



GEOLOGICAL SOCIETY OF AMERICA

DECADE OF NORTH AMERICAN GEOLOGY 1983 GEOLOGIC TIME SCALE



DNAG

CENOZOIC										MESOZOIC										PALEOZOIC										PRECAMBRIAN			
AGE (Ma)	PERIOD	EPOCH	AGE (Ma)	PICKS (Ma)	MAGNETIC POLARITY	AGE (Ma)	PERIOD	EPOCH	AGE (Ma)	PICKS (Ma)	UNCERT. (m.y.)	PERIOD	EPOCH	AGE (Ma)	PICKS (Ma)	UNCERT. (m.y.)	PERIOD	EPOCH	AGE (Ma)	PICKS (Ma)	UNCERT. (m.y.)	EON	ERA	BDY AGES (Ma)									
65	PALEOCENE	L	DANIAN	66.4	66.4	N	CRETACEOUS	EARLY	SCYTHIAN	245	20	CAMBRIAN	EARLY	570	570	36	DEVONIAN	EARLY	2000	2000	28	PROTEROZOIC	EARLY	3800?									
64				UNNAMED					240	22	560			22	2000	28			3750	36	2000			28	3800?								
63	PALEOCENE	L	SELANDIAN	63.6	63.6	N	CRETACEOUS	MIDDLE	ANISIAN	235	10	DEVONIAN	MIDDLE	540	28	28	DEVONIAN	MIDDLE	2000	2000	28	PROTEROZOIC	EARLY	3500									
62				THANETIAN					230	22	540			28	2000	28			3500	28	2000			28	3500								
60	PALEOCENE	L	UNNAMED	60.6	60.6	N	CRETACEOUS	LATE	CARNIAN	225	18	DEVONIAN	LATE	520	36	36	DEVONIAN	LATE	2000	2000	36	PROTEROZOIC	EARLY	3000									
58				YPRSIAN					204	18	520			36	2000	36			3000	36	2000			36	3000								
55	PALEOCENE	E	YPRSIAN	52.0	52.0	N	CRETACEOUS	LATE	HETTANGIAN	208	18	DEVONIAN	LATE	505	32	32	DEVONIAN	LATE	2000	2000	32	PROTEROZOIC	EARLY	2500									
53				LUTETIAN					198	32	505			32	2000	32			2500	32	2000			32	2500								
50	PALEOCENE	E	YPRSIAN	50.0	50.0	N	CRETACEOUS	LATE	SINEMURIAN	198	32	DEVONIAN	LATE	480	20	20	DEVONIAN	LATE	2000	2000	20	PROTEROZOIC	EARLY	2000									
48				LUTETIAN					188	32	480			20	2000	20			2000	20	2000			20	2000								
45	PALEOCENE	M	LUTETIAN	43.6	43.6	N	CRETACEOUS	MIDDLE	PLIENSCHACHIAN	183	28	DEVONIAN	MIDDLE	480	16	16	DEVONIAN	MIDDLE	2000	2000	16	PROTEROZOIC	EARLY	2500									
44				BARTONIAN					187	34	480			16	2000	16			2500	16	2000			16	2500								
40	PALEOCENE	L	PRIABONIAN	40.0	40.0	N	CRETACEOUS	MIDDLE	BAJOCIAN	176	34	DEVONIAN	LATE	440	12	12	DEVONIAN	LATE	2000	2000	12	PROTEROZOIC	EARLY	2500									
38				BARTONIAN					176	34	440			12	2000	12			2500	12	2000			12	2500								
35	PALEOCENE	E	RUPELIAN	36.6	36.6	N	CRETACEOUS	LATE	CALLOVIAN	169	15	DEVONIAN	EARLY	440	12	12	DEVONIAN	EARLY	2000	2000	12	PROTEROZOIC	EARLY	2500									
34				PRIABONIAN					169	15	440			12	2000	12			2500	12	2000			12	2500								
30	PALEOCENE	E	RUPELIAN	30.0	30.0	N	CRETACEOUS	LATE	TITHONIAN	152	12	DEVONIAN	EARLY	400	12	12	DEVONIAN	EARLY	2000	2000	12	PROTEROZOIC	EARLY	2500									
28				RUPELIAN					152	12	400			12	2000	12			2500	12	2000			12	2500								
25	PALEOCENE	L	CHATTIAN	23.7	23.7	N	CRETACEOUS	EARLY	BERRIASIAN	144	15	DEVONIAN	MIDDLE	380	18	18	DEVONIAN	MIDDLE	2000	2000	18	PROTEROZOIC	EARLY	2500									
24				CHATTIAN					144	15	380			18	2000	18			2500	18	2000			18	2500								
20	PALEOCENE	E	BURDIGALIAN	21.8	21.8	N	CRETACEOUS	EARLY	VALANGINIAN	138	5	DEVONIAN	EARLY	380	18	18	DEVONIAN	EARLY	2000	2000	18	PROTEROZOIC	EARLY	2500									
19				BURDIGALIAN					138	5	380			18	2000	18			2500	18	2000			18	2500								
15	PALEOCENE	M	SERRAVALLIAN	15.1	15.1	N	CRETACEOUS	EARLY	HAUTERIVIAN	131	18	DEVONIAN	LATE	360	10	10	DEVONIAN	LATE	2000	2000	10	PROTEROZOIC	EARLY	2500									
14				SERRAVALLIAN					131	18	360			10	2000	10			2500	10	2000			10	2500								
10	PALEOCENE	L	TORTONIAN	11.2	11.2	N	CRETACEOUS	EARLY	ALBIAN	113	14	DEVONIAN	EARLY	340	22	22	DEVONIAN	EARLY	2000	2000	22	PROTEROZOIC	EARLY	2500									
9				TORTONIAN					113	14	340			22	2000	22			2500	22	2000			22	2500								
5	PALEOCENE	E	MESSINIAN	0.5	0.5	N	CRETACEOUS	LATE	CENOMANIAN	97.5	2.5	DEVONIAN	LATE	300	10	10	DEVONIAN	LATE	2000	2000	10	PROTEROZOIC	EARLY	2500									
4				MESSINIAN					97.5	2.5	300			10	2000	10			2500	10	2000			10	2500								
3	PALEOCENE	E	ZANCLEAN	3.4	3.4	N	CRETACEOUS	LATE	CAMPAIAN	74.5	1.4	DEVONIAN	EARLY	280	12	12	DEVONIAN	EARLY	2000	2000	12	PROTEROZOIC	EARLY	2500									
2				ZANCLEAN					74.5	1.4	280			12	2000	12			2500	12	2000			12	2500								
1	PALEOCENE	L	CALABRIAN	0.01	0.01	N	CRETACEOUS	LATE	MAASTRICHTIAN	66.4	0.4	DEVONIAN	LATE	245	20	20	DEVONIAN	LATE	2000	2000	20	PROTEROZOIC	EARLY	2500									
0				CALABRIAN					66.4	0.4	245			20	2000	20			2500	20	2000			20	2500								

THE PALEONTOLOGICAL SOCIETY PAPERS

Volume 1: Paleobiology and Biology of Corals, 1996, \$20.00.

Volume 2: Learning from the Fossil Record, 1996, \$20.00.

All volumes of the *Paleontological Society Papers*, as well as other publications listed on the back cover of this volume, are available by mail order from:

Barbara Pitman
Paleontological Society Special Publications
The Carnegie Museum of Natural History
4400 Forbes Avenue
Pittsburgh, PA 15213-4080

A check or institutional purchase order must accompany the order. Payment is to be made in \$US to The Paleontological Society. Orders will be shipped 4th class mail; overseas orders should add \$US 2.00 for surface mail.

PALEONTOLOGICAL SOCIETY SPECIAL PUBLICATIONS, 1980-1996

Short Course Notes:

- Echinoderms. Edited by T. W. Broadhead and J. A. Waters, 1980, \$12.
Lophophorates. Organized by J. T. Dutro, Jr. and R. S. Boardman, 1981, \$12.
Foraminifera. Organized by M. A. Buzas and B. K. Sen Gupta, 1982, \$12.
Sponges and Spongiomorphs. Organized by J. K. Rigby and C. W. Stearn, 1983, \$12.
Mammals. Organized by P. D. Gingerich and C. E. Badgley, 1984, \$12.
Mollusks. Organized by D. J. Bottjer, C. S. Hickman, and P. D. Ward, 1985, \$12.
Land Plants. Organized by R. A. Gastaldo, 1986, \$12.
Fossil Prokaryotes and Protists. Organized by J. H. Lipps, 1987, \$12.

Short Courses in Paleontology:

- Number 1: Molecular Evolution and the Fossil Record. Organized by B. Runnegar and J. W. Schopf, 1988, \$12.
Number 2: The Age of Dinosaurs. Organized by K. Padian and D.J. Chure, 1989, \$15.
Number 3: Arthropod Paleobiology. Organized by D. L. Mikulic, 1990, \$15.
Number 4: Analytical Paleobiology. Organized by N. L. Gilinsky and P. W. Signor, 1991, \$15.
Number 5: Trace Fossils. Organized and edited by C. G. Maples and R. R. West, 1992, \$15.
Number 6: Taphonomic Approaches to Time Resolution in Fossil Assemblages. Organized and edited by S. M. Kidwell and A. K. Behrensmeyer, 1993, \$15.
Number 7: Major Features of Vertebrate Evolution. Organized and edited by D. R. Prothero and R. M. Schoch, 1994, \$15.
Number 8: Siliceous Microfossils. Organized by C. D. Blome, P. M. Whalen, and K. M. Reed, 1995, \$15.

Special Publications:

- Volume 1: The Evolution-Creation Controversy: Perspectives on Religion, Science, and Education--A Handbook. Organized by R. A. Gastaldo and W. F. Tanner, 1984, \$6.50.
Volume 2: Paleoecology and Taphonomy of Pleistocene to Recent Intertidal Deposits, Gulf of California. K. W. Flessa (ed.), 1987, \$5.00.
Volume 3: Methods and Applications of Plant Paleoecology. W. A. DiMichele and S. L. Wing (eds.), 1988, \$5.00.
Volume 4: Paleotechniques. R. M. Feldmann, R. E. Chapman, and J. T. Hannibal (eds.), 1989, \$20.00.
Volume 5: Paleocommunity Temporal Dynamics: The Long-term Development of Multispecies Assemblies. W. Miller, III (ed.), 1990, \$20.00.
Volume 6: Fifth North American Paleontological Convention--Abstracts and Program. S. Lidgard and P. R. Crane (eds.), 1992, \$20.00.
Volume 7: Dino Fest. G. D. Rosenberg and D. L. Wolberg (eds.), 1994, \$25.00.
Volume 8: Sixth North American Paleontological Convention Abstracts of Papers, J. E. Repetski, Jr. (ed.), 1996, \$12.00.