentation in the Central Appalachian Basin: (abs) Geological Society of America, Abstracts with Programs, v. 27, no. 6, A-32.
- Greb, S.F., Weisenfluh, G.A., Andrews, R.E., and Hiatt, J.K., 1995, Geology and coal availability of the Fire Clay coal (Middle Pennsylvanian, Breathitt Formation, across a 15-quadrangle area of the Eastern Kentucky Coal Field: (abs) Geological Society of America, Abstracts with Programs, v. 27, no. 6, A-138.
- Archer, A.W., Feldman, H.R., Greb, S.F., Kuecher, G.J., Kvale, E.P., and Naylor, R.D., 1995, Laminated shales in Carboniferous coal measures--Limnic or paralic?: (abs) Geological Society of America, Abstracts with Programs, v. 27, no. 6, A-31.
- Greb, S.F., and Hiatt, J.K., 1995, Deposition of the Fire Clay coal interval (Middle Pennsylvanian), Breathitt Formation, Eastern Kentucky Coal Field: (abs) Geological Society of America, Abstracts with Programs, v. 27, no. 2, p. 58.
- Greb, S.F., Williams, D.A., Eble, C.B., Nelson, W.J., Devera, J.A., and DiMichelle, W.A., 1994, Searching for low-sulfur coals in the Western Kentucky Coal Field--The Elm Lick Coal Zone, Tradewater Formation (Desmoinesian): (abs) Geological Society of America, Abstracts with Programs, v. 26, p. 12-14.
- Greb, S.F., Williams, D.A., Eble, C.B., Nelson, W.J., Devera, J.A., and DiMichele, W.A., 1994, Geology of the Elm Lick coal zone, Tradewater Formation--A low-sulfur coal in the Western Kentucky Coal Field: (abs) Illinois Basin Consortium-United States Geological Survey, Programs volume.
- Chesnut, D.R., Jr., Cobb, J.C., and Greb, S.F., 1993, Cyclothem of the central Appalachian basin--A modern analog from Indonesia: Comptes Rendus XII ICC-P, v.2, p. 431-436.
- Greb, S.F., Chesnut, D.R., Jr., and Eble, C.F., 1992, Lower Breathitt Formation (Lower Pennsylvanian) coal geology, eastern Kentucky: (abs) Bulletin American Association of Petroleum Geologists, v. 76, p. 1275.
- Greb, S.F., Eble, C.F., and Chesnut, D.R., Jr., 1992, Coal-bottomed channels in the Breathitt Formation (Pennsylvanian), eastern Kentucky: (abs) Bulletin American Association of Petroleum Geologists, v. 76, p. 1275-1276.
- Greb, S.F., and Chesnut, D.R., Jr., 1992, Trace fossil zonation in regressive sequences in the lower Breathitt Formation (Pennsylvanian), Central Appalachian Basin: (abs) Geological Society of America, Abstracts with Programs, v. 24, no. 7, p. A43.
- Chesnut, D.R., Jr., and Greb, S.F., 1992, Lowstand versus highstand eustatic models for peat preservation--The coal-bearing rocks of the Breathitt Group, eastern Kentucky: (abs) Geological Society of America Abstracts with Programs, v. 24, no. 7, p. A163-164.
- Williams, D.A., and Greb, S.F., 1992, Plant origin for unusual "pipe-organ" structures of the Curlew sandstone, Tradewater Formation (Pennsylvanian), Western Kentucky Coal Field: (abs) Geological Society of America, Abstracts with Programs, v. 24, no. 7, p. A105.
- Chesnut, D.R., Jr., Cobb, J.C., and Greb, S.F., 1991, The Indonesian cyclothem--Modern analogue for the Carboniferous: Buenos Aires, Argentina, XII International Congress on Carboniferous and Permian Geology and Stratigraphy, Abstracts XII, p. 21.
- Greb, S.F., 1989, Geology of roof falls in Kentucky coal mines: (abs) Kentucky Academy of Sciences, 75th Annual Meeting, Program with Abstracts, p. 8.
- Greb, S.F., and Chesnut, D.R., Jr., 1989, Diversity of Lower and Middle Pennsylvanian facies along Kentucky Highway 80 in Laurel and Pulaski Counties, eastern Kentucky: (abs) Kentucky Academy of Sciences, 75th Annual Meeting, Program with Abstracts, p. 10.
- Greb, S.F., 1989, Sedimentation patterns in the Caseyville Formation of western Kentucky, Eastern Interior Basin: (abs) Kentucky Academy of Sciences, 75th Annual Meeting, Program with Abstracts, p. 9.
- Greb, S.F., and Chesnut, D.R., Jr., 1989, Sedimentology of sandstones in a coarsening-upward sequence, Eastern Kentucky Coal Field: (abs) Geological Society of America, Abstracts with Programs, v. 21, no. 6, p. A173.
- Greb, S.F., and Chesnut, D.R., Jr., 1989, Sedimentology of Pennsylvanian sandstone from bedding-plane exposures, Laurel Dam Spillway, Eastern Kentucky Coalfield: (abs) Bulletin American Association of Petroleum Geologists, v. 73, no. 8, p. 1031. \*Awarded AAPG-EMD Best Poster Award for the Eastern Section meeting.
- Greb, S.F., Chesnut, D.R., Jr., Davidson, O.B., 1989, Evidence for Lower Pennsylvanian faulting in the Eastern Kentucky Coal Field: (abs) Bulletin American Association of Petroleum Geologists, v. 73, no. 8, p. 1032.
- Greb, S.F., and Chesnut, D.R., Jr., 1989, Bedding-plane exposures in a coarsening-upwards sequence (Pennsylvanian), eastern Kentucky: (abs) Southeastern Section Geological Society of America Abstracts with Programs, v. 21, no. 3, p. 18.
- Greb, S.F., 1989, The sub-Absaroka unconformity and hydrocarbon production in the Eastern Interior Basin: (abs) Kentucky Oil and Gas Association, Abstracts with Programs, p.10
- Greb, S.F., Chesnut, D.R., Jr., and Davidson, O.B., 1988, A fault-bounded debris flow, Lee Formation (Pennsylvanian), Eastern Kentucky Coal Field: (abs) Geological Society of America, Abstracts with Programs 1988, Denver, Colorado, v. 20, no. 7, p. A66.
- Greb, S.F., 1988, Fluvio-lacustrine deposition in the Hazard No. 8 to Hazard No. 8 rider seam interval, Breathitt Formation (Pennsylvanian), eastern Kentucky: (abs) Bulletin American Association of Petroleum Geologists, v. 72, no. 8, p. 963.

- Greb, S.F., and Cobb, J.C., 1988, Geologic models for coal-mine-roof failures in Kentucky: (abs) Bulletin American Association of Petroleum Geologists, v. 72, no. 8, p. 963. \*Awarded AAPG-EMD Best Poster and Vincent E. Nelson Memorial Awards for the Eastern Section meeting.
- Greb, S.F., Chesnut, D.R., Jr., and Davidson, O.B., 1988, Sedimentology of a debris-flow deposit, Lee Formation (Pennsylvanian), eastern Kentucky: (abs) Society of Economic Mineralogists and Paleontologists Midyear Meeting Abstracts, v. 5, p. 21.
- Greb, S.F., 1988, Structural control of the sub-Pennsylvanian Madisonville Paleovalley and its relationship to hydrocarbon production, Caseyville Formation, western Kentucky: (abs) Abstracts of the technical sessions Kentucky Oil and Gas Association, Fifty-second annual meeting, p. 22.
- Greb, S.F., and Cobb, J.C., 1988, Program on Geology of roof falls can improve safety, productivity: (abs) Institute Mining and Minerals Research Highlights, v. 7, no. 3, p. 2.
- Greb, S.F., and Cobb, J.C., 1987, Classification and modeling of roof-control problems in an eastern Kentucky coal mine: (abs) Geological Society of America, Abstracts with Programs 1987, Phoenix, Arizona, v. 19, no. 7, p. 682-683.
- Greb, S.F., 1987, Structural control of the sub-Pennsylvanian paleovalley network in the Eastern Interior Basin (Caseyville Formation), western Kentucky: (abs) Geological Society of America, Abstracts with Programs, Phoenix, Arizona, v. 19, no. 7, p. 682.
- Greb, S.F., 1987, Adverse effects of crevasse-splay deposits in an Appalachian coal mine, eastern Kentucky: (abs) Bulletin American Association of Petroleum Geologists, v. 71, no. 9, p. 105.
- Shepherd, R.G., Jacobs, G.W., Brice, D.A., Greb, S.F., Amig, B.C., and Kemp, R.E., 1984, Genetic identification of disconformities: (abs) Geological Society of America, Abstracts with Programs 1984, Reno, Nevada, p. 653.

### Web pages (@www.uky.edu/KGS/)

- Greb, S.F., and Wang, R., 2000-present, Energy (previously Coal) Division, Geological Society of America web page. Responsible for images and much of the content on this website <http://www.uky.edu/KGS/coal/GSA/>
- Greb, S.F., and Eble, C.F., 1996 to present, Coal information. Responsible for most of the images and much of the content on this part of the KGS website, <http://www.uky.edu/KGS/coal/index.htm>.
- Greb, S.F., and Chesnut, D.R., Jr., 1996-2001; Greb, 2001-present, Geology of Kentucky. Responsible for most of the images and much of the content on this part of the KGS website, <http://www.uky.edu/KGS/geoky/index.htm>.
- Greb, S.F., and Anderson, W.A., 1996-present, Rocks and Minerals of Kentucky. Responsible for most of the images and for project descriptions on coal pages of KGS website, <http://www.uky.edu/KGS/rocksmn/index.htm>.
- Chesnut, D.R., Jr., and Greb, S.F., 1996-2001; Greb, 2001-present, Fossils and prehistoric life of Kentucky. Responsible for most of the images and much of the content on this part of the KGS website, <http://www.uky.edu/KGS/fossils/index.htm>.
- Greb, S.F., 2001-present, Kentucky Earth Science Education Network. Responsible for design, graphics, and most text. <http://www.uky.edu/KGS/education/index.htm>.

### Other Publications

- Allmon, W.D., Picconi, J.A., Greb, S.F., and Smith, C.C., 2016, 1-Geologic history of the southeastern U.S.: Reconstructing the geologic past, *in* Swaby, A.N., Lucas, M.D., and Ross, R.M., eds., The teacher-friendly guide to the earth science of the southeastern U.S., 2<sup>nd</sup> edition, p. 9-39.
- Moye, R.J., Greb, S.F., and Picconi, J.A., 2016, 5-Mineral resources of the southeastern U.S., *in* Swaby, A.N., Lucas, M.D., and Ross, R.M., eds., The teacher-friendly guide to the earth science of the southeastern U.S., 2<sup>nd</sup> edition, p. 191-226.
- Buckler, C. S., Nester, P.L., Greb, S.F., and Moye, R.J., 2016, 6-Energy in the southeastern U.S., *in* Swaby, A.N., Lucas, M.D., and Ross, R.M., eds., The teacher-friendly guide to the earth science of the southeastern U.S., 2<sup>nd</sup> edition, p. 227-270.
- Discovery-Science video, 2007, Faces of Earth. Filmed and interviewed for part of an earth-science documentary in a video segment on the origin of coal.
- Western Kentucky University Kentucky Educational Television, The Kentucky Network, and the Kentucky Coal Marketing and Export Council, 1998, Kentucky Coal—Kentucky’s Power Source. Filmed and interviewed as part of a CD-rom interactive game, in a video segment “Coal the rock that burns” and “Coal—Now and in the future.”
- The Kentucky Network, and the Kentucky Coal Marketing and Export Council, 1996, An electronic field trip to a Kentucky coal mine. I was interviewed and asked questions live on the air about coal mining. The interview is on a published videotape available through KET.
- Greb, S.F., 1992, Sedimentology of a Pennsylvanian sandstone (Lower Breathitt Formation) from bedding-plane exposures, Laurel River Dam Spillway, Whitley County, Kentucky: Lexington, University of Kentucky, Department of Geological Sciences, Ph.D. Dissertation, 364 pp.
- Greb, S.F., and Cobb, J.C., 1987, The geology of roof falls: A training guide (educational slide set): U. S. Dept. of Labor, Mine Safety and Health Administration, Mine Safety and Health Academy, Educational Materials and Training Films, Beckley, W. V., AV28.
- Greb, S.F., 1985, Structural control of Carboniferous sedimentation in the Madisonville and Indian Lake Paleovalleys, western Kentucky: University of Kentucky, Department of Geology, Masters Thesis, 155 p.
- Greb, S.F., Baker, B., Earle, D., 1985, Geology of the Raven Run Nature Sanctuary: Lexington-Fayette County Department of Parks and Recreation, Raven Run Nature Sanctuary, 17 p.
- Shepherd, R.G., and Greb, S.F., 1985, Petroleum geology of Kentucky: a primer: University of Kentucky, Institute Mining and Minerals Research, 375 p.

### **Short Courses and Workshops Taught**

- Greb, S.F., 2017, Berea (Upper Devonian) core workshop; Kentucky chapter of the American Institute of Professional Geologists: Kentucky Geological Survey, core facility, Lexington, Kentucky, 10/6/2017.
- Greb, S.F., and Harris, D.C., 2017, Berea (Upper Devonian) core, eastern Kentucky: Core Workshop, Eastern Section American Association of Petroleum Geologists, 46th Annual Meeting, Morgantown, West Virginia, 9/26/17.
- Greb, S.F., and Harris, D.C., 2017, Berea (Upper Devonian) core, eastern Kentucky: Core Workshop, KGS annual meeting, Lexington, 5/19/2017.
- Greb, S.F., 2016, Berea core workshop: Lexington, KGS core facility, Final Berea Consortium project meeting, 10/26/2016.

- Grebe, S.F., 2015, Pennsylvanian facies in the Illinois Basin, core workshop: Lexington, Kentucky, KGS annual meeting, Lexington.
- Grebe, S.F., 2013, Geology of Kentucky: Kentucky Crushed Stone Association, Teacher Workshop, Georgetown College, KY, 6/15.
- Grebe, S.F., 2012, Geology of the Ohio River Valley: Falls of the Ohio Earth Discovery Day, Teacher workshop, Clarksville, IN, 10/12.
- Grebe, S.F., 2012, Geology of Kentucky: Kentucky Crushed Stone Association Teacher's Workshop, Georgetown College, KY, 6/13.
- Grebe, S.F., 2011, New Madrid earthquakes, and earthquake science, Teacher Workshop, Falls of the Ohio State Park, Clarksville, IN
- Grebe, S.F., 2011, Kentucky geology and limestone: Kentucky Crushed Stone Association, Teacher Workshop, Georgetown College, KY 6/15.
- Grebe, S.F., 2010, Limestone in Kentucky: Kentucky Crushed Stone Association, Teacher Workshop, Georgetown College, KY 6/16.
- Grebe, S.F., 2010, Dinosaurs: Keynote speaker at Falls of the Ohio Fossil Festival, Falls of the Ohio State Park, Clarksville, IN 9/18
- Grebe, S.F., 2009, Earth history and limestone in Kentucky: Kentucky Crushed Stone Association, Teacher Workshop, 6/09.
- Grebe, S.F., 2008, Earth history and limestone in Kentucky: Kentucky Crushed Stone Association, Teacher Workshop, 6/08.
- Grebe, S.F., 2008, Fossils at the Falls of the Ohio: Teacher Workshop, Falls Fossil Festival, Falls of the Ohio State Park, Clarksville, IN, 9/08.
- Grebe, S.F., 2007, Fossils at the Falls of the Ohio: Teacher Workshop, Falls Fossil Festival, Falls of the Ohio State Park, Clarksville, IN, 9/07.
- Grebe, S.F., 2006, Earth history and fossils: Teacher Workshop, Falls Fossil Festival, Falls of the Ohio State Park, Clarksville, IN, 9/06.
- Grebe, S.F., 2005, Dinosaurs: Teacher Workshop, Falls Fossil Festival, Falls of the Ohio State Park, Clarksville, IN, 9/05.
- Grebe, S.F., 2004, KGS website and earth history: Teacher Workshop, Falls Fossil Festival, Falls of the Ohio State Park, Clarksville, IN, 9/05.
- Grebe, S.F., Kruppa, J., and Taylor, D., 2004, Change through time: Tiered Mentoring Program, Fayette County Middle School Teachers, Lexington, KY, 6/04.
- Grebe, S.F., Ruthven, C.L., and Watson, A., 2003, Understanding and using KY geologic maps: Kentucky Science Teachers Association 29<sup>th</sup> Conference and Professional Development Meeting, Lexington, KY, 11/7/03.
- Grebe, S.F., 2003, Kentucky geologic maps and digital data workshop: Teacher Workshop, Falls Fossil Festival, Falls of the Ohio State Park, Clarksville, IN, 9/20/03.
- Grebe, S.F., 2003, Geology and mining issues near Robinson Forest: Part of a Teacher Workshop sponsored by the University of Kentucky, Robinson Forest, KY, 9/12/03.
- Ruthven, C.L., and Grebe, S.F., 2002, K-12 earth history activities at the Earth Science Education Network, Kentucky Geological Survey: National Science Teachers Association Annual Meeting, Louisville, KY, 10/26/02.
- Grebe, S.F., 2002, Prehistoric art-bringing dinosaur and other fossils back to life: Falls Fossil Festival, Falls of the Ohio State Park, Clarksville, IN, 9/21/02.
- Grebe, S.F., 2002, Kentucky Geology workshop: Teacher Workshop, Falls Fossil Festival, Falls of the Ohio State Park, Clarksville, IN, 9/21/02.
- Grebe, S.F., and Ruthven, C.L., 2001, Web-based fossil and earth history activities on the Earth Science Education Network, Kentucky Geological Survey: Kentucky Science Teachers Association meeting, Lexington, KY, 11/2/01.
- Grebe, S.F., 2001, Weathering and erosion: Kentucky Department of Education, Region 8 Teacher's Workshop, Natural Bridge State Resort Park, KY, 10/20/01.
- Grebe, S.F., 2001, Fossils as evidence of ancient life and other earth history core content: Lewis County Teachers Workshop, Lewis County, KY, 5/17/01.
- Grebe, S.F., Andrews, W.A., Chesnut, D.R., Jr., Eble, C.F., Hower, J.C., and Nutall, B., 2000, Coal Assessment Seminar Workshop—Western Kentucky coals: Short course to mining professionals held at the Days Inn, Madisonville, KY, 3/8.
- Nutall, B., Chesnut, D.R., Jr., and Grebe, S.F., 1999, Coal-bed Methane in Kentucky: Petroleum Technology Transfer Council, KGS, and the Kentucky Society of Professional Geologists, University of Kentucky, Lexington, KY.
- Grebe, S.F., 1999, The Earth Science Education Network: Short course for Kentucky Department of Education, District Science Consultants, Lexington, University of Kentucky.
- Grebe, S.F. 1999, Earth Science and the Web: Kentucky Department of Education, Instructional Technology Leaders University, Carrollton, KY, 7/13/99.
- Grebe, S.F., 1999, Earth Science for Appalachian Rural Systemic Initiative Science Partners: University of Kentucky, Appalachian Rural Systemic Initiative short course, Lexington, KY.
- Grebe, S.F., 1999, Adventures in Learning Program—Earth Science: Montgomery County Educational Foundation, 6/28-7/22, 1999. Summer workshop for middle school children.
- Grebe, S.F., 1998, Adventures in Learning Program—Science (ALPS): Montgomery County Educational Foundation, summer, 1998. 1-week summer workshop for middle school children.
- Weisenfluh, G.A., Grebe, S.F., Chesnut, D.R., Jr., Thacker, E., Eble, C.F., and Andrews, W.A., 1998, Coal assessment seminar workshop—Lower Illinois coal bed: Kentucky Geological Survey and University of Kentucky OISTL, Holiday Inn, Prestonsburg, Ky.
- Grebe, S. F., and Howell, P.D., 1997, Earth science in Kentucky: Kentucky Education Technology Conference, Using the Web to teach geology, Louisville, KY, 3/8/97.
- Grebe, S. F., 1996, Geology of Kentucky for Kentucky educators: Kentucky Science Teacher's Association Meeting, Lexington, KY, 11/8/96.
- Grebe, S. F., 1996, Teacher's workshop—Earth history in Kentucky: Falls of the Ohio State Park, Clarksville, IN, 9/28/96.
- Weisenfluh, G. A., Grebe, S. F., and Eble, C. F., 1993, Applied geology for underground coal mining and property evaluation: University of Kentucky OISTL, Jenny Wiley State Park, KY, 6/24-25/93.
- Grebe, S. F., 1993, Coal Science: National Coal Association's Kentucky Coal Issues Workshop, Paintsville, KY, 4/27/93.
- Grebe, S. F., Weisenfluh, G. A., Eble, C. F., and Chesnut, D. R., Jr., 1992, Applied geology for underground coal mining and property evaluation: University of Kentucky OISTL and Elkhorn Coal Co., Jenny Wiley State Park, KY, 4/26-4/28/92.
- Grebe, S. F., 1992, Coal Science: National Coal Association's Kentucky Coal Issues Workshop, Paintsville, KY, 11/4/92.
- Grebe, S. F., 1991, Coal Science: National Coal Association's Teacher's Workshop, Jenny Wiley State Park, KY, 10/24/91.
- Grebe, S. F., 1991, Coal Science: National Coal Association's Teacher's Workshop, Madisonville, KY, 9/26/91.
- Grebe, S. F., 1991, Coal Science: Pike County Coal Association's Teacher's Workshop, Pikeville, KY, 6/28/91.
- Cobb, J. C., and Grebe, S. F., 1990, Applied geology for underground coal mining and property evaluation, University of Kentucky OISTL and Kentucky Geological Survey, Lexington, KY, 5/10/90.
- Cobb, J. C., Weisenfluh, G. A., and Grebe, S. F., 1987, Applied geology for underground coal mining and property evaluation, University of Kentucky, Institute for Mining and Minerals Research, Lexington, KY, 9/21-9/22/87.

### Graduate Committees

Julie Floyd, MS, 2014, chair, Dept. of Earth and Environmental Sciences, University of Kentucky

Trent Garrison, PhD, committee, Dept. of Earth and Environmental Sciences, University of Kentucky  
 Corey Black Eagle, PhD, committee, Dept. of Earth and Environmental Sciences, University of Kentucky  
 Ralph Bandy, MS, 2013, chair, Dept. of Earth and Environmental Sciences, University of Kentucky  
 Forrest Webb, MS, transfer, committee member, Dept. of Earth and Environmental Sciences, University of Kentucky  
 Melissa Bishop, PhD, transfer, committee member, Dept. of Earth and Environmental Sciences, University of Kentucky  
 Devi Udgate, PhD, 2011, committee member, Dept. of Earth and Environmental Sciences, University of Kentucky  
 Allison Richardson, MS, working, committee member, Dept. of Earth and Environmental Sciences, University of Kentucky  
 Marta Clepper, PhD, 2011, committee member, Dept. of Earth and Environmental Sciences, University of Kentucky  
 Bethany Overfield, MS, 2011, committee member, Dept. of Earth and Environmental Sciences, University of Kentucky  
 Ryan Grimm, PhD, 2009, committee member, Dept. of Geosciences, Virginia Tech  
 Lehne Slater, MS, 2009, committee member, Dept. of Earth and Environmental Sciences, University of Kentucky  
 Chris Coughenor, PhD, 2009, committee member, Biology Dept., Drexel University  
 Carrie Kidd, M.S., 2009, committee member, Dept. of Earth and Environmental Sciences, University of Kentucky  
 Brent Wilhelm, MS, 2008, committee member, Dept. of Earth and Environmental Sciences, University of Kentucky  
 Josh Sexton, MS, 2006, co-chair with Allan Fryar, Dept. of Geological Sciences, University of Kentucky  
 Andrew DeJoux, MSc, 2005, external committee member, University of Canterbury, Christchurch, New Zealand  
 Mike Shultz, MS, 2003, committee member, Dept. of Geological Sciences, University of Kentucky  
 Jesse Korus, MS, 2003, external committee member, Department of Geosciences, Virginia Tech  
 Dahlem, Mathew, MS, 2003, committee member, Dept. of Geological Sciences, University of Kentucky  
 Alex Stewart, MS, 2002, committee member, Dept. of Geological Sciences, University of Kentucky

### **K-16 Education Outreach Activities (non-workshop)**

State finals 4-H rock and mineral collection judging chair (1995 to present)  
 KGS open house: Kentucky fossils and earth history exhibits and activities (every year during earth science week)  
 KGS education committee chair (1995? to present). Coordinate KGS outreach to schools (school visits to KGS, staff visits to schools, loans of materials to schools, science fair judging, etc.)  
 Co-chair Earth and Space Science, 2002, Intel International Science Fair, Louisville, KY.  
 Keynote speaker at AETS annual meeting, 2000, Cumberland Falls, Kentucky, “Misconceptions in earth-science education—Sometimes its all in the wording.”  
 Science consultant to the Kentucky Department of Education, Kentucky Virtual High School, for development of a virtual high school earth and space science curriculum for the State of Kentucky (2001).  
 Science consultant to the Kentucky Department of Education, Core Content Committee (summer, 1999).  
 Member of Committee on Earth Science Educational Outreach, Eastern Section of American Association of Petroleum Geologists, 1998 to the present, American Association of Petroleum Geologists.  
 Science consultant to the Kentucky State Historical Museum, 1998, Frankfort, Kentucky. Helped plan and provided materials for a geology display of Kentucky rocks and minerals based on reports of a turn-of-the century display. In 1992, helped plan and provided art work for displays of Kentucky fossils.  
 Kentucky’s Earth Science Education Representative to the Southeastern Section of the Geological Society of America, 1996-present, Geological Society of America.  
 Designer and chairman of the Earth Science Education Network, 1996-present, Kentucky Geological Survey, University of Kentucky.  
 Chairman of Educational Outreach Committee of the Kentucky Geological Survey, 1993-present.  
 Science consultant and Volunteer, Lexington Children’s Museum, Lexington, KY, 1993-2000.  
 Science Advisory Committee Member, 1991-1995, Living Arts and Science Center, Lexington, KY.

### **Some Artistic Achievements**

Fielding C.F., Frank, T.D., and Isbell, J. L., ed., 2008, Geological Society of America Special Publication 441, Cover art.  
 Pashin, J.C., and Gastaldo, R.A., 2004, AAPG Studies, no. 51, Cover art.  
 Petersen M.S., and Rigby, J. K., 1998, *Interpreting Earth History—A manual in historical geology*, 5th edition: Dubuque, Iowa, W. C. Brown. 6<sup>th</sup> ed., Cover art and numerous illustrations.  
 Geotimes, 1994, cover art, v. 39, no.3.  
 Rocks and Minerals, 1994, cover art, vol. 69, no. 3.  
 Petersen M.S., and Rigby, J. K., 1993, *Interpreting Earth History—A manual in historical geology*, 5th edition: Dubuque, Iowa, W. C. Brown. Cover art and numerous illustrations.  
 Rocks and Minerals, 1992, Dinosaur art and artists, vol. 67, no. 2. Interviewed as a featured artist, cover art.  
Silver Ossy Award (publishing award), 1991, to Odyssey Magazine at University of Kentucky for cover art by Greb, S.F., *Progression of Life* Poster.  
 Chesnut, D. R., Jr., and Etensohn, F. R., Jr., 1990, Homburgian (Chesterian) echinoderm paleontology and paleoecology, Kentucky: *Bulletins of American Paleontology*, v. 95, no. 330, 12 scientific illustrations.  
 Peterson, M. S., and Rigby, J. K., 1990, *Interpreting Earth History—A manual in historical geology*: Dubuque, Iowa, W. C. Brown Publishers. Cover art (different cover than 1993, 5th edition cover).  
 Earth Science Magazine, 1988, *The progression of life*, v. 41, no. 3, cover art.  
American Scholastic Press Association Outstanding Cartoon Award, 1984, for editorial cartoons, Kentucky Kernel, University of Kentucky, Lexington, Ky.