



Publications Related to Stratigraphy, Sedimentology and Paleontology

(All featured fossils in publications are self-collected.)

- 1) Becker, M., Slattery, W., and Chamberlain, J., 1996, Reworked Campanian and Maastrichtian Macrofossils in a Sequence Bounding Transgressive Lag Deposit, Monmouth County, New Jersey, *Northeast Geology and Environmental Science*, Vol. 18, pp. 234-252.
- 2) Becker, M., Slattery, W., and Chamberlain, J., 1998, Mixing of Santonian and Campanian Chondrichthyan and Ammonite Macrofossils along a Transgressive Lag Deposit, Greene County, Western Alabama, *Southeastern Geology*, Vol. 7, No. 1, pp. 1-12.
- 3) Becker, M., Meier, J., and Slattery, W., 1999, Spiral Coprolites from the Upper Cretaceous Wenonah-Mt. Laurel and Navesink Formations in the Northern Coastal Plain of New Jersey, *Northeastern Geology and Environmental Science*, Vol. 21, No. 3, pp. 181-187.
- 4) Becker, M., Chamberlain, J., and Stoffer, P., 2000, Pathological Tooth Deformities in Modern and Late Cretaceous Chondrichthyans: A Consequence of Feeding Related Injury, *Lethaia*, Vol. 36, No. 2, pp. 1-16.
- 5) Becker, M., and Chamberlain, J., 2001, Fossil Turtles from the Lowermost Navesink Formation (Maastrichtian) in Monmouth County New Jersey, *Northeastern Geology and Environmental Science*, Vol. 23, No. 4, pp. 332-339.
- 6) Chamberlain, J., Terry, D., Stoffer, P., and Becker, M., 2001, Paleontology of the K/T Boundary: Badlands National Park, South Dakota; in Santucci, V. L. and McClelland, L., eds., Proceedings of the 6th Fossil Resource Conference: *National Park Service Geological Resource Division Technical Report*, pp. 11-22.
- 7) Becker, M., Earley R., and Chamberlain, J., 2002, A Survey of Non-Tooth Chondrichthyan Hard-Parts from the Lower Navesink Formation (Maastrichtian) in Monmouth County, New Jersey, *Northeastern Geology and Environmental Science*, Vol. 24, No. 4, pp. 282-292.
- 8) Becker, M., Chamberlain J., and Terry, D., 2004, Chondrichthyans from the Fairpoint Member of the Fox Hills Formation (Maastrichtian), Meade County South Dakota, *Journal of Vertebrate Paleontology*, Vol. 24, pp. 780-793.
- 9) Becker, M., Brady, D., and Chamberlain, J., 2005, Rostral Morphology of the Sawfish, *Ischyrhiza mira*, from the Lower Navesink Formation (Maastrichtian) Monmouth County, New Jersey, *Northeastern Geology and Environmental Science*, Vol. 23, No. 4, pp. 332-339.
- 10) Becker, M., Chamberlain, J., and Wolf, G. 2006, Chondrichthyans from the Arkadelphia Formation (Upper Cretaceous: late Maastrichtian) of Hot Spring County, Arkansas, *Journal of Paleontology*, Vol. 80, No. 4, pp. 700-716.
- 11) Becker, M., and Chamberlain, J., 2006, Evidence for a Shark-Bitten Turtle Costal From The Lowermost Navesink Formation (Campanian-Maastrichtian) Monmouth County, New Jersey, *Northeastern Geology and Environmental Science*, Vol. 28, No. 2, pp. 174-181.
- 12) Becker, M., and Chamberlain, J., 2006, Anomuran Microcoprolites from the Lowermost Navesink Formation (Maastrichtian), Monmouth County, New Jersey, *Ichnos*, Vol. 13, pp. 1-9.
- 13) Becker, M., Chamberlain, R., and Chamberlain, J., 2007, The Paradox of Large Carcharhinoid-Type Shark Vertebrae in the Upper Cretaceous of New Jersey, *Proceeding of the Geological Association of New Jersey*, Vol. 24, pp. 69-84.
- 14) Becker, M., Chamberlain, R., and Chamberlain, J., 2007, Large Carcharhinoid-Type Shark Vertebrae in the Upper Cretaceous of New Jersey: Evidence for an Anacoracid Origin, *Northeastern Geology and Environmental Science*, Vol. 30, pp. 118-129.
- 15) Becker, M., Chamberlain, J., Seidemann, D., Buhl, D., and Slattery, W., 2008, Strontium Isotopic Signatures in the Enameloid and Dentine of Upper Cretaceous Shark Teeth from Western Alabama: Paleologic and geochronologic implications, *Palaeogeography, Palaeoclimatology and Palaeoecology*, Vol. 264, pp. 188-194.

- 16) Becker, M., Chamberlain, J., Lundberg, J., L'Amoreaux, W., Chamberlain, R., and Holden, T., 2009, Acanthomorph Fish Fossils with Probable Berciform Relationships (Osteichthyans: Teleostei: Beryciformes) From the Late Cretaceous-Early Tertiary of New Jersey, *Proceeding of the Philadelphia Academy of Sciences*, Vol. 158, pp. 159-181.
- 17) Becker, M., Chamberlain, J., Robb, A. Terry, D. and Garb, M., 2009, Osteichthyans from the Fairpoint Member of the Fox Hills Formation (Maastrichtian), Meade County, South Dakota, USA, *Cretaceous Research*, Vol. 30, pp. 1031-1040.
- 18) Becker, M., Wellner, R., Mallery, C., Chamberlain, J., 2010, Chondrichthyans from the Lower Ferron Sandstone Member of the Mancos Shale (Upper Cretaceous: Middle Turonian) of Emery and Carbon Counties Utah, USA. *Journal of Paleontology*, Vol. 84, pp. 248-266.
- 19) Becker, M., Chamberlain, R. and Chamberlain, J., 2010, Probable Elk-Moose Cervical Vertebra Dredged from the Inner Continental Shelf off Central New Jersey. *Atlantic Geology*, Vol. 46, pp. 7-18.
- 20) Becker, M., Mallery, C., and Chamberlain, J., 2010, Osteichthyans from the Arkadelphia Formation (Late Maastrichtian) of Hot Spring County, Arkansas, USA, *Journal of Vertebrate Paleontology*, Vol. 30, pp. 1019-1036.
- 21) Becker, M., Smith, L., and Chamberlain, J., 2011, Chondrichthyans from the Clayton Limestone Unit of the Midway Group (Paleogene: Paleocene) of Hot Spring County, Arkansas. *Cainozoic Research*, Vol. 4, pp. 194-207.
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- 23) Becker, M., and Chamberlain, J., 2012, *Squalicorax* Chips a Tooth: A Consequence of Feeding-Related Behavior from the Lowermost Navesink Formation (Late Cretaceous: Campanian-Maastrichtian) of Monmouth County, New Jersey, USA. *Geosciences*, Vol. 2, pp. 109-129.
- 25) John, J., Seidemann D., Chamberlain, J., Cheng, Z. and Becker, M., 2012, Trace and Minor Element Chemistry of Modern Shark Teeth and Implications for Shark Tooth Geochronometry, pp. 1-31. In *Strontium: Chemical Properties, Applications and Health Effects*, Editors: Wai, M. and Guan Gong, X., Nova Science Publishers, Hauppauge, New York, ISBN: 978-1-62257-632-6.
- 25) Becker, M., Maisch, H. and Chamberlain, J., 2012, Pycnodonts from the Lower Ferron Sandstone Member of the Upper Cretaceous Mancos Shale (Middle Turonian), Emery and Carbon Counties, Utah. *The Mountain Geologist*, Vol. 4, p. 101-114.
- 26) Becker, M., Maisch, H., and Chamberlain, J., 2013, Plesiosaurian Remains from the Arkadelphia Formation-Midway Group Contact (Maastrichtian-Paleocene) Hot Spring County, Near Malvern, Arkansas, USA. *Paludicola*, Vol. 9, p. 131-143.
- 27) Becker, M., and Bartholomew, A., 2013, Lower Devonian Glacial Erratics from High Mountain, northern New Jersey, USA: Discovery, Provenance, and Significance. *Atlantic Geology*, Vol. 49, p. 194-203.
- 28) Maisch, H., Becker, M., Raines, B., and Chamberlain, J., 2014, Chondrichthyans from the Tallahatta-Lisbon Formation Contact (Middle Eocene) Silas, Choctaw County, Alabama. *Paludicola*, Vol. 9, p. 183-209.
- 29) Maisch, H., Becker, M., and Chamberlain, 2015, Chondrichthyans from a Lag Deposit between the Shark River Formation (Middle Eocene) and Kirkwood Formation (Early Miocene), Monmouth County, New Jersey. *Paludicola*, Vol. 10, p. 149-213.
- 30) Becker, M., Maisch, H., and Bartholomew, A., 2016, Pleistocene Ice Flow Direction indicated by *Terataspis grandis* (trilobite) bearing erratics from the Rickard Hill Facies of the Saugerties Member of the Schoharie Formation (Lower Devonian), *Northeastern Geosciences*, In press.

Papers and Lectures for Conferences or Professional Societies

- 1) Becker, M., Slattery, W., and Buhl, D., 1999, Bimodal Age Distribution of Chondrichthyan Teeth in a Transgressive Lag Deposit Determined by Strontium Isotopic Ratios: An Example from the Upper Cretaceous of Alabama, U.S.A., *Geological Society of America: Abstracts with Programs* No. 234. Denver, Colorado.
- 2) Becker, M., Meier, J., and Slattery, W., 1999, Spiral Coprolites from the Upper Cretaceous Wenonah-Mt. Laurel and Navesink Formations in the Northern Coastal Plain of New Jersey, *Geological Society of America: Abstracts with Programs*, No. 4. Providence, Rhode Island.
- 3) Becker, M., Chamberlain, J., and Stoffer, P., 2000, Pathological Tooth Deformities in Late Cretaceous Chondrichthyans: A Consequence of Feeding Related Injury, *Geological Society of America: Abstracts with Programs*, No. 4. New Brunswick, New Jersey.
- 4) Becker, M., and Chamberlain, J., 2000, Probable Cervical Vertebra From the Extinct Elk-moose, *Cervalces scotti*, Dredged from the Inner Continental Shelf of Central New Jersey, *Geological Society of America: Abstracts with Programs*, No. 26. Reno, Nevada.

- 5) Chamberlain, J., Terry, D., Stoffer, P., and Becker, M., 2001, Fossils of the Cretaceous/Tertiary Transition, Badlands Region of South Dakota, *Geological Society of America: Abstracts with Programs*, No. 28. Boston, Massachusetts.
- 6) Becker, M., Earley, R., and Chamberlain, J., 2001, Taphonomy of Fossil Turtles from the Lowermost Navesink Formation in Monmouth County, New Jersey, *Geological Society of America: Abstracts with Programs*, No. 43. Boston, Massachusetts.
- 7) Becker, M., Earley, R., and Chamberlain, J., 2002, A Survey of Non-Tooth Chondrichthyan Hard-Parts from the Lower Navesink Formation (Maastrichtian) in Monmouth County, New Jersey, *Geological Society of America: Abstracts with Programs*, No. 74. Denver, Colorado.
- 8) Becker, M., Chamberlain, J., and Terry, D. 2003, Chondrichthyans of the Fairpoint Member of the Fox Hills Formation, Meade County, South Dakota, *Geological Society of America: Abstracts with Programs*, No. 149. Seattle, Washington.
- 9) Becker, M., Brady, D., and Chamberlain, J., 2003, Rostral Morphology of the Sawfish, *Ischyrrhiza mira*, from the Lower Navesink Formation (Maastrichtian) Monmouth County, New Jersey, *Geological Society of America: Abstracts with Programs*, No. 224. Seattle, Washington.
- 10) Terry, D, Chamberlain, J., Stoffer, P., Becker, M., Jannett, P., Palamarczuk, S., Garb, M., and Beeney, B., 2004, A Widespread Zone of Soft Sediment Deformation and Ejecta in the Fox Hills Formation of Southwest South Dakota: an Impactite without a Crater, *Geological Society of America: Abstracts with Programs*, No. 36. Baltimore, Maryland.
- 11) Becker, M., Chamberlain, J., and Wolf, G. 2005, Chondrichthyans from the Arkadelphia Formation (Late Maastrichtian) of Hot Spring County, Arkansas, *Geological Society of America: Abstracts with Programs*, No. 5. Denver, Colorado.
- 12) Chamberlain, J., Becker, M., and Garb, M., 2005, Sharks from the Basal Hornerstown Formation, Monmouth County, New Jersey: Implications for a Severe Chondrichthyan Extinction at or Near the K/T Boundary, *Geological Society of America: Abstracts with Programs*, No. 1. Saratoga Springs, New York.
- 13) Becker, M., and Chamberlain, J., 2005, Anomuran Microcoprolites from the Lowermost Navesink Formation (Maastrichtian), Monmouth County, New Jersey, *Geological Society of America: Abstracts with Programs*, No. 57. Salt Lake City, Utah.
- 14) Chamberlain, J., and Becker, M., 2005, Biostratigraphy and Age of the Lower Fairpoint Member of the Fox Hills Formation (Maastrichtian), Badlands Area of South Dakota, *Geological Society of America: Abstracts with Programs*, No. 160. Salt Lake, Utah.
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- 16) Mielnik, K., Chamberlain, J., Garb, M., and Becker, M., 2006, Chondrichthyans from the Cretaceous-Tertiary Boundary Sequence, Monmouth County, New Jersey, *Geological Society of America: Abstracts with Programs*, No. 70. Philadelphia, Pennsylvania.
- 17) Becker, M.A., Chamberlain, R.B., and Chamberlain, J.A., Jr., 2007. Annular and non-annular banding in shark vertebrae: what it tells us about ontogeny and behavior in fossil sharks. History of Earth Sciences & E.L. Yochelson Memorial Symposium, Northeastern Science Foundation, Troy, NY, June 24-26, page 7.
- 18) Becker, M.A., Chamberlain, R.B., and Chamberlain, J.A., Jr., 2007. The Paradox of Large Carcharhinoid-Type Shark Vertebrae in the Upper Cretaceous of New Jersey, Geological Association of New Jersey, Oct. 12, 2007. In: *Contributions to the Paleontology of New Jersey: Field Guide and Proceedings*. Emma C. Rainforth (ed.), Vol. 24, 112p. East Stroudsburg, Pennsylvania.
- 19) Becker, M., Chamberlain, R., Chamberlain, J., Sosna, M., and Linteris, J., 2007, The Paradox of Large Carcharhinoid-Type Shark Vertebrae in the Upper Cretaceous of New Jersey, *Geological Society of America: Abstracts with Programs*, No. 26. Denver, Colorado.
- 20) Mielnik, K., Chamberlain, J., Garb, M., and Becker, M., 2007, Chondrichthyan Diversity at the Cretaceous-Tertiary Boundary, Western Monmouth County, New Jersey, *Geological Society of America: Abstracts with Programs*, No. 208. Denver, Colorado.
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- 22) Becker, M.A., Chamberlain, J., Robb, A.J., Terry, D.O., Jr., Garb, M.P., and Linteris, J.W., 2008, A Cosmopolitan Osteichthyan Fauna from in and around the Debris Cones of Harvester Ant Nests: Fairpoint Member of the Fox Hills Formation (Maastrichtian), Meade County, South Dakota. *Geological Society of America: Abstracts with Programs*, No. 39. Houston, Texas.
- 23) Becker, M. and Mallery, C., 2009, Osteichthyans from the Arkadelphia Formation (Late Cretaceous: Late Maastrichtian) of Hot Spring County, Arkansas, *Geological Society of America: Abstracts with Programs*, 41. St. Petersburg, Florida.

- 24) Becker, M. and Linteris, 2009, Dental Morphology of Middle Cretaceous Pycnodonts from the Lower Ferron Sandstone Member of the Mancos Shale (Middle Turonian) Carbon County, Utah. *Geological Society of America: Abstracts with Programs*, No. 172. Portland, Oregon.
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- 27) Becker, M., Ott, K., Koney, A., and Chamberlain, J., 2011, *Squalicorax* Chips a Tooth: A Consequence of Feeding-related Behavior from the Wenonah-Mt. Laurel and Navesink Formations (Late Cretaceous: Campanian-Maastrichtian) of Monmouth County, New Jersey. *Geological Society of America: Abstracts with Programs*, Session No. 25 Pittsburg, Pennsylvania.
- 28) Becker, M., and Chamberlain, J., 2011, Osteichthyans from the Clayton Limestone Unit (Midway Group: Paleogene: Paleocene), Hot Spring County, Arkansas: Implications for Fish Evolution in the Aftermath of the End-Cretaceous Mass Extinction. *Geological Society of America: Abstracts with Programs*, No. 26. Pittsburg, Pennsylvania.
- 29) Becker, M., Bartholomew, A., Cutuli, J., Koney, A., and O'Brien, A., 2011, Schoharie Formation (Lower Devonian) Glacial Erratics from the Preakness Formation, (Lower Jurassic) of High Mountain, Passaic County, New Jersey. *Geological Society of America: Abstracts with Programs*, No. 99. Minneapolis, Minnesota.
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- 32) Becker, M., Maisch, H., Raines, B., and Chamberlain, J., 2014, Chondrichthyans from the Tallahatta-Lisbon Formation Contact (Middle Eocene) Silas, Choctaw County, Alabama. *Geological Society of America: Abstracts with Programs*, Vol. 46, p. 81. Lancaster, Pennsylvania.
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- 34) Brems, R., Heinemann, A., Scimeca, R., Maisch, H., Becker, M., and Bartholomew, A., 2015, Cephalopod Diversity in the Lower Devonian Schoharie Formation: A Unique Opportunity for Reassessment of Diversity from Glacial Erratics *Geological Society of America Abstracts with Programs*. Vol. 47, p.138. Mt. Washington, New Hampshire.
- 35) Maisch, H., Scimeca, R., Becker, M., Raines, B., and Chamberlain, J., 2015, Fish Remains from the Tallahatta-Lisbon Formation Contact (Middle Eocene-Lutetian) Pigeon Creek, Covington County, Alabama. *Geologic Society of America Abstracts with Programs*. Vol. 47, p.132. Mt. Washington, New Hampshire.
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- 37) Maisch, H., Scimeca, R., Becker, M., Raines, B., and Chamberlain, J., 2016, Fish Remains from the Tallahatta-Lisbon Formation Contact (Middle Eocene-Lutetian) Pigeon Creek, Covington County, Alabama. *Geologic Society of America Abstracts with Programs*, Vol. 47, P. 69-24.
- 38) Becker, M., Pacella, O., Bartholomew, A., Maisch, H., and Chamberlain, J., 2016, Trilobites from the Rickard Hill Facies of the Saugerties Member of the Schoharie Formation (lower Devonian), Helderberg Mountains, New York: A Case Study from Glacial Erratics, *Geologic Society of America Abstracts with Programs*, Vol. 48, P. 61-5.
- 39) Younger, Z., Bartholomew, A., Becker, M., and Maisch, H., 2016, Brachiopods from the Rickard Hill Facies of the Saugerties Member of the Schoharie Formation (Lower Devonian), Helderberg Mountains, New York: A Case Study from Glacial Erratics, *Geologic Society of America Abstracts with Programs*, Vol. 48, p. 61-14.
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