

CURRICULUM VITAE

Name: Robert Angelo Gastaldo

College Status: Whipple-Coddington Professor of Geology

Home Address: 100 South Reynolds Road, Winslow, ME 04901

College Address: Department of Geology, Colby College, 5807 Mayflower Hill, Waterville, ME 04901-8858

Birth date: December 31, 1950

Marital Status: Married

Spouse's Name: Elvira Harman Gastaldo

DEGREES RECEIVED

B.A. Gettysburg College, Gettysburg, Pennsylvania 17325, 5/72

M.S. Southern Illinois University, Carbondale, Illinois 62901, 5/75

Ph.D. Southern Illinois University, Carbondale, Illinois 62901, 8/78

HONORS AND AWARDS

Gilbert H. Cady Award, Energy Division, Geological Society of America, 2016

Fulbright Fellowship, Rhodes University, Grahamstown, South Africa 2013

Short-term Visiting Scientist, Alexander von Humboldt Stiftung, Bonn, Germany 2012

GSA Committee on Research Grants as Member-at-Large 2011-2014

Paleontological Society Centennial Fellow 2008-present

Distinguished Service Award, Society for Sedimentary Geology (SEPM) 2008

PALAIOS Best Paper of 2004 – Honorable Mention

Councilor-at-Large, Paleontological Society, 2002-2004

Invited Participant – Paleontological Society Short Course 1999

Invited Participant – Penrose Conference 1998

College of Science & Mathematics Research Award, Auburn University (Physical Sciences) 1997-1998

Smithsonian Institution Short-Term Visitor 1997

NSF EAR Geology & Paleontology Panel Member 1997-2002

Member, SEPM Council 1996-2002

Distinguished Lecturer, GSA Coal Geology Division 1996-1998

Best Paper, Coal Geology Division, GSA National Meetings 1995

Fellow, Geological Society of America 1994-present

Distinguished Lecturer, Paleontological Society 1994-1995; 1995-1996

Adjunct Professor of Geology, University of Pennsylvania, Department of Geology 1992-present

Senior U.S. Research Award, Forschungspreisträger, Alexander von Humboldt-Stiftung, Bonn 1991-1992.

Chairman, Coal Division, Geological Society of America 1991-1992; Chairman-elect 1990-1991

Alumni Professorship, Auburn University 1990-1991; 1992-1996

Visiting Curator, Department of Geology, Field Museum of Natural History, Chicago 1986-1987 (NSF BSR 8702337 curatorial grant)

Research Collaborator, Department of Paleobiology, Smithsonian Institution (renewed 1998-2002)

President, Southeastern Section Paleontological Society 1986-87; President-elect 1985-86

Fulbright Fellowship, Netherlands American Commission for Educational Exchange, Laboratory of Paleobotany and Palynology, Utrecht, The Netherlands 1982

International Lecturer: United States - United Kingdom Educational Commission, London 15 May - 24 May 82;

Franco-American Commission for Educational Exchange, Paris 1 June - 5 June 82

Graduate Faculty Status, Auburn University, AL 1982

Department of Geology, Best Teacher 1981-1982; 1985-1986

Phi Kappa Phi, National Honor Society

Member Sigma Xi, The Scientific Research Society of North America

EDITORIAL BOARDS

International Journal of Palaeontology and Stratigraphy – Editorial Board, 2008-present
Senckenbergiana Lethaea, Senckenberg Museum, Frankfurt – Editorial Board 2006-2008
Journal of Taphonomy, Prometheus Press – Editorial Board 2002-present
PALAIOS, Society of Sedimentary Geology – Co-editor 1996-2002
PALAIOS, Society of Sedimentary Geology – Associate Editor 1989-1996; 2002-2009
Review of Palaeobotany and Palynology, Elsevier – 1993-2007
Bulletin of the Geological Society of America – 1993-1996

PROFESSIONAL SOCIETY MEMBERSHIPS

Palaeontological Association	The Paleontological Society
Geological Society of America	Botanical Society of America (Paleobotanical Section)
Society of Economic Paleontologists & Mineralogists	International Organization of Palaeobotany
American Association of Stratigraphic Palynologists	Schlotheimia
Alabama Geological Society	International Peat Society

POSITIONS HELD

Member-at-Large, Geological Society of America Committee on Research Grants, 2011-2014
Councilor-at-Large, Paleontological Society, 2002-2004
Whipple-Coddington Professor of Geology, Colby College, ME 9/99-present
Alumni Professor of Geology, Auburn University, AL 9/90-8/91; 9/92-8/96
Senior U.S. Research Scientist, Alexander von Humboldt-Stiftung 8/91-9/92 Institut und Museum für Geologie und Paläontologie, Der-Georg-August Universität, Göttingen, Germany.
Professor of Geology, Auburn University, AL 9/88-6/99
Associate Professor of Geology, Auburn University, AL 9/83-9/88
Assistant Professor of Geology, Auburn University, AL 9/78-9/83
Fulbright Research Scholar, Netherlands-America Commission for Educational Exchange 3/82-8/82 Laboratory of Palaeobotany and Palynology, Utrecht
Geologist, Kansas Geological Survey, Lawrence, KS 8/89.

GRANT & CONTRACT SUPPORT

2018 Glasspool, I., and Gastaldo, R.A., RUI: The Timing and Evolution of Devonian Fire Systems and Their Implications for Atmospheric Oxygen Concentration: NSF EAR 1828359, \$231,571.
2017 Yang, W., Crowley, J.L., Tabor, N.J., Geissman, J.W., Gastaldo, R.A., Angielczyk, K.D., Roopnarine, P.D., and Sidor, C.A., Collaborative Research: Terrestrial Late Permian to Early Triassic Earth Systems in NE Pangea: Insights into the Tempo, Effects, and Causes of the End-Permian Mass Extinction: NSF IES 1714759 – \$249,533 (\$2,095,544 total request)
2016 Gastaldo, R.A., ABR/RUI Is the Terrestrial Permian-Triassic Boundary in the Karoo Basin? Implications for the Response of the Terrestrial Ecosystems to the End-Permian Extinction Event, NSF EAR 1624302 – \$190345
2011 Gastaldo, R.A., Terrestrial Age Constraints for the *Dicynodon* Assemblage Zone, South Africa: Implications for the Timing of the End-Permian Mass Extinction: NSF EAR 1123570 – \$125000.
2009 Gastaldo, R.A., Taphonomic Character of Plant Fossil Assemblages at the Permian-Triassic Boundary, Karoo Basin, South Africa – Chronometric Controls on the Permian/Triassic Boundary, Karoo Basin, South Africa, NSF EAR 0934077– \$14646
2007 Gastaldo, R.A., Chronometric constraint on the Permian-Triassic Boundary, Wapadsberg Pass, South Africa: Supplement to NSF EAR 0749895 – \$11000.
2004 DiMichele, W.A., Pfefferkorn, H.W., and Gastaldo, R.A., Terrestrial ecosystem reorganization during global deglaciation in a cold-Earth : warm-Earth transition: NMNH Mary Walcott Fund – \$20,000.
2004 Gastaldo, R.A., RUI: Taphonomic Character of Plant Fossil Assemblages at the Permian-Triassic Boundary, Karoo Basin, South Africa: National Science Foundation, Earth Science. NSF EAR0417317 – \$67926.

- 2004 Gastaldo, R.A., CUES (Constructing Understanding of Earth Systems) Biosphere Module, American Geological Institute, Middle School Curriculum Project – \$4,500
- 2003 Gastaldo, R.A., CUES (Constructing Understanding of Earth Systems) Biosphere Module, American Geological Institute, Middle School Curriculum Project – \$1,500
- 2002 Pfefferkorn, H.W., and Gastaldo, R.A., Collaborative Research: Tropical Vegetation during the Early Part of an Ice Age: An intercontinental comparison of Mid-Carboniferous floras in their Geochronologic setting. NSF EAR 0207359 – \$74,812
- 2001 King, D.W., Gastaldo, R.A., and Shosa, J.D., Integrated Sampling and Analysis Platform for the Investigation of Lake Geochemistry Over a Range of Temporal and Spatial Scales. NSF MRI 0115900 – \$99,760.
- 2000 Gastaldo, R.A., and Nelson, R.E., RUI: Analysis of an Early-Middle Devonian Ecosystem: Trout Valley Formation, Maine. National Science Foundation, Geology & Paleontology. NSF EAR 0087433 – \$105,000.
- 1998 Gastaldo, R.A. and Pross, J., Organic Matter Characterization and Distribution in a Holocene Incised Valley Fill Sequence. Max Kade Foundation Exchange Visitor Research Program – \$33,500.
- 1998 Gastaldo, R.A. Palynofacies characterization of a Holocene Incised Valley Fill: Mobile Bay, Alabama. ACS- PRF 33429-AC8 – \$60,000.
- 1998 Gastaldo, R.A. EARTHCOMM Unit VI - Earth System Evolution. American Geological Institute Curriculum Development Project – \$8,000.
- 1997 Gastaldo, R.A. Systematics of Carboniferous Tree-Fern foliage. Smithsonian Institution Short-Term Visitor Program – \$1,850.
- 1996 Gastaldo, R.A. EarthWorks! Paleontology: Life in the Past. American Geological Institute Curriculum Development Project – \$15,000.
- 1996 Gastaldo, R.A. Request for a Modified Fisher 1650 Mv Aluminum Boat with 40hp Mercury Outboard for Water Column and Vibracore Sampling. NSF-EAR 9625992 Equipment and Instrumentation – \$7,750.
- 1996 Gastaldo, R.A. Plant Taphonomic Character of Intermontane Carboniferous Floras in the Czech Republic. NSF-INT 9513189 NSF-International Programs Eastern Europe – \$23,563.
- 1991 Staub, J.R. and Gastaldo, R.A. COLLABORATIVE RESEARCH: A test of macrofloral and microfloral biofacies in a peat-accumulating delta, Sarawak, Malaysia. NSF-EAR 9111842 – \$209,135. (1992-1995)
- 1990 Gastaldo, R.A. Plant taphonomy & paleoecology of Eocene lignite-bearing strata in the Subhercynian basin, north Germany. Alexander von Humboldt-Stiftung Senior U.S. Research Scientist Award. (approx. \$85,000; 1991-1992)
- 1990 Ferguson, D.K. and R.A. Gastaldo. Evaluation of plant-bearing sediments as an accurate reflection of source vegetation. NATO Collaborative Research Grant – 204,00BF (\$6700.; 1991-1995).
- 1990 Gastaldo, R.A. Age assignment of the Erin Slate, Talladega Slate Belt, Clay County. National Science Foundation, Stratigraphy & Paleontology, Earth Sciences Section. NSF EAR 9019286 – \$32,209 (1990-1993).
- 1988 Gastaldo, R.A. Phytotaphonomy of Kerogen III precursors, Mahakam Delta, Kalimantan, Indonesia. ACS-Petroleum Research Fund, ACS-PRF 20829-AC8 Grant – \$26,850 (1988-1990).
- 1988 Gastaldo, R.A. Phytotaphonomy of hydrocarbon precursors, Mahakam Delta, Kalimantan. National Science Foundation, Stratigraphy & Paleontology, Earth Sciences Section – NSF EAR 8803609 \$60,516. (1988-1991)
- 1988 Savrda, C.E., R.A. Gastaldo, and D.T. King, Jr. Acquisition of a carbon determinator system for analysis of sedimentary organic carbon and carbonate. National Science Foundation, Instrumentation Equipment Grant, Earth Sciences Section. NSF EAR 8720560 – \$11,450.
- 1987 Gastaldo, R.A. ACS-PRF Summer Research Faculty Fellowship. American Chemical Society – \$4500.00
- 1987 Gastaldo, R.A. Palaeoclimates of Peat Accumulating Geographies. BHP-Utah International, Inc. – \$13,750.
- 1986 Gastaldo, R.A. Megafloral Paleontology and Paleoecology of Early Pennsylvanian Deltaic Systems in the Black Warrior Basin. National Science Foundation. NSF EAR 8618815 – \$85,000 (1986-1988)
- 1986 Gastaldo, R.A. Taphonomy of Plant Accumulating Crevasse Splay Sediments, Chacaloochee Bay, Mobile Delta, Alabama. Petroleum Research Fund, American Chemical Society, Type B – \$20,000. (1986-1988)
- 1985 Gastaldo, R.A. Land Plants - A Short Course. Petroleum Research Fund, American Chemical Society, on behalf of The Paleontological Society, Geological Society of America. Type SE – \$1700.
- 1984 Gastaldo, R.A. Phytotaphocoenoses and paleoecology of Early Pennsylvanian Barrier island/lagoonal complexes in the Warrior coal field, Alabama. NSF EAR 8407833 – \$38,100.
- 1981 Gastaldo, R.A. A Biostratigraphic Correlation Between the Brookwood Coal Group, Black Warrior Coal Basin (Pottsville Formation), Alabama and the Upper Namurian/Lower Westphalian of Northern Europe. Netherlands American Commission for Educational Exchange. – \$10,000. (1982)

- 1979 Gastaldo, R.A. Floral Biostratigraphy of the Brookwood Coal Group (Pottsville) in the Warrior Basin, Alabama. The Petroleum Research Fund, American Chemical Society, Washington, D.C. – \$10,000 (1980-1981); 1981 Project SEED \$500.00; 1983 Page charges \$1400.
- 1979 Gastaldo, R.A. Morphological Variation and Species Delimitation in Upper Carboniferous Equisetalean Strobili. American Philosophical Grant-in-Aid of Research #1488 Johnson Fund – \$1500.

GRANTS PENDING

None

Gastaldo, R.A., Neveling, J., Geissman, J.W., and Kamo, S.L., A Tale of Two Tweefonteins: What Physical Correlation, Magnetostratigraphy, and Geochronology Say about the End-Permian Terrestrial Extinction Paradigm: GSA Bulletin

Jia, R., Gastaldo, R.A., Gibling, M., and Neveling, J., Drones, Architectural Elements, and Fluvial Channel Modeling of the Katberg Formation, South Africa: Journal of Sedimentary Research

MANUSCRIPTS SUBMITTED (IN PRESS - accepted for publication; **bold** indicates undergraduate co-author; *bold italic* indicates M.Sc. student co-authors)

Gastaldo, R.A., **Kus, K.**, Tabor, N., and Neveling, J., (In Press) Calcic Vertisols in the upper *Daptocephalus* Assemblage Zone, Balfour Formation, Karoo Basin, South Africa: Implications for Late Permian Climate: Journal of Sedimentary Research, JSR 019-182.

MANUSCRIPTS IN REVISION

Cantor, B.M., Gastaldo, R.A., and O'Brien, L., Historical Records of Stomatal Indices in *Quercus* from the Southeastern U.S. and Their Implications for Reconstructing Atmospheric Carbon Dioxide in Deep Time: Acta Paleobotanica

Pedentchouk, N., Gastaldo, R.A., and Staub, J.R. Dispersed Organic Matter of Holocene Deposits in the Rajang River Delta, Sarawak, Malaysia. I. Palynofacies Variation Within Siliciclastic Sediments and II. Spatial Variation of Palynofacies Assemblages Within Organic-Poor Siliciclastic Sediments. Sedimentary Geology.

PUBLICATIONS (**bold** indicates undergraduate co-author; *bold italic* indicates graduate student co-author)

2020 Gastaldo, R.A., Kamo, S.L., Neveling, J., Geissman, J.W., Looy, C.V., and Martini, A.M., The *Lystrosaurus* Assemblage Zone, Karoo Basin, predates the end-Permian marine extinction: Nature Communications, doi: <https://doi.org/10.1038/s41467-020-15243-7>

2020 Martinetto, E. Tschopp, E., and Gastaldo, R.A., eds., *Nature Through Time*: Springer Verlag. ISBN 978-3-030-35057-4.

2020 Gastaldo, R.A., Bamford, M., Calder, J., DiMichele, W.A., Ianuzzi, R., Jasper, A., Kerp, H., McLoughlin, S., Opluštil, S., Pfefferkorn, H.W., Roessler, R., and Wang, J., UNIT 12: The Icehouse–Hothouse of the Late Paleozoic Ice Age, coal-forming environments, and their non-analog vegetation: *in* Martinetto, E. Tschopp, E., and Gastaldo, R.A., eds., *Nature Through Time*: Springer Verlag. ISBN 978-3-030-35057-4.

2020 Gastaldo, R.A., Bamford, M., Calder, J., DiMichele, W.A., Ianuzzi, R., Jasper, A., Kerp, H., McLoughlin, S., Opluštil, S., Pfefferkorn, H.W., Roessler, R., and Wang, J., UNIT 13: The Coal Farms of the Late Paleozoic: *in* Martinetto, E. Tschopp, E., and Gastaldo, R.A., eds., *Nature Through Time*: Springer Verlag. ISBN 978-3-030-35057-4.

2020 Gastaldo, R.A., and Neveling, J., Discussion of “Permian—Triassic vertebrate footprints from South Africa: Ichnotaxonomy, producers and biostratigraphy through two major faunal crises” by Marchetti, L., Klein, H., Buchwitz, M., Ronchi, A., Smith, R.M.H., DeKlerk, W.J., Sciscio, L., and Groenewald, G.H. (2019): Gondwana Research, v. 78, p. 375–378. <https://doi.org/10.1016/j.gr.2019.08.003>

2019 Gastaldo, R.A., Neveling, J., Geissman, J.W., and Looy, C.V., Testing the *Daptocephalus* and *Lystrosaurus* Assemblage Zones in a Lithostratigraphic, Magnetostratigraphic, and Palynological Framework in the Free State, South Africa: PALAIOS, v. 34, p. 542-561. DOI: <http://dx.doi.org/10.2110/palo.2019.019>

- 2019 Gastaldo, R.A., News & Views: Plants escaped an ancient mass extinction: *Nature Communications* v. 567, n 7746, p. 38-39.
- 2019 Gastaldo, R.A., Neveling, J., Geissman, J.W., and **Li, J.**, A Multidisciplinary Approach to Review the Vertical and Lateral Facies Relationships of the Purported Vertebrate-defined Stratigraphic Interval at Bethulie, Karoo Basin, South Africa: *Earth Science Reviews*, v. 189, p. 220-243. doi: 10.1016/j.earscirev.2017.08.002
- 2018 Gastaldo, R.A., Neveling, J., Geissman, J.W., and Kamo, S.L., A Lithostratigraphic and Magnetostratigraphic Framework in a Geochronologic Context for a Purported Permian–Triassic Boundary Section at Old (West) Lootsberg Pass, Karoo Basin, South Africa: *Geological Society of America Bulletin*, v. 130, p. 1411-1438.
- 2017 Pfefferkorn, H.W., Gastaldo, R.A., and DiMichele, W.A., Impact of an icehouse climate interval on tropical vegetation and plant evolution: *Stratigraphy*, v. 14, p. 365-376.
- 2017 **Li, J.**, Gastaldo, R.A., Neveling, J., and Geissman, J.W., Siltstones Across the *Daptocephalus* (*Dicynodon*) and *Lystrosaurus* Assemblage Zones, Karoo Basin, South Africa, Show No Evidence for Aridification: *Journal of Sedimentary Research*, v. 87, p. 653-671. DOI: <http://dx.doi.org/10.2110/jsr.2017.35>
- 2017 Gastaldo, R.A., Neveling, J., Looy, C., Bamford, M., Kamo, S.L., and Geissman, J.W., Paleontology of the Blaauwater Farm, South Africa: Testing the *Daptocephalus*/*Lystrosaurus* Biozone Boundary in a Stratigraphic Framework: *PALAIOS*, v. 34, p. 349-366. DOI: <http://dx.doi.org/10.2110/palo.2016.106>
- 2016 Neveling, J., Gastaldo, R.A., Kamo, S.L., Geissman, J.W., Looy, C., and Bamford, M.K., A review of stratigraphic, geochemical, and paleontologic correlation data of the terrestrial end-Permian record in South Africa: in de Wit, M., and Linol, B., eds., *The Origin and Evolution of the Cape Mountains and Karoo Basin*: Springer Publishing, Chapter 15, p. 151-157. DOI 10.1007/978-63-319-40859-1_15
- 2016 Neveling, J., Gastaldo, R.A., and Geissman, J.W., Permo–Triassic boundary in the Karoo Basin: Field trip guide Pre-3: Council for Geoscience, Pretoria, South Africa, 81 p. DOI: 10.13140/RG.2.2.22414.15683
- 2016 Gastaldo, R.A., and Neveling, J., Comment on “Anatomy of a mass extinction: Sedimentological and taphonomic evidence for drought-induced die-offs at the Permo-Triassic boundary in the main Karoo Basin, South Africa” by R.M.H. Smith and J. Botha-Brink, *Palaeogeography, Palaeoclimatology, Palaeoecology*, 447:88-91 : doi 10.1016 /j.palaeo.2014.06.027
- 2016 Gastaldo, R.A., New Paleontological Insights into the Emsian–Eifelian Trout Valley Formation, Baxter State Park's Scientific Forest Management Area, Aroostock County, Maine: *PALAIOS*, v. v. 31, p. 339-346. DOI: <http://dx.doi.org/10.2110/palo.2016.035>
- 2015 Gastaldo, R.A., Kamo, S.L., Neveling, J., Geissman, J., Bamford, M., and Looy, C., Is the vertebrate-defined Permian–Triassic Boundary in the Karoo Basin, South Africa, the terrestrial expression of the End Permian marine event?: *GEOLOGY*, v. 43, p. 939-942.
- 2014 Gastaldo, R.A., **Knight, C.**, Neveling, J., and Tabor, N., Late Permian Paleosols from Wapadsberg Pass, South Africa: Implications for Changhsingian Climate: *Geological Society of America Bulletin*, v. 126, p. 665-679: doi: 10.1130/B30887.1
- 2013 Kennedy, K.R., Gibling, M.R., Eble, C.E., Gastaldo, R.A., Gensel, P.G., Werner-Zwanziger, U., and Wilson, R.A., Early Devonian Coaly Shales of Northern New Brunswick, Canada: Plant Accumulations in the Early Stages of Terrestrial Colonization: *Journal of Sedimentary Research*, v. 83, p. 1202-1215.
- 2013 Gastaldo, R.A., **Pludow, B.A.**, and Neveling, J., Mud Aggregates from the Katberg Formation, South Africa: Additional Evidence for Early Triassic Degradational Landscapes: *Journal of Sedimentary Research*, v. 83, p. 531-540.
- 2012 Gastaldo, R.A., Taphonomic Controls on the Distribution of Palynomorphs in Tidally-influenced Coastal Deltaic Settings: *PALAIOS*, v. 27, p. 798-810.
- 2012 Gastaldo, R.A., and Neveling, J., REPLY: The terrestrial Permian-Triassic boundary event bed is a non-event: *GEOLOGY*, v. 40, p. e257, doi:10.1130/G32975Y.1.
- 2011 Falcon-lang, H.J., Heckel, P.H., Dimichele, W.A., Blake, B.M., Jr., Easterday, C.R., Eble, C.F., Elrick, S., Gastaldo, R.A., Greb, S.F., Martino, R.L., Nelson, W.J., Pfefferkorn, H.W., Phillips, T.L., and Rosscoc, S.J., REPLY: No Major Stratigraphic Gap Exists near the Middle–upper Pennsylvanian (Desmoinesian–missourian) Boundary in North America: *PALAIOS*, v. 26, p. 671.
- 2011 Kosnik, M.A., Alroy, J., Behrensmeyer, A.K., Fursich, F.T., Gastaldo, R.A., Kidwell, S.M., Kowalewski, M., Plotnick, R.E., Rogers, R.R., and Wagner, P.J., Changes in the shell durability of common marine taxa through the Phanerozoic: Evidence for biological rather than taphonomic drivers: *Paleobiology*, v. 37, p. 303-331.
- 2011 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 Rosscoc, S.J., No major

- stratigraphic gap exists near the Desmoinesian-Missourian Stage boundary in North America: *PALAIOS*, v. 26, p. 125-139.
- 2010 Gastaldo, R.A., and Demko, T.M., Long term hydrology controls the plant fossil record: *in* Allison, P.A., and Bottjer, D.J., eds., *Taphonomy, Second Edition: Processes and Bias Through Time: Topics in Geobiology*, v. 32, p. 249-286. (doi 10.1007/978-90-481-8643-3_7)
- 2010 Prevec, R., Gastaldo, R.A., Neveling, J., **Reid, S.B.**, and Looy, C.V., An Autochthonous Glossoperid flora with Latest Permian palynomorphs from the *Dicynodon* Assemblage Zone of the southern Karoo Basin, South Africa: *Palaeogeography, Palaeoclimatology, Palaeoecology*, v., 292, p. 381-408. (doi: 10.1016/j.palaeo.2010.052)
- 2010 Gastaldo, R.A., Peat or No Peat: Why do the Rajang and Mahakam Deltas Differ?: *International Journal of Coal Geology*, v. 83, p. 162-172. (doi: 10.1016/j.coal.2010.01.005)
- 2010 **Daly, R.G.**, and Gastaldo, R.A., The Effect of Orientation to Growing-season Sunlight on Stomatal Parameters of *Quercus rubra* Around the Belgrade Lakes, Central Maine: *PALAIOS*, v. 25, p. 339-346.
- 2009 Prevec, R., Labandeira, C.C., Neveling, J., Gastaldo, R.A., Bamford, M.K., and Looy, C.V., Portrait of a Gondwanan Ecosystem: A New Late Permian Locality from Kwazulu-Natal, South Africa: *Review of Palaeobotany & Palynology*, v. 156, p. 454-493.
- 2009 Pashin, J.C., and Gastaldo, R.A., Carboniferous of the Black Warrior Basin, *in* Greb, S.F., and Chestnut, D.R., Jr., eds., *Carboniferous Geology and Biostratigraphy of the Appalachian and Black Warrior Basins: Kentucky Geological Survey Special Publication 10, Series 12*, p. 10-21.
- 2009 Gastaldo, R.A., Purkynová, E., and Šimůnek, Z., Megafloral Perturbation Across the Enna Marine Zone in the Upper Silesian Basin Attests to Late Mississippian Deglaciation and Climate Change: *PALAIOS*, v. 24, p. 350-366.
- 2009 Gastaldo, R.A., Purkyňová, E., Šimůnek, Z., and Schmitz, M.D., Ecological Persistence in the Late Mississippian (Serpukhovian - Namurian A) Megafloral Record of the Upper Silesian Basin, Czech Republic: *PALAIOS*, v. 24, p. 336-350.
- 2009 **Pace, D.W.**, Gastaldo, R.A., and Neveling, J., Aggradational and Degradational Landscapes in the Early Triassic of the Karoo Basin and Evidence for Climatic Oscillation Following the P/Tr Event: *Journal of Sedimentary Research*, v. 79, p. 276-291.
- 2009 Gastaldo, R.A., Neveling, J., **Clark, C.K.**, and **Newbury, S.S.**, The terrestrial Permian-Triassic boundary event bed is a non-event: *GEOLOGY*, v. 37, n. 3, p. 199-202.
- 2008 Pfefferkorn, H.W., Gastaldo, R.A., DiMichele, W.A., and Phillips, T.L., Pennsylvanian tropical floras from the United States as a record of changing climate: *in* Fielding, C.R., Frank, T.D., and Isbell, J.L., Eds., *Resolving the Late Paleozoic Gondwanan Ice Age in Time and Space: GSA Special Paper 441*, p. 305-316.
- 2008 DiMichele, W.A., and Gastaldo, R.A., Plant Paleoecology in Deep Time: *Annals of the Missouri Botanical Gardens*, v. 95, p. 144-198.
- 2008 Gastaldo, R.A., and **Rolerson, M.W.**, *Katbergia* gen. nov., a New Trace Fossil from Upper Permian and Lower Triassic Rocks of the Karoo Basin: Implications for Paleoenvironmental Conditions at the P/Tr Extinction Event: *Palaeontology*, v. 51, p. 215-229.
- 2007 Gastaldo, R.A. *TAPHONOMY: in* Parker, S.P., ed., *McGraw Hill Encyclopedia of Science and Technology*. 10th Edition (updated and revised; online at <http://www.accessscience.com/emailedContent.aspx?emailID=vzha15BA76DC26Ccfclz101FBD2E0ajk44>)
- 2007 Gastaldo, R.A., and *Degges, C.W.*, Sedimentology and Paleontology of a Carboniferous Log Jam: *International Journal of Coal Geology*, v. 69, p. 103-118.
- 2006 Greb, S.F., DiMichele, W.D., and Gastaldo, R.A., Evolution of Wetland Types and the Importance of Wetlands in Earth History: *in* DiMichele, W.A., and Greb, S., eds., *Wetlands Through Time: Geological Society of America, Special Paper 399*, p. 1-40.
- 2006 **Allen, J.P.**, and Gastaldo, R.A., Sedimentology and taphonomy of the Early to Middle Devonian plant-bearing beds of the Trout Valley Formation, Maine: *in* DiMichele, W.A., and Greb, S., eds., *Wetlands Through Time: Geological Society of America, Special Paper 399*, p. 57-78.
- 2006 Gastaldo, R.A., Gibson, M.A., and *Blanton-Hooks, A.*, A Late Mississippian Back-Barrier Marsh Ecosystem in the Black Warrior and Appalachian Basins: *in* DiMichele, W.A., and Greb, S., eds., *Wetlands Through Time: Geological Society of America, Special Paper 399*, p. 139-154.
- 2005 Paleobiology Database Taphonomy Working Group: Behrensmeier, A.K., Fürsich, F.T., Gastaldo, R.A. Kidwell, S.M., Kosnik, M.A. Kowalewski, M., Plotnick, R.E., Rogers, R.R., and Alroy, J., Are the most durable shelly taxa also the most common in the marine fossil record?: *Paleobiology*, v. 31, p. 607-623.

- 2005 Gastaldo, R.A., Adendorff, R., Bamford, M.K., Labandeira, Neveling, J., and Sims, H.J., Taphonomic Trends of Macrofloral Assemblages Across the Permian-Triassic Boundary, Karoo Basin, South Africa: PALAIOS, v. 20, p. 478-497. (Special Taphonomy Issue; Gee, C.T., Gastaldo, R.A., and Ferguson, D.K., eds.)
- 2005 Gee, C.T., and Gastaldo, R.A., Sticks & Mud, Fruits & Nuts, Leaves & Climate: Plant Taphonomy Comes of Age: PALAIOS, v. 20, p. 415-418.
- 2005 **Selover, R.W.**, and Gastaldo, R.A., A Reinterpretation of the Wagendrift Quarry, Estcourt, Kwazulu Natal Province, and its Implications for Karoo Basin Paleogeography: Journal of South African Geology, v. 108 (3), p. 429-438.
- 2005 DiMichele, W.D., Gastaldo, R.A., and Pfefferkorn, H.W., Biodiversity partitioning in the Late Carboniferous and Early Permian and its implications for ecosystem assembly: Proceedings of the California Academy of Sciences, v. 56, suppl. 1, no. 4, p. 32-49.
- 2005 **Selover, R.W.**, Gastaldo, R.A., and Nelson, R.E., An Estuarine Assemblage from the Middle Devonian Trout Valley Formation of Northern Maine: PALAIOS, v. 20, p. 192-197.
- 2004 Gastaldo, R.A., The relationship between bedform and log orientation in a Paleogene fluvial channel, Weißelster basin, Germany: Implications for the use of coarse woody debris for paleocurrent analysis: PALAIOS, v. 19, p. 959-606.
- 2004 Gastaldo, R.A., *Stevanović-Walls, I., Ware, W.N.*, and Greb, S.F., Community Heterogeneity of Early Pennsylvanian Peat Mires: GEOLOGY, v. 32, no. 8, p. 693-696.
- 2004 Gastaldo, R.A., *Stevanović-Walls, I.*, and *Ware, W.N.*, *In Situ*, Erect Forests Are Evidence for Large-Magnitude, Coseismic Base-Level Changes within Pennsylvanian Cyclothems of the Black Warrior Basin, USA: *in* Pashin, J.C., and Gastaldo, R.A., eds., Sequence Stratigraphy, Paleoclimate, and Tectonics of Coal-bearing Strata: AAPG Studies in Geology, v. 51, p. 219-238.
- 2004 Pashin, J.C., and Gastaldo, R.A., eds., Sequence Stratigraphy, Paleoclimate, and Tectonics of Coal-bearing Strata: American Association of Petroleum Geologists, Studies in Geology, v. 51, 248 p.
- 2004 **Tackaberry, W.J.**, Rueger, B.F., and Gastaldo, R.A., Spittal Pond, Bermuda: Implications for Holocene Sea Level Change: *in* Lewis, R.D., and Panusak, B., eds., 11th Symposium on the Geology of the Bahamas and Other Carbonate Regions 2002, Grace Research Center, San Salvador, Bahamas, p. 187-204.
- 2004 Gastaldo, R.A., A View of Non-Analog Worlds: Review of Knoll, A.H., 2004, *Life on a Young Planet: The First Three Billion Years of Evolution on Earth*: American Journal of Botany, v. 91, p. 294-298.
- 2004 Gastaldo, R.A., Savrda, C.E., and Lewis, R.D., Deciphering Earth History: Understanding Earth's Deep Past: Contemporary Publishing Company of Raleigh Inc., 3rd Edition. 265 p.
- 2003 Staub, J.R., and Gastaldo, R.A., Late Quaternary Incised-valley Fill and Deltaic Sediments in the Rajang River Delta: *in* Sidi, H.F., Nummedal, D., Imbert, P., Darman, H., and Posamentier, H.W., eds., Tropical Deltas of Southeast Asia - Sedimentology, Stratigraphy, and Petroleum Geology: SEPM Special Publication. v. 76, p. 71-87.
- 2002 Gastaldo, R.A., and Savrda, C.E., MEET THE NEW BOSS; SAME AS THE OLD BOSS? The Who – We Won't Get Fooled Again, 1971: PALAIOS, v. 17, no. 3, p. 223-224.
- 2001 Gastaldo, R.A. Plant Taphonomy: *in* Briggs, D.E.G. and Crowther, P.R., eds. Palaeobiology II: Blackwell Scientific, Oxford, UK. p. 314-317.
- 2001 DiMichele, W.A., Pfefferkorn, H.W., and Gastaldo, R.A., Response of Late Carboniferous and Early Permian plant communities to climate change: Annual Review of Earth and Planetary Sciences, v. 29, p. 461-487.
- 2000 Behrensmeyer, A.K., Kidwell, S.M., and Gastaldo, R.A., Taphonomy and Paleobiology: Paleobiology, v. 26, no. 4, p. 103-147.
- 2000 Pfefferkorn, H.W., Gastaldo, R.A., and DiMichele, W.A., Ecosystem Stability during the Late Paleozoic Cold Interval: *in* Gastaldo, R.A., and DiMichele, W.A., eds., Phanerozoic Terrestrial Ecosystems: The Paleontological Society Papers, v. 6, p. 63-78.
- 2000 Gastaldo, R.A., and DiMichele, W.A., eds., Phanerozoic Terrestrial Ecosystems: The Paleontological Society Papers, v. 6, 308 p.
- 2000 Jablonski, D., Benton, M.J., Gastaldo, R.A., Marshall, C.R., and Sepkoski, J.J., Jr., Macroevolution: *in* Lane, H.R., Steininger, F.F., Kaesler, R.L., Ziegler, W., and Lipps, J., eds., Fossils and the Future: Paleontology in the 21st Century: Senckenberg-Buch, No. 74, p. 155-166.
- 2000 Staub, J.R., Among, H.L., and Gastaldo, R.A., Seasonal Sediment Transport and Deposition in the Rajang River Delta, Sarawak, East Malaysia: Sedimentary Geology, v. 133, p. 249-264.
- 2000 Pryor, J.S. and Gastaldo, R.A., Paleocological Analysis of Two Early Pennsylvanian Mineral-Substrate Wetlands: PALAIOS, v. 15, p. 3-13.

- 1999 Gastaldo, R.A. Debates on Autochthonous and Allochthonous Origin of Coal: Empirical Science versus the Diluvialists: *in* Manger, W.A., ed., *The Evolution-Creation Controversy II: Perspectives on Science, Religion, and Geological Education: Paleontological Society Paper*, v. 5, p. 135-168.
- 1999 Gastaldo, R.A. and Staub, J.R., A Mechanism to Explain the Preservation of Leaf Litters Lenses in Coals Derived from Raised Mires: *Palaeogeography, Palaeoclimatology, Palaeoecology*, v. 149, p. 1-14.
- 1999 Gastaldo, R.A. Collection and Analysis Techniques for Paleoecological Studies in Coastal-Deltaic Setting: *in* Jones, T.P. and Rowe, N.P., eds., *Fossil Plants and Spores: Modern Techniques: Geological Society, London*, p. 279-284.
- 1999 Gastaldo, R.A. Private, State, Federal and Reservation Laws Governing Collection of Fossils in the United States of America: *in* Jones, T.P. and Rowe, N.P., eds., *Fossil Plants and Spores: Modern Techniques: Geological Society, London*, p. 330-338.
- 1998 Gastaldo, R.A., Riegel, W., Püttmann, W., Linnemann, U.H., and Zetter, R. A Multidisciplinary Approach to Reconstruct the Late Oligocene Vegetation in central Europe: *Review of Palaeobotany and Palynology*, v. 101, p. 71-94.
- 1998 Gastaldo, R.A. and Ferguson, D.K. Reconstructing Tertiary plant communities: Introductory remarks: *Review of Palaeobotany and Palynology*, v. 101, p. 3-6.
- 1998 Gastaldo, R.A. Ashley, G., Lane, H.R., Macleod, N., O'Neill, N.J., and Wang Cheng-Yuan. *AFTERTHOUGHT: Paleontology in The 21st Century: An International Workshop: PALAIOS*, v. 13, p. 85-88.
- 1997 Gastaldo, R.A. *TAPHONOMY: in* Parker, S.P., ed., *McGraw Hill Encyclopedia of Science and Technology*. 8th Edition. v. 18, p. 147-149.
- 1997 Jablonski, D., Benton, M.J., Gastaldo, R.A., Marshall, C.R., and Sepkoski, J.J., Jr., Macroevolution in the 21st Century: *in* Lane, H.R., Lipps, J., Steininger, F.F., and Ziegler, W., eds. *International Senckenberg Conference: Paleontology in the 21st Century: Kleine Senckenbergreihe*, No. 25, p. 111-119.
- 1997 Gastaldo, R.A. *COLLECTING the NATURAL WORLD: Legal Requirements & Personal Liability for Collecting Plants, Animals, Rocks, Minerals & Fossils*. Geoscience Press, Inc., Tucson, AZ.: *PALAIOS*, v. 12, p. 501. (Book Review).
- 1997 Gastaldo, R.A. and Staub, J.R. Water Column and Grab Sample Palynofacies Assemblages from the Rajang River Delta, Sarawak, East Malaysia: *PALYNOLOGY*, v. 21, p.145-171.
- 1997 Gastaldo, R.A. and Sarvda, C.E. *ONLINE: Regime, Rumors, Realities, and Remedies: PALAIOS*, v. 12, p. 1-2.
- 1996 Gastaldo, R.A. Flöz nah and Flöz fern Assemblages: Potential Predictors of Late Carboniferous Biome Replacement? *In* Leary, R.L., ed. *Patterns in Paleobotany: Proceedings of a Czech-U.S. Carboniferous Paleobotany Workshop: Illinois State Museum Scientific Papers*, v. 26, p. 19-28.
- 1996 *De m ko*, T.M. and Gastaldo, R.A. Eustatic and autocyclic influences on deposition of the Lower Pennsylvanian Mary Lee Coal zone, Warrior Basin, Alabama: *International Journal of Coal Geology*, v. 31, p. 3-19.
- 1996 Hofmann, C.C., Zetter, R., Ferguson, D.K., and Gastaldo, R.A. Taphonomische Untersuchungen im Mobile-Delta, Alabama, USA - Teil 1: Zusammensetzung der Floren in den verschiedenen Environments: *Mitteilung Abteilung Geologie und Paläontologie Landesmuseum Joanneum*, v. 54, p. 93-111.
- 1996 Gastaldo, R.A., DiMichele, W.A., and Pfefferkorn, H.W. Out of the Icehouse into the Greenhouse: A Late Paleozoic Analogue for Modern Global Vegetational Change: *GSA Today* v. 10, n. 10, p. 1-7.
- 1996 Gastaldo, R.A., Savrda, C.E., and Lewis, R.D. *INSTRUCTORS MANUAL to Deciphering Earth History*. Contemporary Publishing Company of Raleigh, Inc., 62 p.
- 1996 Gastaldo, R.A., Palynofacies of the Wetland Soils in the Temperate-Subtropical Mobile-Tensaw River Delta, *in* Rich, R., Chmura, G., and Gastaldo, R.A. *Palynology of Wetland Environments of the Southern United States*, Ninth International Palynological Congress Field Trip Guidebook, Houston, TX., A3:1-37.
- 1996 Gastaldo, R.A., Feng, W. i w e i, and Staub, J.R. Palynofacies Patterns in Channel Deposits of the Rajang River and Delta, Sarawak, East Malaysia: *PALAIOS*, v. 11, p. 266-279.
- 1996 Gastaldo, R.A. and Savrda, C.E. *ONLINE: Changing of the Guard: PALAIOS*, v. 11, p. 95-96.
- 1996 Gastaldo, R.A., Savrda, C.E., and Lewis, R.D. *Deciphering Earth History: A Laboratory Manual with Internet Exercises*. Contemporary Publishing Company of Raleigh, Inc., ISBN 0-89892-139-2, 302 p.
- 1996 Gastaldo, R.A., Walther, H., Rabold, J. and Ferguson, D. Criteria to distinguish parautochthonous leaves in Cenophytic alluvial channel-fills: *Review of Palaeobotany and Palynology*, v. 91, p. 1-21.
- 1995 Guthrie, G.M, Steltenpohl, M.G. and Gastaldo, R.A. Alleghanian timing constraints on Laurentian margin orogenesis: New fossils and radiometric data from the Alabama Blue Ridge, *in* G.M. Guthrie, ed. *The Timing and Tectonic Mechanisms of the Alleghanian Orogeny, Alabama Piedmont, A Guidebook for the 32nd Annual Field Trip of the Alabama Geological Society, Tuscaloosa, AL.*, p. 1-16.

- 1995 Gastaldo, R.A., Pfefferkorn, H.W. and DiMichele, W.A. Taphonomic and Sedimentologic Characterization of "Roof-Shale" floras, in Lyons, P., Wagner, R.H. and Morey, E., eds. *Historical Perspective of Early Twentieth Century Carboniferous Paleobotany in North America*. Geological Society of America Memoir 185:341-352.
- 1995 Gastaldo, R.A., Savrda, C.E., and Lewis, R.D. Deciphering Earth History: A Laboratory Manual. Contemporary Publishing Company of Raleigh, Raleigh, NC., ISBN 0-89892-125-2, 150pp.
- 1995 Gastaldo, R.A., Allen, G.P., and Huc, A.Y., The tidal character of fluvial sediments of the Recent Mahakam River delta, Kalimantan, Indonesia: *Special Publications International Association of Sedimentologists*, v. 24, p. 171-181.
- 1995 Gastaldo, R.A. New Occurrence of *Periastron reticulatum* Unger emend. Beck, An enigmatic Mississippian fossil plant: *Journal of Paleontology*, v. 65, p. 388-392.
- 1994 Eble, C.F., Gastaldo, R.A., *De m ko*, T.M., and Liu, Y. Coal compositional changes along a swamp interior to swamp margin transect in the Mary Lee Coal bed, Warrior Basin, Alabama, U.S.A.: *International Journal of Coal Geology*, v. 26, p. 43-62.
- 1994 Gastaldo, R.A. and Eble, C.F. Carboniferous Floras of the Central Appalachians: Kentucky & Tennessee. Guidebook for Field Trip 20, Paleobotanical Section, Botanical Society of America Meetings, Knoxville, TN. 7 August 94. 25 p.
- 1994 Gastaldo, R.A. The genesis and sedimentation of phytoclasts with examples from coastal environments in A. Traverse, ed. *Sedimentation of Organic Particles*. Cambridge University Press. Chapter 7, pp. 103-127.
- 1993 Gastaldo, R.A., Gutherie, G., and Steltenpohl, M.G. Mississippian fossils from southern Appalachian metamorphic rocks and their implications for Late Paleozoic tectonic evolution: *Science*, v. 262, p. 732-734.
- 1993 Gastaldo, R.A., *De m ko*, T.M., and Liu, Y., The application of sequence and genetic stratigraphic concepts to Carboniferous coal-bearing strata: An example from the Black Warrior basin, USA: *Geologische Rundschau*. v. 82, p. 212-226.
- 1993 Dolph, G.E., Gastaldo, R.A., DiMichele, W.A., and Hunn, D.M. *Karinopteris*, A fossil pteridosperm from the "Paper" coal of Indiana: *Proceedings of the Indiana Academy of Science for 1988*, v. 98, p. 433-448.
- 1993 Cunningham, C.R., Feldman, H.R., Franseen, E.K., Gastaldo, R.A., Mapes, G., Maples, C.G., and Schultze, H-P. 1993. The Upper Carboniferous (Stephanian) Hamilton Fossil-Lagerstätte (Kansas, U.S.A.): A valley-fill, tidally influenced depositional model: *Lethaia*, v. 26, p. 225-236.
- 1993 Gastaldo, R.A., G.P. Allen, and A.Y. Huc. Detrital peat formation in the tropical Mahakam River delta, Kalimantan, eastern Borneo: Formation, plant composition, and geochemistry in J.C. Cobb and C. B. Cecil, Eds. *Modern and Ancient Coal-forming Environments*: Geological Society of America Special Paper 286, p. 107-118.
- 1993 Gastaldo, R.A. Book Review. Tallis, J.H. 1991. PLANT COMMUNITY HISTORY: LONG-TERM CHANGES IN PLANT DISTRIBUTION AND DIVERSITY. Chapman & Hall, London, 398 p. *International Organization Palaeobotany Newsletter* v. 48, p. 8-9.
- 1992 Gastaldo, R.A. Taphonomic considerations for plant evolutionary investigations: *The Palaeobotanist*, v. 41, p. 211-223.
- 1992 Liu, Y., and Gastaldo, R.A. Characteristics and provenance of log-transported gravels in a Carboniferous channel deposit: *Journal of Sedimentary Petrology*, v. 62, p. 1072-1083.
- 1992 Gastaldo, R.A. and Huc, A.Y. Sediment facies, depositional environments, and distribution of phytoclasts in the Recent Mahakam River delta, Kalimantan, Indonesia: *PALAIOS*, v. 7, p. 574-591.
- 1992 Gastaldo, R.A. Plant taphonomic character of the Late Carboniferous Hamilton Quarry, Kansas, USA: Preservational modes of walcian conifers and implied relationships for residency time in aquatic environments: in J. Kovar-Eder, ed. *Palaeovegetational Development in Europe and Regions Relevant to its Palaeofloristic Evolution*: Museum of Natural History Vienna, p. 393-399.
- 1992 Contributor to: DiMichele, W.A. and Hook R.W., Rapporteurs. Paleozoic Terrestrial Ecosystems in Behrensmeier, A., Damuth, J., DiMichele, W.A., Potts, R., Sues, H.-D., and Wing, S. *Terrestrial Ecosystems Through Time*. University of Chicago Press.
- 1992 Contributor to: Behrensmeier, A.K. and Hook, R.W., Rapporteurs. Paleoenvironmental Contexts and Taphonomic Modes in the Terrestrial Fossil Record in Behrensmeier, A., Damuth, J., DiMichele, W.A., Potts, R., Sues, H.-D., and Wing, S. *Terrestrial Ecosystems Through Time*. University of Chicago Press.
- 1992 Liu, Y., and Gastaldo, R.A., Characteristics of a Pennsylvanian ravinement surface: *Sedimentary Geology*, v. 77, p. 197-214.
- 1992 Blumenstengel, H., Mai, D., Walther, H., Gastaldo, R.A., and Riegel, W., Exkursion in das Weiße-Becken. 21. Jahrestagung des Arbeitskreises für Paläobotanik und Palynologie in Göttingen. 56 p.

- 1992 Gastaldo, R.A., Regenerative growth in fossil horsetails (*Calamites*) following burial by Alluvium: *Historical Biology*, v. 6, p. 203-220.
- 1992 *Demko*, T.M., and Gastaldo, R.A., Paludal environments of the Lower Mary Lee coal zone, Pottsville Formation, Alabama: Stacked clastic swamps and peat mires: *International Journal of Coal Geology*, v. 20, p. 23-47.
- 1991 Gastaldo, R.A., *Demko*, T.M., and *Liu*, Y., A mechanism to explain persistent alternation of clastic and peat-accumulating swamps in Carboniferous sequences: *Bulletin Société géologique de France*, t. 162, p. 299-305.
- 1990 Gastaldo, R.A. Phytotaphocoenoses in Late Quaternary temperate and tropical coastal deltaic regimes. Paleofloristic and paleoclimatic changes in the Cretaceous and Tertiary. *in* E. Knobloch and Z. Kvaček, eds. Proceedings of the International Symposium - Paleofloristic and Paleoclimatic Changes in the Cretaceous and Tertiary. International Geological Correlation Programme Project No. 216: Global Biological Events in Earth History. Geological Survey of Czechoslovakia, Prague. p. 285-290.
- 1990 Gastaldo, R.A., The paleobotanical character of log assemblages necessary to differentiate blow-downs resulting from cyclonic winds: *PALAIOS*, v. 5, p. 472-478.
- 1990 Gastaldo, R.A. ONLINE - Sticks & Mud: Perspectives for the 90's: *PALAIOS*, v. 5, p. 201-202.
- 1990 Gastaldo, R.A., *Demko*, T.M., and *Liu*, Y., Carboniferous coastal environments and paleocommunities of the Mary Lee coal zone, Marion and Walker Counties, Alabama. A Guidebook for Field Trip VI, 39th Annual Meeting Southeastern Section of the Geological Society of America, Tuscaloosa, Alabama. Geological Survey of Alabama, 139 p.
- 1990 Gastaldo, R.A., Early Pennsylvanian swamp forests in the Mary Lee coal zone, Warrior Basin, Alabama, *in* Gastaldo, R.A., *Demko*, T.M., and *Liu*, L., eds., Carboniferous coastal environments and paleocommunities of the Mary Lee coal zone, Marion and Walker Counties, Alabama. A Guidebook for Field Trip VI, 39th Annual Meeting Southeastern Section of the Geological Society of America, Tuscaloosa, Alabama. Geological Survey of Alabama, p. 41-54.
- 1990 Gastaldo, R.A., Earliest evidence for helical crown configuration in a Carboniferous tree of uncertain affinity: *Journal of Paleontology*, v. 64, p. 146-151.
- 1989 Gastaldo, R.A., Processes of incorporation of plant parts in deltaic coastal sedimentary environments: Implications for paleoecological restorations. *Compte Rendu XIth International Carboniferous Congress of Stratigraphy & Geology*, Beijing, China. V. 3, p. 109-120.
- 1989 Chestnut, D.R. Jr., Cobb, J.C., and Gastaldo, R.A., Origin of the Middlesboro Member of the Lower Pennsylvanian-age Lee Formation (Bashkirian) in the central Appalachian Basin, eastern USA, and its unique fossil occurrence: *Compte Rendu XIth International Carboniferous Congress of Stratigraphy & Geology*, Beijing, China, v. 2, p. 20-30.
- 1989 Gastaldo, R.A., *Demko*, T.M., *Liu*, Y., *Keefe*, W.D., and *Abston*, S.L., Biostratigraphic processes for the development of mud-cast logs in Carboniferous and Holocene swamps: *PALAIOS*, v. 4, p. 356-365.
- 1989 Gastaldo, R.A., *Gibson*, M.A., and *Gray*, T.D., An Appalachian-sourced deltaic sequence, northeastern Alabama: Biofacies-lithofacies relationships and interpreted community patterns: *International Journal of Coal Geology*, v. 12, p. 225-257.
- 1989 Gastaldo, R.A., Editor, PLANT TAPHONOMY - ORGANIC SEDIMENTARY PROCESSES, Special Issue Review of Palaeobotany and Palynology, Vol. 58, No. 1, February 1989.
- 1989 Gastaldo, R.A., Introduction: Review of Palaeobotany & Palynology, v. 58, p. 1-4.
- 1989 Gastaldo, R.A., *Bearce*, S.C., *Degges*, C., *Hunt*, R.J., *Peebles*, M.W., and *Violette*, D., Biostratigraphy of a Holocene oxbow lake: A backswamp to mid-channel transect: *Review of Palaeobotany & Palynology*, v. 58, p. 47-60.
- 1989 Gastaldo, R.A., Preliminary observations on phytotaphonomic assemblages in a subtropical/temperate Holocene bayhead delta: Mobile Delta, Gulf Coastal Plain, Alabama: *Review of Palaeobotany & Palynology*, v. 58, p. 61-84.
- 1989 *Gibson*, M.A., and Gastaldo, R.A., Invertebrate body fossils and trace fossils from the Lower Pennsylvanian of northern Alabama: *Alabama Geological Survey Circular* 143, p. 1-53.
- 1988 Gastaldo, R.A., A Conspectus of Phytotaphonomy: *in* DiMichele, W.A., and Wing, S.L., eds., *Methods and Applications of Plant Paleoecology: Notes for a Short Course*. Paleontological Society Special Publication, v. 3, p. 14-28.
- 1988 Gastaldo, R.A., The frond architecture of *Sphenopteris pottsvillea* (White) Gastaldo and Boersma: *Journal of Paleontology*, v. 62, p. 982-991.
- 1987 Gastaldo, R.A., **Douglass, D.P.**, and **McCarroll, S.M.**, Origin, characteristics and provenance of plant macrodetritus in a Holocene crevasse splay, Mobile delta, Alabama: *PALAIOS*, v. 2, p. 229-240.

- 1987 Gastaldo, R.A., Confirmation of Carboniferous clastic swamp communities: *Nature*, v. 326, p. 869-871.
- 1987 Gastaldo, R.A., A Conspectus of Phytotaphonomy in DiMichele, W.A., and Wing, S.L., eds., *Methods and Applications of Plant Paleocology: Notes for a Short Course*. Paleontology Section, Botanical Society of America, Columbus, OH, p. 20-40.
- 1987 Gastaldo, R.A., SEPM session explores new frontiers in plant Taphonomy: *PALAIOS*, v. 2, p. 107-109.
- 1987 Gibson, M.A., and Gastaldo, R.A., Invertebrate paleoecology of the Upper Cliff Coal Interval (Pennsylvanian), Plateau Coal Field, northern Alabama: *Journal of Paleontology*, v. 61, p. 339-350.
- 1986 Gastaldo, R.A., Implications on the paleoecology of autochthonous Carboniferous lycopods in clastic sedimentary environments: *Palaeogeography, Palaeoclimatology and Palaeoecology*, v. 53, p. 191-212.
- 1986 Gastaldo, R.A., An explanation for lycopod configuration, 'Fossil Grove' Victoria Park, Glasgow: *Scottish Journal of Geology*, v. 22, p. 77-83.
- 1986 Haas, C., and Gastaldo, R.A., Flood tidal deltas and related back-barrier systems: Bremen Sandstone, "Pottsville" Formation, Black Warrior Basin, Alabama: *Geological Society of America Centennial Field Guide-Southeastern Section*, No. 40, p. 181-183.
- 1986 Gastaldo, R.A., Selected aspects of plant taphonomic processes in coastal deltaic regimes, in T.W. Broadhead (ed.), *Fossil Land Plants: Notes for a Short Course* (sponsored by The Paleontological Society). University of Tennessee, Department of Geological Sciences, *Studies in Geology*, v. 15, p. 27-44.
- 1986 Mapes, G., and Gastaldo, R.A. Upper Paleozoic non-peat accumulating floras, in T.W. Broadhead (ed.), *Fossil Land Plants: Notes for a Short Course* (sponsored by The Paleontological Society). University of Tennessee, Department of Geological Sciences, *Studies in Geology*, v. 15, p. 115-127.
- 1985 Gastaldo, R.A., Upper Carboniferous paleoecological reconstructions: observations and reconsiderations: in Escobeda, J.L., L.F. Grana'dos, B. Melé'ndez, R. Pignatelli, R. Ray and R.H. Wagner, eds. *Dixième Congrès International de Stratigraphie et de Géologie du Carbonifère*, Madrid, 1983, v. 2, p. 281-296.
- 1985 Gastaldo, R.A., Morphological plasticity in a *Pecopteris* leaf from the Middle Pennsylvanian of southern Illinois: in J.T. Dutro, Jr., and H.W. Pfefferkorn eds. *Neuvième Congrès International de Stratigraphie et de Géologie du Carbonifère*, Washington and Champaign-Urbana, 1979, *Compte Rendu*, v. 5, p. 115-126.
- 1985 Churnet, H.G., Bergenback, R.E. and Gastaldo, R.A., Lower Pennsylvanian Sediments and Associated Coals in the Walden Ridge South: in Woodward, N.B. ed. *Field Trips in the Southern Appalachians*, University of Tennessee Department of Geology *Studies in Geology*, v. 9, p. 34-69. (Prepared for field trips sponsored by the Southeastern Section of the Geological Society of America, Knoxville, TN.)
- 1985 Gastaldo, R.A., Plant Accumulating Deltaic Depositional Environments. *Field Trip Guide*, Paleobotanical Section, Botanical Society of America Meetings, 8-11 August. Auburn University Continuing Education: Alabama Geological Survey Reprint Series 66, 35p.
- 1985 Gastaldo, R.A., Energy Shale: in Matten, L.C. ed. *Field Guidebook 3rd Mid-Continent Paleobotany Colloquium*, Carbondale, IL. p. 1D-9D.
- 1984 Gastaldo, R.A., Studies on North American Pecopterids. III. *Pecopteris buttsii* D. White from the Early Pennsylvanian of Alabama: *Journal of Paleontology*, v. 58, p. 63-77.
- 1984 DiMichele, W.A., Rischbieter, M.O., Eggert, D.L., and Gastaldo, R.A., Stem and Leaf Cuticle of *Karinopteris*: Source of Cuticles from the Indiana "Paper" Coal: *American Journal of Botany*, v. 71, p. 626-637.
- 1984 Gastaldo, R.A., A Case Against Pelagochthony: The Untenability of Carboniferous Arborescent Lycopod-Dominated Floating Peat Mats: in Walker, K. R. ed. *The Evolution-Creation Controversy, Perspectives on Religion, Philosophy, Science and Education: A Handbook*. Paleontological Society Special Publications, Knoxville, TN., v. 1, p. 97-116.
- 1983 Gastaldo, R.A., and Boersma, M.A., A Reinvestigation of Early Pennsylvanian Species of *Mariopteris* from the Appalachian Region. I. *Karinopteris*, *Mariopteris* and the 'Pottsvillea Complex.': *Review of Palaeobotany and Palynology*, v. 38, p. 185-226.
- 1983 Gastaldo, R.A. and Boersma, M.A., A Reinvestigation of Early Pennsylvanian Species of *Mariopteris* from the Appalachian Region. II. *Eusphenopteris* and *Sphenopteris*: *Review of Palaeobotany and Palynology*, v. 38, p. 227-247.
- 1983 Boersma, M., and Gastaldo, R.A., Proposal to conserve *Eusphenopteris* (Foss.): *Taxon* v. 32, p. 307-310.
- 1983 Gastaldo, R.A., *Paleobotany Lab Manual. An Interdisciplinary Approach*: Auburn University Printing Service. 124p.
- 1982 Gastaldo, R.A., and Cook, R.B., A Reinvestigation of the Paleobotanical Evidence for the Age of the Erin Shale: in Bearce, D.N., Black, W.W., Kish, S.A., and Tull, J.F., eds. *Tectonic Studies in the Talladega and Carolina Slate Belts, Southern Appalachian Orogen*. Geological Society of America Special Paper, v. 191, p. 69-78.

- 1982 Gastaldo, R.A., A Reinvestigation of *Potonia angularis* (Lesquereux) Stidd: *Journal of Paleontology*, v. 56, p. 1296-1302.
- 1982 Gastaldo, R.A., A Preliminary Assessment of Early Pennsylvanian Megafloral Palaeoecology in the Plateau Coal Field, Northeastern Alabama: Third North American Paleontological Convention, Proceedings v. 1, p. 187-192.
- 1982 Gastaldo, R.A., and Zodrow, E.L., Studies on North American Pecopterids. IV. Diversity and Stratigraphy Occurrence in the Sydney Coal Field, Nova Scotia. Third North American Paleontological Convention, Proceedings, v. 1, p. 193-198.
- 1982 Gastaldo, R.A., Paleobotanical Studies in Alabama: 1845-1980. Geological Survey of Alabama, Circular 106, p. 1-21. (dated 1981).
- 1981 Gastaldo, R.A., An Ultrastructural and Taxonomic Study of *Valvisporites auritus* (Zerndt) Bhardwaj, A Lycopside Megaspore from the Middle Pennsylvanian of southern Illinois: *Micropaleontology*, v. 27, p. 84-93.
- 1981 Gastaldo, R.A., *Palaeostachya dircei* n. sp., An Authigenically Cemented Equisetalean Strobilus from the Middle Pennsylvanian of southern Illinois: *American Journal of Botany*, v. 68, p. 1305-1318.
- 1981 Gastaldo, R.A., Taxonomic Considerations for Carboniferous Coalified Compression Equisetalean Fructifications: *American Journal of Botany*, v. 68, p. 1319-1324.
- 1978 Gastaldo, R.A., and Matten, L.C., Studies on North American Pecopterids. I. *Pecopteris vera* n. sp. from the Middle Pennsylvanian of southern Illinois: *Palaeontographica Abt. B.*, v. 165, p. 43-52.
- 1978 Gastaldo, R.A., and Matten, L.C., *Trigonocarpus leeanus*, A New Species from the Middle Pennsylvanian of southern Illinois: *American Journal of Botany*, v. 65, p. 882-890.
- 1977 Matten, L.C., Gastaldo, R.A., and Lee, M.R., Fossil *Robinia* from the western United States: Review of Palaeobotany and Palynology, v. 24, p. 195-208.
- 1977 Gastaldo, R.A., A Middle Pennsylvanian Nodule Flora from Carterville, Illinois: in Romans, R.C. ed., *Geobotany*. Plenum Press, N.Y., pp. 133-156.

ABSTRACTS - Over 275 published abstracts. Following list since Colby appointment in 1999 (**student co-authors** listed with year of graduation).

- Glasspool, I.J., Gastaldo, R.A., and **Robak, K.** '21, 2019, 285-2 - Further Evidence of Latest Silurian Wildfire Activity: Charred Mesofossils from the Winnica Formation of the Holy Cross Mountains, Poland: *Geological Society of America Abstracts with Programs*, v. 51, no. 5, doi:10.1130/abs/2019AM-334712
- Wan, M., Gastaldo, R.A., and Yang, W., 2019, Taphonomic and Paleocological Aspects of a Silicified Stand of the Gymnosperm *Protophyllocladoxylon* from the Wutongguo Lower Order Cycle, Bogda Mountains, Xinjiang Province, Western China: *Geological Society of America Abstracts with Programs*, v. 51, no. 5, doi:10.1130/abs/2019AM-335626
- Gastaldo, R.A., Neveling, J., Geissman, J.W., and Looy, C., 2019, What is the nature of the *Daptocephalus/Lystrosaurus* vertebrate biozone boundary in the Karoo Basin? An evaluation of the Bethel, Heldenmoed, and Donald 207 (Fairydale) farm records. in S. Hartenfels, H.G. Herbig, M.R.W. Amler, and M. Aretz, eds., *Abstracts, 19th International Congress on the Carboniferous and Permian, Kölner Forum für Geologie und Palaontologie*, 23/2019, p. 118-119.
- Gastaldo, R.A., Andrzejewski, K., Tabor, N., and Neveling, J., 2019, Late Changhsingian Variation in Climate Proxies of the *Daptocephalus* Assemblage Zone, Karoo Basin, South Africa. AGU Annual Meeting, Abstract 499259.
- Gastaldo, R.A., Neveling, J., Tabor, N.J., and Geissman, J.W., 2018, Assessing Permo-triassic Terrestrial Paleoclimate Trends of Calcic Paleoverisols When Stratigraphically Absent in the Karoo Basin, South Africa : *Geological Society of America Abstracts with Programs*. Vol. 50, No. 6, ISSN 0016-7592 doi: 10.1130/abs/2018AM-318049
- Harrison, S.D.**, '19, Gastaldo, R.A., and Neveling, J., 2018, Testing for Carbonate-rich Paleosols in the Lower *Lystrosaurus* Assemblage Zone, Karoo Basin, South Africa: *Geological Society of America Abstracts with Programs*. Vol. 50, No. 6, ISSN 0016-7592 doi: 10.1130/abs/2018AM-318060
- Jia, R.** '21, Stonesifer, T., Gastaldo, R.A., and Neveling, J., 2018, Drones and 3d Modeling of the Katberg Formation in a Classical Permian—Triassic Boundary Site: *Geological Society of America, Abstracts with Program*, Vol. 50, No. 6, ISSN 0016-7592 doi: 10.1130/abs/2018AM-318057
- Stonesifer, T., **Jia, R.** '21, Gastaldo, R.A., and Neveling, J., 2018, Using Drone Technology, Photogrammetry, and Virtual Reality in the Analysis of Remote and Inaccessible Classic Localities: the Vertebrate-defined

- Permian–triassic Section on the Bethel Farm, Free State Province, South Africa: Geological Society of America, Abstracts with Program, Vol. 50, No. 6, ISSN 0016-7592 doi: 10.1130/abs/2018AM-318053
- Le, N.** ‘19, Gastaldo, R.A., and Rueger, B.F., 2018, Biodiversity and Distribution of Benthic Foraminifera in Harrington Sound, Bermuda: the Effects of Physical and Geochemical Factors on Dominant Taxa: Geological Society of America, Abstracts with Program, Vol. 50, No. 6, ISSN 0016-7592 doi: 10.1130/abs/2018AM-318164
- Kus, K.** ‘18, Gastaldo, R.A., Neveling, J., Geissman, J.W., and Looy, C.V., 2017, Calcisols, Palynofloras, and Rare Charcoal from Quaggasfontein, Eastern Cape Province, South Africa: Correlations in the Wapadsberg Pass Area and Implications for Late Permian Climate: Geological Society of America, Abstracts with Program, Vol. 49, No. 6 doi: 10.1130/abs/2017AM-303520
- Sinkler, S.** ‘18, Gastaldo, R.A., Neveling, J., and Geissman, J.W., 2017, Sandstones, Siltstones, and Trace Fossils in a Succession of Lowermost Triassic Rocks near Lootsberg Pass, Eastern Cape Province, South Africa: Geological Society of America, Abstracts with Program, v. 49, No. 6 DOI: 10.1130/abs/2017AM-303765
- Gastaldo, R.A., Neveling, J., Geissman, J.W., and Kamo, S.L., 2017, A Lithostratigraphic and Magnetostratigraphic Framework in a Geochronologic Context for a Purported Permian–Triassic Boundary Section at Old (West) Lootsberg Pass, Karoo Basin, South Africa: Geological Society of America, Abstracts with Program, v. 49, No. 6,
- Li, J.W.** ‘16, Gastaldo, R.A., and Neveling, J., 2016, Petrography, Mineralogy, and Geochemistry of Greenish- and Reddish-gray Siltstones Straddling the Vertebrate-defined Permian–triassic Boundary in South Africa: Geological Society of America, Abstracts with Program, v. 48, n. 7, doi: 10.1130/abs/2016AM-277899
- Geissman, J.W., Gastaldo, R.A., and Neveling, J., 2016, Paleomagnetic Data Bearing on the Thermal History of Upper Permian to Lower Triassic Beaufort Group Strata, Karoo Basin, South Africa: Geological Society of America, Abstracts with Program, v. 48, n. 7, doi: 10.1130/abs/2016AM-285027
- Gastaldo, R.A., Neveling, J., Geissman, J.W., Kamo, S., Looy, C., and Bamford, M.K., 2016, Variability in the Late Permian Landscape of the Upper Balfour Formation (Beaufort Group Strata, Karoo Basin, South Africa); Geological Society of America, Abstracts with Program, v. 48, n. 7, doi: 10.1130/abs/2016AM-278570
- Churchill, A.N.** ‘19J, Gastaldo, R.A., and Neveling, J., 2016, Geochemistry of Palingkloof Siltstones near the Vertebrate-defined Ptb at Tweefontein, South Africa: Geological Society of America, Abstracts with Program, v. Vol. 48, No. 7 doi: 10.1130/abs/2016AM-282896
- Gastaldo, R.A., **Li, J.**, Neveling, J., and Geissman, J.W., 2016, Red Green: Geochemistry of colored siltstones from the *Daptocephalus* (*Dicynodon*) and *Lystrosaurus* Assemblage Zones at Old Lootsberg Pass and Bethulie, South Africa: 35th International Geological Congress, Abstract, Cape Town, South Africa,
- Neveling, J., Gastaldo, R.A., Geissman, J.W., Kamo, S.L., Looy, C.V., and Bamford, M.K., 2016, Variability in the Late Permian landscape of the upper Balfour Formation (Beaufort Group Strata, Karoo Basin, South Africa.): 35th International Geological Congress, Abstract, Cape Town, South Africa
- Geissman, J.W., Gastaldo, R.A., and Neveling, J., 2016, Paleomagnetic Data Bearing on the Thermal History of Upper Permian to Lower Triassic (?) Beaufort Group Strata (Karoo Supergroup), Karoo Basin, South Africa: 35th International Geological Congress, Abstract, Cape Town, South Africa
- Gastaldo, R.A., Bamford, Geissman, J., Kamo, S.L., Looy, C., and M., Neveling, J., 2014, Stratigraphic Evidence for Early Triassic *Glossopteris* in the Karoo Basin, South Africa: EPPC 2014 Abstract Book, 26-31 August 2014, Padua, Italy, p. 76-77.
- Gastaldo, R.A., Neveling, J., Kamo, S.L., Geissman, J., and Bamford, M., 2014, Stratigraphic Evidence for Early Triassic *Glossopteris* in the Karoo Basin, South Africa: GSA Abstracts with Program, v. 46, n. 6, p. 488.
- Hickson, T.A., Gastaldo, R.A., Gran, K., Macdonald, McDaris, J.H., and Theissen, K., Getting Together: Reporting Out On An Interdisciplinary Workshop for Sedimentary Geologists, Paleontologists, and Geomorphologists: GSA Abstracts with Program, v. 46, n. 6, p. 437.
- Spencer, K.** ‘14, Gastaldo, R.A., Neveling, J., Prevec, R., Geissman, J.W., and Kamo, S.L., 2013, The Late Permian Stratigraphy of the Basal Tweefontein Section, Eastern Cape Province, South Africa: Geological Society of America, Abstracts with Program, v. 45, no. 7, p. 127.
- Langwenya, D.** ‘14, Gastaldo, R.A., Neveling, J., Prevec, R., Geissman, J.W., and Kamo, S.L., 2013, the Late Permian Stratigraphy of the Upper Tweefontein Section, Eastern Cape Province, South Africa: Geological Society of America, Abstracts with Program, v. 45, no. 7, p. 127.
- Chizinski, T.L.** ‘14, Gastaldo, R.A., and Neveling, J., 2013, The Fluvial Sequence of a Latest Changhsingian, Pre-pt Extinction River Complex, Eastern Cape Province, South Africa: Geological Society of America, Abstracts with Program, v. 45, no. 7, p. 127.

- Gastaldo, R.A., Gee, C., Sander, P.M., Grimpylakos, G., Zouros, N., and Valiakos, I., 2013, Miocene Volcanic Landscapes of the Eastern Mediterranean: the Fossil Forests of Lesvos, Greece: Geological Society of America, Abstracts with Program, v. 45, no. 7, p. 328.
- Gastaldo, R.A., Tabor, N.J., Neveling, J., and **Knight, C. '10**, 2013, Latest Changhsingian Paleosol Trends and Estimates of Atmospheric pCO₂ from Carbonate Concretions at Wapadsberg Pass, Karoo Basin, South Africa: Geological Society of America, Abstracts with Program, v. 45, no. 7, p. 232.
- Eble, C.F., Kennedy, K., Gibling, M.R., Gastaldo, R.A., and Gensel, P., 2013, Organic Petrography of Carbonaceous Shales from the Lower Devonian Campbellton and Val D'amour Formations, New Brunswick, Canada: Geological Society of America, Abstracts with Program, v. 45, no. 7, p. 651.
- Gastaldo, R.A., Kamo, S.L., Looy, C.V., Neveling, J., Prevec, R., and Tabor, N.J., 2012, Constraining the end-Permian crisis in the Karoo Basin, South Africa: new data from the Eastern Cape Province: *Terra Nostra*, v. 2012/3, p. 61-62.
- Gastaldo, R.A., 2011, Taphonomic attributes of palynomorphs in tidally-influenced coastal deltaic settings: 20th Anniversary Plant Taphonomy Workshop, Senckenberg Museum, Dresden, Germany.
- Gastaldo, R.A., 2010, Taphonomic trends in plant-assemblages of selected Holocene transitional coastal-deltaic regimes: Implications for understanding the terrestrial fossil record of plants: *GeoDarmstadt2010*, Schriftenreihe der Deutschen Gesellschaft für Geowissenschaftern, H. 68, p. 190-191.
- Gastaldo, R.A., 2010, Introducing Exploratory Data Analysis Techniques in Introductory Paleontology: Diversity Indices, Similarity Coefficients, and Cluster Analysis: Geological Society of America, Abstracts with Program, Paper No. 20-7.
- Kapupu, C. '12**, Gastaldo, R.A., and Neveling, J., 2010, the Lithological Characterization of a Middle Permian Deltaic Distributary Channel, in the Karoo Basin, South Africa: Geological Society of America, Abstracts with Program, Paper No. 174-19.
- Katsiaticas, N. '12**, Gastaldo, R.A., and Neveling, J., 2010, an Analysis of Geometric and Sedimentologic Characteristics of a Middle Permian Fluvial System, Karoo Basin, South Africa: Geological Society of America, Abstracts with Program, Paper No. 174-20.
- Pludow, B.A. '11**, Gastaldo, R.A., and Neveling, J., 2010, a Middle Permian (Wordian) Avulsion System, Karoo Basin, South Africa: Implications for the Ecca-beaufort Transition: Geological Society of America, Abstracts with Program, Paper No. 174-22.
- Gastaldo, R.A., Prevec, R., Neveling, J., and Looy, C., 2010, A Late Changhsingian forest-floor litter and palynospectrum from the Karoo Basin, South Africa: Insights into southern hemisphere biodiversity before ecosystem turnover: 8th European Palaeobotany - Palynology Conference 2010, Program and Abstracts, Budapest, Hungary, p. 98.
- Gastaldo, R.A., 2010, Perspectives on the Permian-Triassic Boundary, Karoo Basin, South Africa: Biological Evolution, Chronometry and Chronostratigraphy, Indaba on the Stratigraphy of South Africa to mark the retirement of Mike Johnson: Council for Geoscience, Abstracts with Program.
- Charsky, A.M. '09**, **Beltran, J.O. '09**, **Knight, C.L. '10**, **Lanphier, H.W. '12**, **Malick, G.T. '09**, **Mathes, S.B. '10**, **McCarthy, A.L. '10**, **Oakes, J. A. '10**, **Schwarz, J.J. '09**, and Gastaldo, R.A., Middle Devonian (Emsian-Eifelian) mixed terrestrial, estuarine, and marine-invertebrate assemblages from the Trout Valley Formation, Baxter State Park, Maine: Geological Society of America, Abstracts with Program, v. 41, n. 7, p. 102.
- Pludow, B.A. '11**, Gastaldo, R.A., and Neveling, J., Deciphering the Early Triassic recovery environment: The search for mud aggregates in the Karoo Basin, South Africa: Geological Society of America, Abstracts with Program, v. 41, n. 7, p. 101.
- Knight, C. '10**, Gastaldo, R.A., and Neveling, J., Late Permian paleoenvironmental factors expounded through analysis of a forest-floor paleosol profile, Karoo Basin, South Africa: Geological Society of America, Abstracts with Program, v. 41, n. 7, p. 101.
- Gastaldo, R.A., and Neveling, J., The diastemic record of Early Triassic recovery environments in the Karoo Basin, South Africa: Geological Society of America, Abstracts with Program, v. 41, n. 7, p. 242.
- Gastaldo, R.A., 2009, Megafloral Perturbation Across the Enna Marine Zone in the Upper Silesian Basin Attests to Late Mississippian (Serpukhovian) Deglaciation and Climate Change: Geological Society of America, Abstracts with Program, v. 41, No. 3, p. 34.
- Charsky, A. '09**, Gastaldo, R.A., Wust, R.A.J., and Rieser, U., 2008, Evidence for pulsed flooding periods from a Series of Terraces Along the Burdekin River in Northeast Queensland, Australia, during the Late Quaternary: Implication for climate change: Geological Society Abstracts with Program, Abstract 146-1.
- Colin, E.D. '10**, **Daly, R.G. '08**, **Delano, C.L. '08**, **Grocke, S.B. '09**, **Hunt, C.G. '10**, **Kilian, T.M. '08**, **Newbury, S.S. '08**, **Smith, A.M. '09**, and Gastaldo, R.A., 2008, Taphonomic and paleoecological aspects of the Early

- Devonian (Pragian) Tarrantine Formation near Jackman, Maine: Geological Society Abstracts with Program, Abstract 249-6.
- Guest, R.L. '09**, Herbst, G.S., Gastaldo, R.A., Harries, P., Oches, E., Portell, R., and Dietl, G., 2008, Can Predatory-Prey Arms Races Intensify during a Mass Extinction Event? Strombid Gastropods from Late Neogene of Florida: Geological Society Abstracts with Program, Abstract 144-22.
- Cantor, B.M. '08**, and Gastaldo, R.A., 2007, Historical Records of Stomatal Indices for *Quercus* and *Nyssa* from the Southeastern U.S.: Geological Society of America, Abstracts with Program, v. 39, p. 301.
- Daly, R.G. '08**, and Gastaldo, R.A., 2007, The Effect on Stomatal Proxies as a Function of Geographical Position Relative to Growing Season Sunlight: Geological Society of America, Abstracts with Program, v. 39, p. 301.
- Newbury, S. '08, Clark, C.K. '08**, Gastaldo, R.A., and Neveling, J., 2007, High Resolution Stratigraphy of the Permian-triassic Boundary at Bethulie, Karoo Basin South Africa: Geological Society of America, Abstracts with Program, v. 39, p. 148.
- Reid, S.B. '08**, Gastaldo, R.A., Neveling, J., and Tabor, N., 2007, Fluvial Systems and Carbonate Nodules Reveal Late Permian Climate Change at Wapadsberg Pass, Eastern Cape Province, South Africa: Geological Society of America, Abstracts with Program, v. 39, p. 85.
- Cantor, B.M. '08, Aigler, B.V. '08, Pace, D.W. '06, Reid, S.B. '08, Thompson, C.Y. '08**, and Gastaldo, R.A., 2006, Intra- and Interspecific Variation in Stomatal Proxies for *Quercus* and *Nyssa* in the Subtropical Southeastern USA: GSA Abstracts with Program, v. 38, n. 7, p. 487.
- Reid, S.B. '08**, Gastaldo, R.A., Neveling, J., and Adendorff, R., 2006, Late Permian Fluvial Facies and Architectures Preserving an Autochthonous Leaf Litter, Wapadsberg Pass, Eastern Cape Province, South Africa: GSA Abstracts with Program, v. 38, n. 7, p. 144.
- Weidner, J. '07**, Gastaldo, R.A., and Deike, R., Rock Detective's Introduction to Whale Ear Bone Fossils for Grades K-12: GSA Abstracts with Program, v. 38, n. 7, p. 221.
- Gastaldo, R.A., and Demko, T.M., 2005, Long-term Hydrology Controls the Continental Plant-fossil Record: GSA Abstracts with Program, v. 37, n. 7, p. 118.
- Pace, D.W. '06, Desjardin, D. '06, Masters, L.B. '06, Rolerson, M.W. '06, Weeks, S.S. '06**, Gastaldo, R.A., and Neveling, J., 2005, Characteristics of Early Triassic Fluvial Systems in the Karoo Basin - Carlton Heights: GSA Abstracts with Program, v. 37, n. 7, p. 139.
- Larsen, D.J. '05, Goss, J.M. '06, Humphreys, A.E. '05, Russoniello, C.J. '06, Weeks, S.S. '06**, and Gastaldo, R.A., 2005, The Paleocology and Depositional Setting of a Silurian Mixed Siliciclastic System: Ripogenus Dam, Maine: GSA Abstracts with Program, v. 37, no. 1, p. 15.
- Gastaldo, R.A., Adendorff, R., Bamford, M., Labandeira, C., Neveling, J., and Sims, H., 2004, Taphonomic Trends of Macrofloral Assemblages across the Permian-Triassic Boundary in the Karoo Basin, South Africa: GSA Abstracts with Program, v. 36, n. 5, p. 178.
- Dunham, S.E. '05**, Deike, R., and Gastaldo, R.A., 2004, Rock Detective's Introduction to Kaolin for Grades K-12: GSA Abstracts with Program, v. 36, n. 5, p. 216.
- Gray, S.W. '05**, Neveling, J., and Gastaldo, R.A., 2004, Search for the Elusive Permian-Triassic "Laminites" in the Karoo Basin, South Africa: GSA Abstracts with Program, v. 36, n. 5, p. 74.
- Sims, H., Adendorff, R., Bamford, M.K., Gastaldo, R.A., Labandeira, C.C., Looy, C.V., and Neveling, J., 2004, Assessing Changes in Community Diversity: Portrait of a Permian Gondwanan Floodplain Ecosystem: GSA Abstracts with Program, v. 36, n. 5, p. 177.
- Sims, H.J., Adendorff, R., Bamford, M.K., Gastaldo, R.A., Labandeira, C.C., Looy, C.V., and Neveling, J., 2004, Portrait of a Permian Gondwanan ecosystem: The Clousten Farm locality in KwaZulu-Natal, South Africa: Paleontological Society of South Africa, Abstracts, v. **, p. **.
- Selover, R.W. '04**, and Gastaldo, R.A., 2003, A new interpretation of the Wagendrift Section near Estcourt, KwaZulu Natal Province, South Africa: Geological Society of America Abstracts with Program, v. 35, no. 6, A208-15.
- Nesbeda, R. '04**, and Gastaldo, R.A., 2003, Sedimentological and Geochemical Characterization of East Pond, Belgrade Lakes Watershed, central Maine: Geological Society of America Abstracts with Program, v. 35, no. 6, A84-20.
- Gastaldo, R.A., 2003, Insights into Billable Hours: Planning and Executing Lake Studies: Geological Society of America Abstracts with Program, v. 35, no. 6, A146-2.
- Shosa, J.D., Gastaldo, R.A., and King, D.W., 2003, The Advantages of Conducting Research in Our Back Yard: Geological Society of America Abstracts with Program, v. 35, no. 6, A16-1.
- Sims, H.J., Rees, P.M., Stein, W.E., Tiffney, B.H., Gensel, P.G., Wing, S.L., Raymond, A., Johnson, K.R., Wilf, P., and Gastaldo, R.A., 2003, Temporal and Spatial Patterns in the Evolution of Within-community Plant Diversity: Geological Society of America Abstracts with Program, v. 35, no. 6, A178-1.

- Allen, J.P. '03**, and Gastaldo, R.A., A Sedimentologic And Plant Taphonomic Evaluation Of The Early Middle Devonian Trout Valley Formation, Maine: AAPG Annual Meeting 2004.
- Kowalewski, M., Kidwell, S.M., Behrensmeyer, A.K., Alroy, J., Fürsich, F.T., Gastaldo, R.A., Kosnik, M.A., Plotnick, R.E., Rogers, R., 2003, Phanerozoic Taphonomy of the Marine Benthos and the Secular Patterns in the Metazoan Fossil Record: AAPG Annual Meeting 2004.
- Gibson, M.A., Gastaldo, R.A., and Blanton-Hooks, A., 2003, Invertebrate taphonomy in a paleomarine ecosystem site (Late Mississippian), Black Warrior Basin, Alabama: *Journal of the Tennessee Academy of Science*, v. 79, no. 2, p. **.
- Stevanovic-Walls, I.M., Gastaldo, R.A., and Ware, W.N., 2003, Vegetational heterogeneity in the Blue Creek mire of Early Pennsylvanian (Langsettian) age, NW Alabama: *Botanical Society of America Abstracts with Program*, p. 55.
- Gastaldo, R.A., Purkynová, E., Šimůnek, Z., and Eble, C.F., 2004, Ecological Patterns of Stability in the Namurian to Langsettian of the Silesian Basin, Czech Republic: VII International Organization of Palaeobotany Conference, Bariloche, Patagonia, Abstracts, Museo Paleontológico Egidio Feruglio, Trelew, Argentina, p. 37-39.
- Gastaldo, R.A., Stevanović-Walls, I.M., and Ware, W.N., 2004, *In Situ*, Erect Forests Are Evidence for Large-Magnitude, Coseismic Base-Level Changes within Pennsylvanian Cyclothems of the Black Warrior Basin, USA : VII International Organization of Palaeobotany Conference, Bariloche, Patagonia, Abstracts, Museo Paleontológico Egidio Feruglio, Trelew, Argentina, p. 39-40.
- Sims, H.J., Rees, P.M., Stein, W.E., Tiffney, B.H., Gensel, P.G., Wing, S.L., Raymond, A., Johnson, K.R., Wilf, P., Gastaldo, R.A., and Looy, C., 2004, Temporal and Spatial Patterns in the Evolution of Within-Community Plant Diversity: VII International Organization of Palaeobotany Conference, Bariloche, Patagonia, Abstracts, Museo Paleontológico Egidio Feruglio, Trelew, Argentina, p. 102-103.
- King, D.W., Shosa, J.D., and Gastaldo, R., 2003, Design and Implementation of an Integrated Sampling Platform for Geochemical Investigations of Maine Lakes: Abstract GEOC 86, 25th ACS National Meeting, New Orleans, LA.
- Allen, J.P. '03, Lansdale, A.L. '03, Bierwirth, M.S. '04, Dushman, B.E. '03, Kaferle, A.M. '03, Nesbeda, R. '04, Ossolinski, J.E. '03, Selover, R.W. '03**, and Gastaldo, R.A., 2003, Sediment Characteristics of Messalonskee Lake, Belgrade Lakes Region, Central Maine: *GSA Abstracts with Program*, v. 35, No. 3, p. 72.
- Kowalewski, M., Behrensmeyer, A.K., Fürsich, F.T., Gastaldo, R.A., Kidwell, S.M., Kosnik, M.A., Plotnick, R.E., Rogers, R., and Alroy, J., 2002, Phanerozoic Taphonomy of Marine Benthos: Fidelity and Secular Trend: *GSA Abstracts with Program*, v. 34, No. 6, p. 542.
- Gastaldo, R.A., Stevanović-Walls, I.M., and Ware, W.N., 2002, The Blue Creek Coal Mire: A Polaroid Picture in Time: *GSA Abstracts with Program*, v. 34, No. 6, p. 211.
- Allen, J.P. '03**, Gastaldo, R.A., and Nelson, R.E., 2002, Wetland Plant Assemblages of the Trout Valley Formation, Middle Devonian, Maine: *GSA Abstracts with Program*, v. 34, No. 6, p. 18-19.
- Selover, R.W. '04**, Nelson, R.E., and Gastaldo, R.A., 2002, Middle Devonian Estuarine Macrofauna from the Trout Valley Formation of North-central Maine: *GSA Abstracts with Program*, v. 34, No. 6, p. 257-258.
- Sims, H.J., Gensel, P.G., Tiffney, B.H., Wing, S.L., Gastaldo, R.A., Rees, P.A., Stein, W.E., and Raymond, A., 2002, The Evolution of Within-Community Phanerozoic Land Plant Diversity: *GSA Abstracts with Program*, v. 34, No. 6, p. 161.
- Nelson, R.E., Gastaldo, R.A., **Allen, J.P. '03, Lindley, C.F. '02, Terkla, M.G. '02**, and **Trout, M.K. '01**, 2001, Early Middle Devonian Arthropod Remains from the Trout Valley Formation of North-central Maine, U.S.A: *Geological Society of America, Abstracts with Programs*, v. 33, no. 6, p. A-265.
- Allen, J.P. '03**, Gastaldo, R.A., and Nelson, R.E., 2001, Sedimentological Framework of the Trout Valley Formation, Middle Devonian, Maine: *Geological Society of America Abstracts with programs*, v. 33, no. 6, p. A-75.
- Severs, M.J. '02**, Rueger, B.F., and Gastaldo, R.A., 2001, The Holocene History of Warwick Pond, Bermuda: *Geological Society of America, Abstracts with Programs*, v. 33, no. 6, p. A-314.
- Gastaldo, R.A., 2001, the Relationship Between Bedform and Log Orientation: Is There Any Reliability in Using Woody Phytoclasts as Paleocurrent Indicators?: *Geological Society of America, Abstracts with Programs*, v. 33, no. 6, p. A76.
- Gastaldo, R.A., Ware, W.N., and Stevanovic-Walls, I.M., 2002, Evidence for Tectonic Factors in the Preservation of Autochthonous Carboniferous Forests, Black Warrior Basin: *Geological Society of America, Abstracts with Program*, v. 34, no. 1, p. A-57.

- Terkla, M.G., '01, Allen, J.P., '02,** Nelson, R.E., and Gastaldo, R.A., 2002, Lower Middle Devonian Eurypterid remains from the Trout Valley Formation of North-Central Maine: Geological Society of America, Abstracts with Program, v. 34, no. 1, p. A72.
- Gastaldo, R.A., Rueger, B.F., and **Tackaberry, W.J. '01,** 2001, Spittal Pond, Bermuda: What do you **want** the Holocene history to be?: 11th Symposium on the Geology of the Bahamas and Other Carbonate Regions, San Salvador, Bahamas.
- Shosa, J.D., Gastaldo, R.A., and King, D.W., 2001, Integration of Research and Curriculum: The Belgrade Lakes Project: CUR Undergraduate Research Symposium.
- Lindley, C.F. '02,** and Gastaldo, R.A., 2001, Dispersed organic matter (Palynofacies) in coastal environments: An example from the Mobile-Tensaw River delta and bay, Alabama: Geological Society of America, Abstracts with Program, v. 33, no. 1, p. A28.
- Gastaldo, R.A., Nelson, R.E., **Bandow, S.C. '03, Lindley, C.F. '02,** and **Trout, M.K. '01,** 2001, Early Middle Devonian Terrestrial Ecosystems of Maine: the Trout Valley Formation Revisited: Geological Society of America, Abstracts with Program, v. 33, no. 1, p. A63.
- Tackaberry, W.A. '01,** Rueger, B.F., and Gastaldo, R.A., 2000, Local Environmental Perturbations as Evidenced by Sedimentological Analysis: Spittal Pond, Bermuda: Geological Society of America, Abstracts with Program, v. 33, no. 1, p. A24.
- Gastaldo, R.A., Purkynová, E., Šimůnek, Z., Drábková, J., and Eble, C.F., 2000, Patterns of Vegetational Persistence in Coastal and Continental Interiors of the Carboniferous Icehouse. Silesian Coal Basin, Czech Republic. Geological Society of America, Abstracts with Program, v. 32, no. 7, p. A153.
- Tackaberry, W.A. '01,** Rueger, B.F., and Gastaldo, R.A., 2000, Sedimentology and Holocene history of Spittal Pond, Bermuda: Geological Society of America, Abstracts with Program, v. 32, no. 7, p. A178.
- Lindley, C.F. '02,** Gastaldo, R.A., and Pross, J., 2000, Palynofacies characterization of Holocene Bay sediments from the Mobile-Tensaw River system, Alabama: Geological Society of America, Abstracts with Program, v. 32, no. 7, p. A413.

SUMMARY OF SERVICE

Paleontology Society, Committee on Student Grant-in-Aid of Research - 2003
EPA Science to Achieve Results (STAR) Fellowships for Graduate Study Program - 1998
National Science Foundation Panel Member (NSF-EAR) - 1996-2000
National Science Foundation Panel Member (NSF-ILI) - 1997, solicited for 1998
National Science Foundation Panel Member (NSF SST) - 1979
National Science Foundation Panel Member (NSF EAPSI) - 2006-2007
Co-Editor, PALAIOS, 1996-2002
Associate Editor, PALAIOS, 1989-1996; 2002-present
Associate Editor, Geological Society of America Bulletin, 1993-1996
Editorial Board, Review of Palaeobotany and Palynology, 1993-2007
Editorial Board, Senckenbergiana Lethaea, 2004-present
Editorial Board, Journal of Taphonomy, 2003-present

Reviewer: Academic Press; Alabama Academy of Science; American Chemical Society, Petroleum Research Fund; American Journal of Botany; American Philosophical Society; Benjamin/Cummings Publishing Company; Botanical Gazette; Cambridge University Press; Charleston Museum Publications, Charleston, SC; Council for International Exchange of Scholars; Geobios; Geology; Geological Society of America, Bulletin; Geological Society of America, Special Papers; International Congress of Carboniferous Geology and Stratigraphy; International Journal of Coal Geology; Journal of Paleontology; Journal of Sedimentary Petrology; Kansas Geological Survey; Maritime Sediments and Atlantic Geology; The Mosasaur; National Science Foundation, International Exchange Programs; The National Research Council, U.K.; Natural Environmental Research Council, U.K.; Nature; National Science Foundation, Stratigraphy & Paleontology; National Science Foundation, Systematic Biology; Neues Jahrbuch für Geologie und Paläontologie, Abhandlungen; Palaeogeography, Palaeoclimatology, Palaeoecology; Palaeontographica Abt. B; PALAIOS; Paleobiology; Palynology; Paleontology Society Short Course Notes; Review of Palaeobotany & Palynology; Sedimentary Geology; Sigma Xi, National Research Honorary; Science; Smithsonian Scholarly Studies Program; Société Géologique de France; Springer-Verlag Publishing; W.C. Brown Company Publishers; PalSIRP;

Selected Societal Responsibilities

Co-Chairman and Convener Symposium: Validity of "Ancient Earth" Data. Southeastern GSA, Florida State University, Tallahassee, 17 March 83.

Field Trip Leader - Early Pennsylvanian plant fossils in northeast Alabama. American Fern Society Annual Meeting, 20 September 83.

Convener and Co-Chairman Symposium, Carboniferous Paleontology, Paleoecology and Biostratigraphy, Southeast Section Paleontological Society Symposium, Lexington, KY. 5 April, 1984.

Field Trip Organizer: Pre-Meeting Field Trip Paleobotanical Section, Botanical Society of America. Auburn University Continuing Education Program, 5-8 September, 1985.

Convener and Co-Chairman Symposium, Plant Taphonomy: Organic Sedimentary Processes, AAPG-SEPM Meetings, Atlanta, 16 June 1986.

Convener and Chairman, Fossil Land Plants: A Short Course, Paleontology Society Short Course, Geological Society of America Meetings, San Antonio, 9 November 1986.

Invited Participant, Evolution of Terrestrial Ecosystems Workshop, USNM, Smithsonian Institution, 28-29 January, 1987.

Invited Participant, Evolution of Terrestrial Ecosystems Workshop, Airlie House, Warrenton, VA., Smithsonian Institution, 15-19 May 1987.

Co-chairman UNESCO International Geological Correlation Programme Project 216 Symposium, "Paleofloristic and paleoclimatic changes in the Cretaceous and Tertiary," Prague, Czechoslovakia, 28 August - 2 September 89.

Field Trip Organizer: Post-Meeting Field Trip, Southeastern GSA, Tuscaloosa, AL, 7-8 April 90.

Chairman PALEOZOIC PALEOBOTANY, Pan-European Paleobotanical Conference, Vienna, Austria - 19 September 91.

Chairperson, Tertiary of central European basin, International Organization of Palaeobotany, Paris, France - 1 September 92.

Field Trip Organizer: Pre-Meeting Field Trip Paleobotanical Section, Botanical Society of America. Knoxville, TN. August 1994.

Council Member, SEPM May 1996-2002

Field Trip Organizer, Pre-Meeting Field Trip International Palynological Conference, Houston, TX June 1996.

Co-Chairman, Evolution of Terrestrial Vegetation and Taphonomy Session, International Organization of Palaeobotany, Santa Barbara, CA - 5 July 96.

Developer & Writer, Module 9 – AGI's EarthWorks, National Middle School Curriculum

Organizing Committee, Paleontology in the 21st Century, Senckenberg Museum, Frankfurt, Germany, August 1997.

Co-Chair/Treasurer: Southeast Geological Society of America Meeting, Auburn, AL March 1997.

Co-Chair and Organizer: Plant Taphonomy and Paleoclimates, Geological Society of America National Meeting Theme Session, Salt Lake City, UT, 23 October 97.

Team Leader Unit VI – AGI's EarthComm, National High School Earth Science Curriculum 1998

Developer & Writer, Unit VI Chapter 18 – AGI's EarthComm, National High School Earth Science Curriculum 1998

Paleontological Society Council – Councillor Unrestricted 2002-2004

Curriculum Developer – AGI's Concepts for Understanding Earth Science, National Middle School Earth Science Curriculum 2003-2004

Co-Convener and Session Chair: Gastaldo, R.A., and DiMichele, W.A., Vegetational Response(s) to Critical Times in Earth History: VII International Organization of Palaeobotany Conference, Bariloche, Patagonia, 2004.

Co-Convener and Session Chair: Gee, C., Gastaldo, R.A., and Ferguson, D., Plant Taphonomic Processes and the Interpretation of Fossil Assemblages. VII International Organization of Palaeobotany Conference, Bariloche, Patagonia, 2004.

Co-Convener and Session Chair: Eble, C., Demchuk, T.D., Pfefferkorn H.W., and Gastaldo, R.A., "Ice House" / "Hothouse" – An Analysis of Late Paleozoic Floras and Their Response to Global Climate Change: GSA, Philadelphia, 2006.

Co-Convener and Session Chair: Gee, C. and Gastaldo, R.A., Plant taphonomic processes: case studies in paleobotany and palynology, VIII IOPC Bonn, Germany 2008.

Co-Convener and Session Chair: Gastaldo, R.A., DiMichele, W.A., and Montanez, I., GSA Topical Session - Permian and Triassic Terrestrial Biotic Responses to Global Perturbations, Houston, TX, 2008.

Classroom lecturer and assistance to local and regional elementary, middle, and high schools, including Science Olympiad competitions.