

CURRICULUM VITA
May, 2005

James Thomas Sprinkle

1. Personal Data

Work address: Department of Geological Sciences
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U.S. citizen, born September 2, 1943, Arlington, Massachusetts; age 61;
married to Gloria Klizicki Sprinkle, 1968; two children (30 and 27).

2. Education

Ph.D., Harvard University, January, 1971
M.A., Harvard University, June, 1966
B.S., Massachusetts Institute of Technology, June, 1965

3. Professional Experience

1986-present	First Mr. and Mrs. Charles E. Yager Professor, Department of Geological Sciences, University of Texas at Austin
1983-1986	Professor, Department of Geological Sciences University of Texas at Austin
1977-1983	Associate Professor, Department of Geological Sciences University of Texas at Austin
1971-1977	Assistant Professor, Department of Geological Sciences University of Texas at Austin

1970-1971	NRC-USGS Postdoctoral Research Associate, Paleontology and Stratigraphy Branch, U.S. Geological Survey, Denver, Colorado
1966-1970	Teaching Fellow in Geology and General Education, Harvard University
Summers of 1964, 1965	Field Assistant for R. C. Gutschick, University of Notre Dame
Summers of 1963	Preparator and Curatorial Assistant for 1960, 1961, Bernhard Kummel Museum of Comparative Zoology, Harvard University

4. Professional Societies

Paleontological Society
 Palaeontological Association
 International Paleontological Union
 Society for Sedimentary Geology (SEPM)
 Geological Society of America (Fellow)
 American Association for the Advance of Science
 Society of the Study of Evolution
 Society of Systematic Biologists
 American Society of Naturalists
 Willi Hennig Society
 Paleontological Research Institution
 Association of Systematic Collections

5. Professional Society Service

Associate Editor, Journal of Paleontology, 2004-present.
 Co-chairman of session on "Paleontology - Biodiversification", 9th International
 Symposium on the Ordovician System, San Juan, Argentina, Aug. 19, 2003.
 Co-chairman of session on "Biodiversification - Regional Topics", 8th International
 Symposium on the Ordovician System, Prague, Czech Republic, June 25, 1999.
 Participant in Paleontological Society Short Course on Echinoderms, Geological
 Society of America Annual Meeting, Salt Lake City, Utah, October 19, 1997.
 Organizer and Chairman of Symposium on "Invertebrate Paleontology of the South-
 Central Region." Geological Society of America South-Central Meeting,
 Austin, Texas, March 11, 1996.
 Member, Board of Editorial Advisors, Treatise on Invertebrate Paleontology,
 University of Kansas, 1991-present.
 Member, Financial Management and Investment Committee, Paleontological

Society, 1987-1989, 1990-1993.

Member, Strimple Award Committee, Paleontological Society, 1986-1989.

Co-Editor of GCAGS-SEPM 1985 Transactions volume, Gulf Coast Association of Geological Societies, 1984-1985.

Membership Committee, Paleontological Society, 1984-1992.

Member, Schuchert Award Committee, Paleontological Society, 1984-1986, 1995-1998

Member (1982-1984) and Chairman (1984-1986) of Treatise Advisory Committee, Geological Society of America.

Paleontological Society Councilor under 40, 1981-1983.

Participant in Paleontological Society Short Course on Echinoderms, Geological Society of America Annual Meeting, Atlanta, Georgia, November 16, 1980.

Organizer and Chairman of Symposium on "Echinoderm Paleobiology," for the 2nd North American Paleontological Convention, Lawrence, Kansas, August 9, 1977.

Chairman of Field Trip Committee, Gulf Coast Association of Geological Societies, 1976-1977.

Chairman of Earth Science Session, Texas Academy of Science Annual Meeting, Huntsville, Texas, March 22, 1975.

Vice-President Section III (Earth Sciences), Texas Academy of Science, 1974-1975.

Co-Chairman of Paleobiology II Session, Geological Society of America Annual Meeting, Dallas Texas, November 14, 1973.

Auditor, Paleontological Society, 1968-1971.

Reviewer for:

Journal of Paleontology, 1970-2004.

Paleobiology, 1975, 1983, 2000.

B.Y.U. Geol. Studies, 1975-1976, 2004

McGraw-Hill, 1976, 1986, 1997.

Washington Academy of Sciences, 1976.

NSF grant proposals, 1977-1980, 1982-1985, 1987, 1989-2004.

Wm. C. Brown Co., 1981.

GFF (Sweden), 1981.

Lethaia, 1982, 2001.

Paleontological Research Institution, 1982, 1986, 1993.

Alcheringa (Australia) & Queensland Museum Memoirs, 1982, 1985, 1998.

Canadian Journal of Earth Sciences, 1983, 1986, 1987.

Royal Ontario Museum, 1984-1986.

Petroleum Research Fund, Amer. Chem. Soc., 1984, 1987, 2002-2003

Johns Hopkins Univ. Press, 1985.

Geological Magazine (England), 1986.

Burke Museum Public., Univ. of Washington, 1986.

Merrill Publ. Co., 1986.

Southern Illinois Univ., 1987.

Univ. of Kansas Paleontological Institute, 1987.

Science, 1989.

Palaios, 1989, 1992, 1998, 2001, 2003-2004.
Historical Biology, 1989.
Prentice-Hall, 1990.
MacMillan Publ. Co., 1991.
National Academy of Sciences, 1992.
Kansas Geological Survey, 1992.
Kirtlandia, 1994.
Polish Academy of Science, 1994.
Geobios (France), 1995, 1998.
Systematic Biology, 1996.
American Zoologist, 1998
Paleontological Society PalSIRP Grant Proposals, 1998-2001.
National Geographic Society Research Proposals, 2000
10th Internat. Echinoderm Conf. Proceedings (New Zealand), 2000
Royal Society of Edinburgh (Scotland), 2000
Science in China Press, 2001
Proceedings of the European Conference on Echinoderms (Germany), 2002
Coloquios de Paleontologia (Spain), 2002
W. H. Freeman and Co., 2002
Palaeontology, 2002.
ISOS Proceedings (Argentina), 2003
Geological Journal (England), 2003
Marine Biology (England), 2003
11th Internat. Echinoderm Conf. Proceedings (Germany), 2003
Eclogae Geologicae Helvetiae (Switzerland), 2003
Czech Science Foundation, 2004
The Mountain Geologist, 2004
Yale Peabody Museum Special Publications, 2005
Palaeogeography, Palaeoclimatology, Palaeoecology, 2005

6. Awards, Fellowships, and Honorary Societies

American Federation Scholarship Foundation, South-Central Federation of Mineralogical Societies, 2004 Honorary Award ("for distinguished achievement in the field of Earth Sciences") (Came with 2 \$4,000 scholarships for UT Geol. graduate students).
Honorable mention for 1995 Best Paper Award in Palaios, SEPM, 1996.
Charles Schuchert Award of the Paleontological Society ("for excellence in paleontology by a person under 40 years of age"), 1982.
NRC-USGS Postdoctoral Associateship, U.S. Geol. Survey, Denver, Colorado, 1970-1971.

Harvard University Fellowship, 1969-1970.
Member, Society of Sigma Xi, 1967-1970, Harvard University.
NSF Graduate Fellowship, 1965-1969.
General Motors College Scholarship, 1961-1965.

7. Teaching

CURRENT TEACHING CONTRIBUTION

Each long semester, I teach a medium-to-large undergraduate course (GEO 404C, GEO 422K) and one of four different graduate seminars; in the early summer of past years, I often helped team-teach our 6-week senior field course GEO 660. GEO 404C, Plate Tectonics and Earth History, is a freshman-level second geology course that uses a plate tectonics approach to study the earth's geologic history and the history of life (about half for each). It is taken by Geology majors as their second freshman course, and by students in other departments as a second required science course, often after GEO 302E, 303, or 401. The course has a 2-hr./week laboratory and an optional afternoon field trip late in the semester. Recently, the enrollment in 404C has been between 50-90 students, with about 20% Geology majors, but the enrollment has been as high as 166 students with over 50% Geology majors in the early 1980's. I have taught this course (or a previous version that was offered both fall and spring) 37 times since 1972 to nearly 2,985 students total, with only one spring semester off in 1978 for research leave.

GEO 422K, Paleobiology, is a junior-level main-sequence course for our BS and BA Geology majors, covering the entire field of paleontology in one semester. A few biology majors have also taken this course in the past as an outside course in their major. The course has a 4-hour/week laboratory and two all-day field trips to collect Cretaceous and Pennsylvanian fossils for lab projects. Since 1991, 422K has been a Substantial Writing Component Course, using the two field trip reports, an additional abstract project, and an editing question on the final exam for the required student writing. The enrollment in 422K has been between 18-45 since it has been a Writing Component Course, but before that had been as high as 142 during the boom times in 1981. I have taught this course for 34 consecutive fall semesters to nearly 1,970 students total since coming to UT in 1971.

GEO 660, Field Geology, is a 6-week senior-level field course taught in the Rocky Mountains that is taken by most of our BS Geology majors, often as their last course before graduating. The students get to practice measuring and interpreting geologic sections, and making geologic maps and cross sections in different geologic settings. Recently, it has been taught in the mountains of SE New Mexico, SW Colorado, and western Montana. I team-taught all, half, or more recently a smaller part of this field course 20 times in the past 34 years.

I have also taught GEO 303 (with Leon Long), GEO 405, GEO 420K (with John Warren), and GEO 322L (3 times) at different times in the past to fill in for other faculty members who went on leave, left UT, or retired. GEO 322L was eventually combined with GEO 422K when our BA degree program was revised in the early 1990's. GEO 383K, Paleoecology, GEO 389K, Paleontological Nomenclature and Techniques, GEO 391S, Current Topics in Paleobiology (Evolution), and GEO 391S, Current Topics in Paleobiology (Weird Fossil Organisms), are each offered on a rotating basis every two years. The GEO 389K techniques course is taught as a series of student projects to prepare all the different parts of a systematics paper for publication (halftone/digital plate, text figure, systematic description, project abstract). The other three graduate courses are run as seminars with reading assignments and discussion of topics in class, often dealing with current controversies or recent discoveries in each subject areas, plus a student term paper.

COURSES TAUGHT (LAST 5 YEARS)

Spring Semester, 2005 - GEO 404C, Plate Tectonics and Earth History - 57 students
Fall Semester, 2004 - GEO 422K, Paleobiology (Substantial Writing Component Course) - 22 students GEO 389K, Paleontological Nomenclature and Techniques - 3 graduate students + 1 outside auditor (+ 2 lectures in GEO 392M, Modern Geological Sciences - 7 graduate students)
Spring Semester, 2004 - GEO 404C, Plate Tectonics and Earth History - 69 students
Fall Semester, 2003 - GEO 422K, Paleobiology (Substantial Writing Component Course) - 21 students GEO 391S, Current Topics in Paleobiology (Weird Fossil Organisms) - 6 graduate students + 1 outside auditor (+ 2 lectures in GEO 392M, Modern Geological Sciences - 6 graduate students)
Spring Semester, 2003 - GEO 404C, Plate Tectonics and Earth History - 80 students
Fall Semester, 2002 - GEO 422K, Paleobiology (Substantial Writing Component Course) - 28 students GEO 389K, Paleontological Nomenclature and Techniques - 6 graduate students (+ 2 lectures in GEO 392M, Modern Geological Sciences - 16 graduate students)
Spring Semester, 2002 - GEO 404C, Plate Tectonics and Earth History - 72 students GEO 383K, Paleoecology - 8 graduate students + 1 undergraduate
Fall Semester, 2001 - GEO 422K, Paleobiology (Substantial Writing Component Course) - 21 students GEO 391S, Current Topics in Paleobiology (Echinoderms) - 4 graduate students (+ 2 lectures in GEO 392M, Modern Geological Sciences - 7 graduate students)
Spring Semester, 2001 - GEO 404C, Plate Tectonics and Earth History - 80 students GEO 391S, Current Topics in Paleobiology (Evolution) - 6 graduate students
Fall Semester, 2000 - GEO 422K, Paleobiology (Substantial Writing Component Course) - 28 students GEO 389K, Paleontological Nomenclature and Techniques - 6 graduate students (+ 3 lectures in Leon Long's new course GEO 392M, Modern Geological Sciences - 15 graduate students)
Spring Semester, 2000 - GEO 404C, Plate Tectonics and Earth History - 53 students GEO 383K, Paleoecology - 5 graduate students

Fall Semester, 1999 - GEO 422K, Paleobiology (Substantial Writing Component Course) - 36 students GEO 391S, Current Topics in Paleobiology - 7 graduate students

GRADUATE STUDENT SUPERVISION

Ph.D.'s supervised

Bryan Wilbur, "Revision of helicoplacoids and other Early Cambrian echinoderms from North America," Aug., 2000 - Present.

Chris Schneider, "Paleocommunities from the Winchell Formation (Pennsylvanian), north-central Texas," Aug., 1999 - August, 2003. Visiting Assistant Professor, Appalachian State University, Boone, NC.

M. Ann Molineux, "Late Pennsylvanian shales of north-central Texas: An assessment of their depositional environment," Aug., 1991 - Dec., 1997; Nonvertebrate Paleontology Collections Manager, Texas Memorial Museum, Austin, Texas.

Colin D. Sumrall, "The phylogeny of the Echinodermata," Jan., 1992 - Aug., 1996; Assistant Professor, University of Tennessee, Knoxville.

Ronald A. Johns, "Paleoecology and depositional environments of Ordovician sponge communities in central and eastern Nevada," Aug., 1987 - May, 1993; Division Chairman, Austin Community College.

Ronald D. Lewis, "Depositional environments and paleoecology of the Oil Creek Formation (Middle Ordovician), Arbuckle Mountains and Criner Hills, Oklahoma," Aug., 1975 - Aug., 1982; Associate Professor, Auburn University.

Mark W. Longman, "Depositional history, paleoecology, and diagenesis of the Bromide Formation (Ordovician), Arbuckle Mountains, Oklahoma" (co-supervisor), Aug. 1972 - Aug., 1976; Geologist with RPI International, Boulder, Colorado.

Stephen G. Katz, "Hydrospires in Morrowan Pentremites (Blastoidea) from Oklahoma and Arkansas," Aug., 1971 - Dec., 1975; Small Business Owner and Bed-and-Breakfast proprietor, Granville, Ohio.

M.A.'s supervised

Colin D. Sumrall, "Phylogeny, ecology, and extinction of post-Devonian edrioasteroids," Jan. 1990 - Dec., 1991; continued with Ph.D. here.

John P. Huelsenbeck, "Phylogenetic study of living and fossil oysters," Aug., 1988 - May, 1992; completed Ph.D. in Zoology Department here; now Associate Professor, Department of Biology, University of California, San Diego.

Ronald A. Johns, "Brachiopod biostratigraphy of the Middle Ordovician Bromide Formation, southern Oklahoma," Aug., 1984 - Dec., 1987; continued with Ph.D. here.

Ann Worrel (Gelber), "Paleoecological correlation between three wells, Vermillion area, Gulf of Mexico" (co-supervisor), Aug., 1982 - Aug., 1986; Geologist with ConocoPhillips Inc., Ponca City, Oklahoma.

Roger C. Wiggin, "Depositional environment of the Ignacio Formation, southwestern Colorado," Aug., 1980 - Aug., 1987; Geologist with Mitchell Energy Corporation, The Woodlands, Texas.

Russell E. Hinote, "Analysis of fossil communities in the Del Rio Formation, Upper Cretaceous, Texas," Aug., 1975 - Dec., 1978; Micropaleontologist with BP Amoco, Houston, Texas.

Thomas W. Broadhead, "Biostratigraphy and paleoecology of the Floyd Shale, Upper Mississippian, northwestern Georgia," Aug., 1972 - May, 1975; Professor and Director of the Honors Program, University of Tennessee, Knoxville.

8. Scholarly Activity

CURRENT RESEARCH/CONTRIBUTIONS

1. Early Ordovician Echinoderms from the Rocky Mountains

This major project, funded by NSF Grant BSR-8906568, is an attempt to locate and collect primitive echinoderms from a poorly known part of the section in the central and southern Rocky Mountains. In three summers of field work plus many shorter trips,

I have now collected six small to medium-sized echinoderm faunas from the following units: 1) about 38 specimens from the Garden City Limestone of northern Utah and southeastern Idaho; 2) 175 specimens from the Fillmore Formation of western Utah; 3) 206 specimens from the Ninemile Shale of central and southern Nevada; 4) about 7 specimens and many fragments from the Manitou Limestone of central Colorado; 5) 24 specimens from the El Paso Group in western Texas and southeastern New Mexico; and 13 specimens from the Arbuckle Group in southern Oklahoma.

Many of these echinoderms represent new genera and species that will be described in a series of taxonomic papers. I am working with Tom Guensburg, Rock Valley College, Rockford, Illinois, on the diverse Fillmore fauna (three papers in preparation and 6 more planned) and on the general implications of these Early Ordovician echinoderms (one papers in press), with Guensburg, Colin Sumrall, University of Tennessee, and Dan Blake, University of Illinois, on new eocrinoids and starfish (two papers in preparation), with Forest Gahn, Smithsonian Institution, and Guensburg on the Garden City Faunas (two papers in preparation, and with Mark McKinzie of Grapevine, Texas, on small El Paso and Arbuckle Group faunas (one papers in preparation). These new specimens represent an early stage of the Ordovician radiation of echinoderms, and show that the simple model for onshore to offshore migration of new evolutionary faunas is in fact oversimplified, and has several other controlling factors, such as type of substrate. Completing this project will take several additional years of studying and writing up these specimens.

2. Carboniferous Echinoderms and Communities from Oklahoma and Montana

This area includes three medium-sized projects describing new Carboniferous echinoderms and their associated communities. One occurrence from the Morrowan (Early Pennsylvanian) of southern Oklahoma has four new species of edrioasteroids and a few other organisms attached to conglomerate pebbles in a distal alluvial fan deposited in a shallow marine bay. This very unusual fossil occurrence was discovered by a group of workers at Baylor University whom I joined in 1987 (one joint paper now in press, a second paper planned). Another occurrence from the Middle Pennsylvanian Winchell Formation in north-central Texas, discovered by former UT student Dan Ryder, has a spectacularly preserved echinoid, crinoid, and starfish fauna in a distal deltaic channel filled with plant-bearing black shale. This unit and its communities was the subject of Chris Schneider's dissertation project (2003), and will result in several joint papers (one joint paper now in press). The third project includes several new silicified blastoids occurring in a diverse, bryozoan-dominated, Early Mississippian community in central Montana that was discovered by James Welch (now deceased) and jointly collected between 1984 and 1986 (specimens collected and prepared, manuscript planned).

3. Cambrian Echinoderms from the Rocky Mountains, Mississippi Valley, and Southern Appalachians

This area of research includes five small to medium-sized projects in which I am describing new fossil echinoderms in Cambrian rocks from the western, central, and southeastern U. S. This research will increase our knowledge about the morphology, diversity, and evolution of the earliest known echinoderms. Information from two of these projects may also refute the proposal that "carpoid" echinoderms are ancestral to or actually belong in the chordates. Individual projects include description of: 1) several faunas of Late Cambrian echinoderms from the Rocky Mountains collected on NSF Grant EAR93-04253 (with Colin Sumrall and Tom Guensburg - material collected, one papers planned); 2) a revision of the Middle Cambrian Burgess Shale echinoderm fauna (with Desmond Collins, Royal Ontario Muneum - one paper published, a second paper in review); 3) a large Late Cambrian echinoderm fauna from SE Missouri (with H. L. Strimple [now deceased] - manuscript partly completed); 4) redescription of the Early to Middle Cambrian genus *Gogia* from localities in the Rocky Mountains (material assembled, manuscripts planned, some sections written); and 5) a new occurrence of Late Cambrian carpoids in NE Alabama (with G. L. Bell, Jr., former UT Ph.D. student - material collected, in planning).

GRANTS

1996-1998	CRDF Grant RG1-242 entitled "Comparison of Early Ordovician Echinoderm Faunas on Separate Continents" from the Civilian Research and Defense Foundation for the Independent States of the Former Soviet Union, Arlington, VA, \$35,920 total (U.S. portion \$9,900) (Sprinkle/Rozhnov, co-PI's)
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- 1993-1994 NSF Grant EAR-9304253 entitled "Search for Late Cambrian Echinoderms from the Rocky Mountains" from the National Science Foundation, Washington, D.C., \$39,553.
- 1989-1992 NSF Grant BSR-8906568 for research on "Early Ordovician Echinoderms from the Rocky Mountains" from the National Science Foundation, Washington, D.C., \$53,629.
- 1983 Grant for purchase of new research and teaching microscope from University of Texas College of Natural Sciences Special Equipment Funds, \$4,900.
- 1982 Grant for purchase of Univ. of Kansas Paleo Instit. Monograph 1 reprints from Owen-Coates Fund, Geology Foundation, University of Texas at Austin, \$975.
- 1978 Faculty Research Assignment Award from the University Research Institute, University of Texas at Austin, for leave time during spring semester of 1978, \$9,020.
- 1977-1980 NSF Grant DEB-7682627 for research on "Echinoderm Faunas from the Bromide Formation (Middle Ordovician) of Oklahoma" from the National Science Foundation, Washington, D.C., \$29,100.
- 1976 Grant for summer field work from the Hal P. Bybee Fund, Geology Foundation, University of Texas at Austin, \$500.
- 1974 Research Grant #14-7499-0725, URI Project R-725, from University Research Institute, University of Texas at Austin, for summer field expenses, \$1,340.
- 1973 Grant for purchase of MCZ publication reprints from Amoco Production Foundation (General) Fund, Geology Foundation, University of Texas at Austin, \$800.
- 1973 Grant for field work from L. W. Callender Memorial Fund, Geology Foundation, University of Texas at Austin, \$800.
- 1971 Grant for Graduate Program Development from University of Texas at Austin Graduate School (NSF Grant GZ-2148 O.E.) to purchase camera equipment for teaching and research, \$344.