

BENJAMIN MARTIN WAGGONER

Biographical Information

Born: September 20, 1969; Lafayette, Louisiana

Current Home Address:

612 Locust St., Apt. #7
Conway, AR 72034 USA

Current Professional Address:

Department of Biology
University of Central Arkansas
Conway, AR 72035-5003 USA
Phone: (501) 450-5037
FAX: (501) 450-5914
E-mail: benw@mail.uca.edu
WWW: <http://faculty.uca.edu/~benw/>

Education

High School: Acadiana High School, Lafayette, Louisiana, 1983-1987

B. S. *summa cum laude* (Biology), Tulane University, New Orleans, 1991

B. A. *cum laude* (Russian), Tulane University, New Orleans, 1991

Ph. D. (Integrative Biology), University of California, 1998

Positions

August 1997-present: Assistant Professor, Department of Biology, University of Central Arkansas. Received tenure May 2003.

1996-August 1997: Graduate Student Research Affiliate, University of California Museum of Paleontology

July-December, 1993: Visiting scholar, Paleontological Institute, Moscow

August 1991-December 1996: Graduate Student Instructor (GSI), Department of Integrative Biology, University of California

June 1991-August 1991; June 1992-August 1992: curatorial assistant, University of California Museum of Paleontology

Professional Affiliations

Paleontological Society

Palaeontological Association

International Palaeontological Association

American Microscopical Society

Society of Systematic Biologists

UNESCO International Geological Correlation Project 366: Ecological Aspects of the Cambrian Radiation

Courses Taught:

UC-Berkeley (teaching assistant)

Biology 1A, General Biology

Biology 1B, General Biology
Biology 11, General Biology (non-majors' biology)
Integrative Biology 82, Introduction to the Oceans
Integrative Biology 131L, Human Anatomy Laboratory
University of Central Arkansas (professor)
Biology 1120, Freshman Biology Seminar
Biology 1400, Biology for General Education (non-majors' biology)
Biology 4250, Scanning Electron Microscopy
Biology 4402, Vertebrate Zoology
Biology 4415, Evolution
Biology 6330, History of Biology
Biology 6450, Systematics and Classification
Honors College 3150, 3350, Junior Seminar
Science Education 3410, Earth Science

Professional and Community Service

Co-Organizer (with Jere H. Lipps), Paleontological Society Short Course,
"Biological Revolutions in the Neoproterozoic and Cambrian." (In
progress; course scheduled for fall 2004)
Book Review Editor, *Palaeontologica Electronica*: December 2001-present
Ad hoc manuscript reviewer
1998: *Journal of Evolutionary Biology*; *Nature*; *Palaios*
2000: *Science*; *Nature*; *Journal of Paleontology*; *Biological Reviews*; *American
Malacological Bulletin*
2001: *Journal of Paleontology*; *Journal of Morphology*; *Nature*
2002: *Botanical Journal of the Linnean Society*; *Science*; *Nature*;
Palaeontology; *Palaeogeography*, *Palaeoecology*, *Palaeoclimatology*;
Integrative and Comparative Biology; *Lethaia*
2003: *Palaeontology*; *Palaeogeography*, *Palaeoecology*; *Lethaia*; *Journal of
Paleontology*
Textbook reviewer: Addison-Wesley-Longman, 2000; McGraw-Hill, 2002;
Blackwell, 2002
Book proposal reviewer: University of California Press, 2001; Cambridge
University Press, 2003
Ad hoc grant reviewer: NSF, Geology and Paleontology Division, 1999, 2002;
NERC, 2002; Civilian Research and Development Foundation, 2003

Academic Honors

Phi Beta Kappa (Alpha of Louisiana)
National Merit Scholar, 1987
Deans' Honor Scholar, Tulane University, 1987-1991'
UCA Research, Scholarship and Creativity Faculty Award, 2003

Skills

Languages
English, Spanish, Russian, limited French (spoken and written)

Computer skills

Extensive HTML and Web design experience
Familiarity with Macintosh, Windows, and UNIX platforms
Software: Word, Photoshop, PowerPoint, Excel, etc.

Film developing and printing (B&W)

Scanning Electron Microscopy

Experience with both traditional SEM and Environmental Scanning Electron
Microscope (ESEM) operation

X-ray elemental analysis (EDS)

Biological and geological sample preparation

Medical laboratory technician, Berkeley Free Clinic, 1991-1997

Clinical microscopy, urinalysis

Grants:

“Acquisition of a Laser Scanning Confocal Microscope for Natural Sciences Research and Teaching”. National Science Foundation grant #DBI-0215847, 2002. \$225,155.
(Senior Investigator; Steven Runge, UCA, PI)

“Acquisition of a Scanning Electron Microscope for Natural Sciences Research and Training.” National Science Foundation grant #DBI-0079582, 2000. \$136,672.
(Co-PI with Paul V. Hamilton and Carl K. Frederickson, UCA).

“Cambrian Fossils of Eastern California and West-Central Nevada.” UCA University
Research Council grant #212-138, 2000. \$3105.

Students:

Hannah Young: B. S. honors thesis, UCA Honors College, 1997-1998. Title: “Where’s
the Science in Creation Science?”

Karen McDonald: M.S. thesis, UCA Department of Biology, 2000-2001. Title: “A
paleoecological reconstruction of the Imo Formation (Mississippian, Chesterian)
from the Peyton Creek roadcut in north-central Arkansas.”

Heather Stottman: M.S. thesis, UCA Department of Biology, 2001-2003. Title: “A
Mazon Creek-type fossil assemblage from the Pennsylvanian of the Arkansas
River valley.”

PEER-REVIEWED PUBLICATIONS

Research Papers:

- Waggoner, B. and Hagadorn, J. W. Conical fossils from the Lower Cambrian of California and Nevada, USA. *PaleoBios*: in press (accepted April 21, 2003).
- Waggoner, B. M. Paleobiogeography of the Late Precambrian “Ediacara biota” and the use of phylogenetic contrast analyses in biogeography. *Palaeogeography, Palaeoclimatology, Palaeoecology*: in press (accepted January 10, 2003).
- Waggoner, B. M. and Collins, A. G. *Reductio ad absurdum*: Testing the evolutionary relationships of problematic fossils using molecular divergence dates. *Journal of Paleontology*: in press (anticipated publication date January 2004).
- Waggoner, B. and Hagadorn, J. W. An unmineralized ?chlorophycean alga from the Lower Cambrian of California, USA. *Neues Jahrbuch für Geologie und Paläontologie, Monatshefte*: in press (anticipated publication date December 2003).
- Waggoner, B. Non-trilobite arthropods from the Silver Peak Range, Nevada. *Journal of Paleontology* **77**(4): 706-720.
- Peterson, K. J., Waggoner, B., and Hagadorn, J. W. A fungal analog for Newfoundland Ediacaran fossils? *Integrative and Comparative Biology***43**(1): 127-136.
- Waggoner, B. M. The Ediacaran biotas in time and space. *Integrative and Comparative Biology* **43**(1): 104-113.
- Hagadorn, J. W. and Waggoner, B. M. 2002. The Early Cambrian problematic fossil *Volborthella*: New insights from the Basin and Range. In: Corsetti, F. A. (ed.) *Proterozoic-Cambrian of the Great Basin and Beyond*. Volume 93. Society of Economic Paleontologists and Mineralogists, Pacific Coast Section, Los Angeles. pp. 137-152.
- Waggoner, B. M. and Hagadorn, J. W. 2002. Additional fossils from the latest Neoproterozoic of southern Nye County, Nevada. In: Corsetti, F. A. (ed.) *Proterozoic-Cambrian of the Great Basin and Beyond*. Volume 93. Society of Economic Paleontologists and Mineralogists, Pacific Coast Section, Los Angeles. pp. 87-96.
- Hagadorn, J. W., Fedo, C. M., and Waggoner, B. M. 2000. Ediacara-type biotas from the Cambrian of the southwestern United States. *Journal of Paleontology* **74**(4): 731-740.
- Hagadorn, J. W. and Waggoner, B. M. 2000. Ediacaran fossils from the southwestern Great Basin, United States. *Journal of Paleontology* **74**(2): 349-359.
- Waggoner, B. M. 1999. Los comienzos de la historia evolutiva de los artrópodos: ¿qué nos pueden contar los fósiles? [The earliest evolutionary history of arthropods: what do the fossils tell us?] In: Melic, A., de Haro, J. J., Méndez, M., and Ribera,

- I. (eds.) *Evolución y Filogenia de Arthropoda*. Sociedad Entomologica Aragonesa, Barcelona. pp. 115-131.
- Waggoner, B. M. 1999. Biogeographic analyses of the Ediacara biota: a conflict with paleotectonic reconstructions. *Paleobiology* **25**(4): 440-458.
- Waggoner, B. M. 1999. Fossil oak leaf galls from the Stinking Water paleoflora of Oregon (early Miocene). *PaleoBios* **19**(3): 8-14.
- Waggoner, B. M. 1998. Interpreting the earliest metazoan fossils: what can we learn? *American Zoologist* **38**(6): 975-982.
- Fedonkin, M. A. and Waggoner, B. M. 1997. The Late Precambrian fossil *Kimberella* is a mollusc-like bilaterian organism. *Nature* **388**: 868-871.
- Poteet, M. and Waggoner, B. M. 1996. Unusual oak leaf galls from the middle Miocene of northwest Nevada. *Journal of Paleontology* **70**(6): 1080-1084.
- Long, D. J. and Waggoner, B. M. 1996. Evolutionary relationships of the white shark: a phylogeny of lamnoid sharks based on dental morphology. In: Klimley, A. D. and Ainley, D., eds. *Great White Sharks: The Biology of Carcharodon carcharias*. Academic Press, New York. pp. 37-47.
- Waggoner, B. M. 1996. Bacteria and protozoa from middle Cretaceous amber of Ellsworth County, Kansas. *PaleoBios* **17**(1): 20-26.
- Waggoner, B. M. 1996. The first fossil cyphoderiid testate amoeba, in Dominican Republic amber (Eocene-Oligocene). *PaleoBios* **17**(1): 17-19.
- Waggoner, B. M. and Langer, M. R. 1996. Taxonomische Notiz: *Mississippidendrium*, new name for *Mesodendrium* Waggoner and Langer 1993. *Paläontologische Zeitschrift* **70**(1/2): 273.
- Waggoner, B. M. 1996. Phylogenetic hypotheses of the relationships of arthropods to Precambrian and Cambrian problematic fossil taxa. *Systematic Biology* **45**(2): 190-222.
- Waggoner, B. M. 1995. Ediacaran lichens: a critique. *Paleobiology* **21**(3): 393-397.
- Waggoner, B. M. and Collins, A. G. 1995. A new chondrophorine (Cnidaria, Hydrozoa) from the Cadiz Formation (Middle Cambrian) of California. *Paläontologische Zeitschrift* **69** (1/2) : 7-17.
- Waggoner, B. M. 1994. An aquatic microfossil assemblage from Cenomanian amber of France. *Lethaia* **27**: 77-84.

- Waggoner, B. M. 1994. Fossil actinomycete in Eocene-Oligocene Dominican amber. *Journal of Paleontology* **68**(2): 398-401.
- Waggoner, B. M. 1994. Fossil microorganisms from Upper Cretaceous amber from Tishomingo County, Mississippi. *Review of Palaeobotany and Palynology* **80**(1/2): 75-84.
- Poinar, G. O. Jr., Waggoner, B. M. and Bauer, U.-C. 1993. Palaeoecology of a Triassic amoeba. *Naturwissenschaften* **80**(12): 566-568.
- Waggoner, B. M. 1993. Fossil actinomycetes and bacteria in Eocene amber from Washington. *Tertiary Research* **14**(4): 155-160.
- Waggoner, B. M. and Langer, M. R. 1993. A new hydroid from the Upper Cretaceous of Mississippi. *Paläontologische Zeitschrift* **67**(3/4): 253-259.
- Long, D. J. and Waggoner, B. M. 1993. The ectoparasitic barnacle *Anelasma* (Cirripedia, Thoracica, Lepadomorpha) on the shark *Centroscyllium nigrum* (Chondrichthyes, Squalidae) from the Pacific sub-Antarctic. *Systematic Parasitology* **26**: 133-136.
- Waggoner, B. M. and Poinar, G. O. Jr. 1993. Fossil habrotrichid rotifers in Dominican amber. *Experientia* **49**(4): 354-357.
- Waggoner, B. M. 1993. *Naegleria*-like cysts in Cretaceous amber from central Kansas. *Journal of Eukaryotic Microbiology* **40**(1): 97-100.
- Poinar, G. O. Jr., Waggoner, B. M., and Bauer, U.-C. 1993. Earliest terrestrial protists and other microorganisms in Triassic amber. *Science* **259**(5092): 222-224.
- Waggoner, B. M. and Poinar, G. O. Jr. 1992. A fossil myxomycete plasmodium from Eocene-Oligocene amber of the Dominican Republic. *Journal of Protozoology* **39**(5): 639-642.

Papers in Review or Preparation:

- Waggoner, B. M. An Ediacara-type fossil from the Lower Cambrian of the Mojave Desert. *Historical Biology*. In review.
- Waggoner, B. The "cladistic telephone." *American Biology Teacher*: in revision.
- Waggoner, B. M. Phylogenetic, multivariate, and hybrid approaches to the biogeography of the late Neoproterozoic Ediacara biota. *Paleobiology*. In preparation.
- Stottman, H. and Waggoner, B. Mazon Creek fossils from the coal strata of Arkansas. *Palaeontologia Electronica*. In preparation.

Waggoner, B., Hagadorn, J. W., and Leslie, S. A. The bivalved arthropod *Caryocaris* from the lower Ordovician of the western United States. *Journal of Paleontology*: in preparation.

Waggoner, B. Mineralized Miocene microbial mats from the Barstow Formation of San Bernardino County, California. *Palaios*: in preparation.

Review Papers:

Runnegar, B. and Waggoner, B. 2002. Ediacaran biota. *McGraw-Hill Encyclopedia of Science and Technology*. Volume 6, pp. 78-82. McGraw-Hill, New York.

Waggoner, B. 2002. Eukaryotes and multicells: Origin. In: *Encyclopedia of Life Sciences*. Vol. 6, pp. 585-593. Nature Publishing Group, London. <http://www.els.net/>

Waggoner, B. 2002. Molecular palaeontology. In: *Encyclopedia of Life Sciences*. Vol. 12, pp. 227-232. Nature Publishing Group, London. <http://www.els.net/>

Waggoner, B. M. 2000. Evolution. *2001 Yearbook of Science and Technology*. McGraw-Hill, New York: pp. 154-156.

Waggoner, B. M. 1999. Chelicerata. In: Singer, R. (ed.) *Encyclopedia of Paleontology*. Fitzroy Dearborn, London, Chicago. pp. 249-261.

Waggoner, B. M. 1999. Fungi. In: Singer, R. (ed.) *Encyclopedia of Paleontology*. Fitzroy Dearborn, London, Chicago. pp. 504-506.

Waggoner, B. M. 1999. Lichens. In: Singer, R. (ed.) *Encyclopedia of Paleontology*. Fitzroy Dearborn, London, Chicago. pp. 676-679.

Waggoner, B. M. 1999. Microbial fossils, Precambrian. In: Singer, R. (ed.) *Encyclopedia of Paleontology*. Fitzroy Dearborn, London, Chicago. pp. 736-740.

Waggoner, B. M. 1999. Miller, Hugh. In: Singer, R. (ed.) *Encyclopedia of Paleontology*. Fitzroy Dearborn, London, Chicago. pp. 750-752.

Waggoner, B. M. 1999. Origin of life. In: Singer, R. (ed.) *Encyclopedia of Paleontology*. Fitzroy Dearborn, London, Chicago. pp. 790-796.

Waggoner, B. M. 1999. Superphyla. In: Singer, R. (ed.) *Encyclopedia of Paleontology*. Fitzroy Dearborn, London, Chicago. pp. 1188-1193.

Waggoner, B. M. 1999. Trilobites. In: Singer, R. (ed.) *Encyclopedia of Paleontology*. Fitzroy Dearborn, London, Chicago. pp. 1288-1295.

Theses:

- Waggoner, B. M. 1998. New approaches to the systematics and paleobiology of the late Precambrian soft-bodied biotas. Doctoral dissertation, Department of Integrative Biology, University of California at Berkeley, Berkeley, California. xv + 266 pp.
- Waggoner, B. M. 1991. Interactions between soil protozoa and plant roots: a physiological and ecological study. Bachelor of Science Honors thesis, Department of Biology, Tulane University, New Orleans, Louisiana. v + 42 pp.

Published Abstracts of Professional Presentations:

- Stottman, H. A. and Waggoner, B. M. 2003. A Mazon Creek-type concretionary biota from the Pennsylvanian of the Arkansas River Valley. *Geological Society of America Abstracts with Programs* **35**(1): 68. Presented at the 2003 Geological Society of America Southeastern/South Central Section Annual Meeting, Memphis, Tennessee.
- Fernald, A. R., Leslie, S. A., Connelly, J. B., Waggoner, B. M. and Hagadorn, J. W. 2002. *Caryocaris* (Arthropoda, Phyllocarida) from the Mazarn Shale and its biostratigraphic potential. *Geological Society of America Abstracts with Programs* **34**(6): 358. Presented at the 2002 Geological Society of America Annual Meeting, Denver, Colorado.
- Waggoner, B. 2002. Shifting provinces across the Proterozoic-Cambrian boundary. *Geological Society of America Abstracts with Programs* **34**(6): 316. Presented at the 2002 Geological Society of America Annual Meeting, Denver, Colorado.
- Waggoner, B. 2002. The beginnings of biomineralization in the southwestern Great Basin of the western United States. *Geological Society of Australia Abstracts* **68**: 163. Presented at the First International Palaeontological Congress, Sydney, Australia.
- Waggoner, B. M. 2001. The Ediacara biota in space and time. *American Zoologist* **41**: 1617. Presented at the 2002 Society for Integrative and Comparative Biology Annual Meeting, Anaheim, California.
- Waggoner, B. M. 2001. Possible micrometazoan coprolites from the Johnnie Formation (Late Neoproterozoic) of the Mojave Desert, California. *Geological Society of America Abstracts with Programs* **33**(6): 429. Presented at the 2001 Geological Society of America Annual Meeting, Boston, Massachusetts.
- Collins, A. G. and Waggoner, B. M. 2001. The evolutionary affinities of cnidarian-grade Ediacaran fossils: Tests using molecular divergence dates. *PaleoBios* **21**(2),

- supplement): 42. Presented at the Sixth North American Paleontological Convention, Berkeley, California.
- Waggoner, B. M. 2001. The rulebook is rewritten: Ediacaran and Cambrian global biodiversity patterns. *PaleoBios* **21**(2, supplement): 130. Presented at the Sixth North American Paleontological Convention, Berkeley, California.
- Waggoner, B. M. 2001. Facies, time, and geography in the structuring of Ediacaran assemblages. *Geological Association of Canada / Mineralogical Association of Canada Abstracts* **26**: 158. Presented at the 2001 Geological Association of Canada / Mineralogical Association of Canada Meeting, St. John's, Newfoundland.
- Waggoner, B. M. 2000. Phylogenetic analysis of heterochrony in the evolution of Cambrian arthropods. *Geological Society of America Abstracts with Programs* **32**(7): 302. Presented at the 2000 Geological Society of America Annual Meeting, Reno, Nevada.
- McDonald, K., Waggoner, B. M., Hotchkiss, F. H. C., and Harper, J. A. 2000. Ophiuroids from the Imo Formation (Chesterian: Mississippian) of northern Arkansas. *Geological Society of America Abstracts with Programs* **32**(7): 446. Presented at the 2000 Geological Society of America Annual Meeting, Reno, Nevada.
- Waggoner, B. M. and Hagadorn, J. W. 1999. Unusual Lower Cambrian fossils from the Latham Shale: What, if anything, is a Lagerstätten? *Geological Society of America Abstracts with Programs* **31**(6): 105. Presented at the 1999 Geological Society of America Cordilleran Section Annual Meeting, Berkeley, California.
- Hagadorn, J. W. and Waggoner, B. M. 1998. Vendian-Cambrian faunas from the southwestern U.S. *Geological Society of America Abstracts with Programs* **30**(7): 233. Presented at the 1998 Geological Society of America Annual Meeting, Toronto, Ontario, Canada.
- Waggoner, B. M. 1998. Three-dimensional anatomy and microstructure of some simple "medusoids" from the Vendian of Siberia. *Geological Society of America Abstracts with Programs* **30**(7): 34. Presented at the 1998 Geological Society of America Annual Meeting, Toronto, Ontario, Canada.
- Waggoner, B. M. 1997. Interpreting the earliest metazoan fossils: what can we learn? *American Zoologist* **37**(5): 103A. Presented at the 1998 Society for Integrative and Comparative Biology Annual Meeting, Boston, Massachusetts.
- Waggoner, B. M. and Hagadorn, J. W. 1997. Ediacaran fossils from western North America: Stratigraphic and biogeographic implications. *Geological Society of*

- America Abstracts with Programs* **29**(6): 30. Presented at the 1997 Geological Society of America Annual Meeting, Salt Lake City, Utah.
- Fedonkin, M. A. and Waggoner, B. M. 1996. The Vendian fossil *Kimberella*: The oldest mollusc known. *Geological Society of America Abstracts with Programs* **28**(7): 53. Presented at the 1996 Geological Society of America Annual Meeting, Denver, Colorado.
- Poinar, G. O. Jr. and Waggoner, B. M. 1993. New terrestrial micrometazoan fossils in amber. *PaleoBios* **14**(4): S12. Presented at the 1993 California Paleontology Conference, Los Angeles, California.
- Poinar, G. O. Jr. and Waggoner, B. M. 1992. New microbe fossils in amber and their use in phylogeny and paleoecology. *PaleoBios* **14**(1): S6. Presented at the 1992 California Paleontology Conference, Davis, California.

Other Professional Presentations:

- Waggoner, B. and Hamilton, P. V. 2001. Involving an electron microscope in the K-12 curriculum. Annual Mathematics and Science Leadership Conference, University of Central Arkansas, Conway.
- Waggoner, B. M. 1996. Global biogeography of Ediacaran assemblages in the Late Precambrian. California Paleontological Conference, University of California at Santa Barbara, Santa Barbara, California.
- Waggoner, B. M. 1995. Global biogeography of Ediacaran assemblages in the Late Precambrian. XIV Meeting of the Willi Hennig Society, College Station, Texas.
- Waggoner, B. M. 1994. Phylogeny of Vendian and Cambrian arthropods and arthropod-like organisms: a first cladistic hypothesis. XIII Meeting of the Willi Hennig Society, Copenhagen, Denmark.

Other Publications:

- Waggoner, B. M. *Fossils: the Key to the Past* (book review). *Quarterly Review of Biology* **78**: 218-219.
- Ruehle, J., McDonald, K. S., Waggoner, B. M., Shostell, J. M., Keteles, K. A., and Culwell, D. E. 2002. *Biology 1400: Biology for General Education: Laboratory Manual*. Hayden-McNeil, Plymouth, Michigan. xii + 188 pp.
- Waggoner, B. M. 2002. *The Map that Changed the World* (book review). *Palaeontologica Electronica* **5**(1). http://palaeo-electronica.org/2002_1/books/map.htm.

Waggoner, B. M. 2001. *Paleobiogeography: Using Fossils to Study Global Change, Plate Tectonics, and Evolution* (book review). *Quarterly Review of Biology* **76**: 348.

Waggoner, B. M. 2001. *American Monster: How the Nation's First Prehistoric Creature Became a Symbol of National Identity* (book review). *Palaeontologica Electronica* **4**(1). http://palaeo-electronica.org/2001_1/books/monster.htm.

Waggoner, B. M. 2000. *Cradle of Life* (book review). *Quarterly Review of Biology* **75**: 44-45.

Waggoner, B. M. 2000. Oxidative respiration (sung to the tune of the “Hokey Pokey”). *Annals of Improbable Research* **6**(4): 26.

Waggoner, B. M. 1999. *Bone Wars and Two Tiny Claws* (book review). *Palaeontologica Electronica* **2**(2). http://www-odp.tamu.edu/paleo/1999_2/toc.htm.

Waggoner, B. M. 1999. *The Garden of Ediacara* (book review). *Palaeontologica Electronica* **2**(1). http://www-odp.tamu.edu/paleo/1999_1/toc.htm.

Waggoner, B. M. 1999. Eukaryotes. *Microsoft Encarta Deluxe Online Encyclopedia*. Accessible via <http://encarta.msn.com/> Also on *Microsoft Encarta Encyclopedia Deluxe 2000 CD-ROM*.

Waggoner, B. M. 1997. The non-linear dynamics of reincarnation. *Annals of Improbable Research* **3**(6): 3-5.

Waggoner, B. M. 1995. Evolutionary relationships among cheeses: pattern or process? *Annals of Improbable Research* **1**(3): 6-7.

Invited Technical Presentations:

“The Ediacaran Organisms: What *Were* They, Anyway?” Department of Geology, University of Arkansas at Little Rock. March 1998.

“The Ediacaran Fossils of the Late Precambrian and their Significance.” Department of Geology, University of Arkansas at Fayetteville. November 1998.

“The Ediacaran Organisms: What *Were* They? What Happened to Them? And Why Should You Care?” Department of Geology, Tulane University. February 2003.

“The Ediacaran Organisms: What *Were* They? And Why Should Anyone Care?” Department of Geology, University of Georgia. February 2003.

“What You Can learn From a Bunch of Oddballs: The Late Proterozoic Ediacara Biota.”
Graduate Program in Organismal and Evolutionary Biology, University of
Massachusetts at Amherst, September 2003.

Popular Presentations:

“Saturdays with SEM” (hands-on workshop for local students and teachers). University
of Central Arkansas, Conway, Arkansas. Seven workshops from spring 2002 to
present.

“Evolution or Creation: Symposium About Origins” (debate with D. Hovind). Heritage
Baptist Church and Christian School, Little Rock, Arkansas, February 2003.

“Evolution or Creation: Symposium About Origins” (debate with K. Hovind). Heritage
Baptist Church and Christian School, Little Rock, Arkansas, February 2002.

“Evolution or Creation: Symposium About Origins” (debate with K. Hovind). Heritage
Baptist Church and Christian School, Little Rock, Arkansas, February 2001.

“Life Comes to Land.” Altamont School, Birmingham, Alabama. February 2001.

“Life: The First Three Billion Years.” College of Natural Sciences and Mathematics,
University of Central Arkansas, Conway, Arkansas. April 2000.

“Arthropods: The *Real* Rulers of the Earth.” Burpee Museum of Natural History,
Rockford, Illinois. March 2000.

“Evolution or Creation: Symposium About Origins” (panel discussion) Heritage Baptist
Church and Christian School, Little Rock, Arkansas, April 1999.

“The First Three Billion Years.” Burpee Museum of Natural History, Rockford, Illinois.
March 1999.

“The Origin and Evolution of Birds.” Central Arkansas Audubon Society. November
1998.

WWW Educational Resources:

University of Central Arkansas, Department of Biology: Web designer, 1997-present.

Representative samples include:

UCA Department of Biology

<http://www.uca.edu/divisions/academic/biology/>

UCA Environmental Sciences Program

<http://www.uca.edu/divisions/academic/environment/>

Scanning Electron Microscope Lab and Image Archive
<http://www.uca.edu/divisions/academic/biology/sem/>

University of California Museum of Paleontology: An estimated 200 on-line exhibits created during the period 1994-2002. Recently created or updated samples include:

Carl Linnaeus (1707-1778)

<http://www.ucmp.berkeley.edu/history/linnaeus.html>

Introduction to the Echinoidea

<http://www.ucmp.berkeley.edu/echinodermata/echinoidea.html>

Introduction to the Ophiuroidea

<http://www.ucmp.berkeley.edu/echinodermata/ophiuroidea.html>

Localities of the Cambrian: The Marble Mountains

<http://www.ucmp.berkeley.edu/cambrian/marblemts.html>

Localities of the Cambrian: The House Range

<http://www.ucmp.berkeley.edu/cambrian/house.html>

Localities of the Cretaceous: Clayton Lake, New Mexico

<http://www.ucmp.berkeley.edu/mesozoic/cretaceous/clayton.html>

Localities of the Eocene: The Florissant Formation

<http://www.ucmp.berkeley.edu/tertiary/eoc/florissant.html>

Localities of the Oligocene: The Creede Formation

<http://www.ucmp.berkeley.edu/tertiary/oli/creede.html>

Localities of the Vendian: Mistaken Point

<http://www.ucmp.berkeley.edu/vendian/mistaken.html>

Nicholas Steno (1636-1686)

<http://www.ucmp.berkeley.edu/history/steno.html>

Thomas Henry Huxley (1825-1895)

<http://www.ucmp.berkeley.edu/history/thuxley.html>