

- that have been calibrated to the paleomagnetic time scale, the oxygen isotope record, or both.
- 2) The integration of paleontology, paleomagnetic stratigraphy, and oxygen isotope analysis in the relatively complete and continuous deep-sea record is providing a chronologic framework within which glacial-interglacial cycles can be accurately delimited. Within this framework it is now becoming possible to make an approximate correlation between the climatic record of the deep sea and the classic glacial-interglacial record in terrestrial sequences.
 - 3) With minor adjustments and calibration to a uniform time scale there is a remarkable degree of correspondence in the climatostratigraphic curves of various authors from various parts of the world in the Northern and Southern hemispheres, which suggests essentially synchronous response over a large part of the earth to major climatic changes. The global correlation of paleoclimatic cycles is shown in Fig. 11.
 - 4) As pointed out in the introductory paragraph to this chapter, the Quaternary is a unique time in earth history, even by the most conservative standard of comparison. In the relatively short time span of the last 1.5 Ma the earth has witnessed such diverse events as:
 - a) repeated (perhaps as many as 30 or more) glaciations at high and mid-latitudes in the Northern Hemisphere, which have drastically altered the biogeographic distribution patterns of marine and terrestrial plants and animals alike;
 - b) repeated and drastic latitudinal displacement of climatic zones by as much as 20 to 30 degrees;
 - c) dramatic changes in oceanographic circulation patterns in the oceans and Mediterranean Sea; dramatic oscillations in circulation between the Mediterranean and Black Sea; repeated isolation of, and increased salinity in, the Red Sea; repeated subaerial exposure of the Bering shelf and subaerial connection between North American and Siberian land areas.
 - 5) Integrated geophysical, geochemical, and paleontologic studies on the deep-sea stratigraphic record are leading to a better understanding of the history of global climate over the past million years. These studies may be expected to lead to a more precise construction of past global climatic conditions at specific "moments" in time (McINTYRE *et al.*, 1976), which can, in turn, serve as boundary conditions for modeling general atmospheric circulation patterns in the Pleistocene (GATES, 1976).

Just as the present has been amply demonstrated to be a reliable guide in reconstructing the past, so the past is seen to be a reliable guide to predicting the future.
 - 6) Having shown uncharacteristic restraint above, we here feel constrained to point out, in passing only, that this same interval has witnessed the passage from East African "stone-pebble culture," through the development of intricate and perfect bifacial implements, to the paleolithic tool industries (which began about 0.5 Ma), through the artistic inspiration of Altamira, Lascaux, and other caves in southwestern France and Spain, to the genius of Leonardo. Although hominid evolution has recently been pushed back into the Pliocene Epoch (*ca.* 3.4 Ma) it seems fair to say that, in general terms, Man is a child of the Quaternary.

REFERENCES

- Agassiz, Louis, 1838, *Notes sur les glaciers*: Soc. Géol. France, Bull., ser. 1, v. 9, p. 443-450 (observations on p. 407-410, 435-438).
- Ager, D. V., 1973, *The nature of the stratigraphic record*: 113 p., MacMillan (London).
- Ambrosetti, Pierluigi, Azzaroli, Augusto, Bonadonna, F. P., & Follieri, Maria, 1972, *A scheme of Pleistocene chronology for the Tyrrhenian side of central Italy*: Soc. Geol. Italiana, Boll., v. 91, p. 169-184.
- Arrhenius, Gustav, 1952, *Sediment cores from the east Pacific*: Rept. Swedish Deep Sea Expedition (1947-1948), v. 5, no. 1, p. 1-89.
- Azzaroli, Augusto, 1970, *Villafranchian correlation*

- tions based on large mammals: *Jour. Geology*, v. 35, no. 2, p. 111-131.
- Bandy, O. L., Casey, R. E., & Wright, R. C., 1971, *Late Neogene planktonic zonation, magnetic reversals, and radiometric dates, Antarctic to the tropics*: *Am. Geophys. Union, Antarctic Res. Ser.* (Antarctic oceanology, 1), v. 15, p. 1-26.
- , & Wilcoxon, J. A., 1970, *The Pliocene-Pleistocene boundary, Italy and California*: *Geol. Soc. America, Bull.*, v. 81, p. 2939-2948.
- Banner, F. T., & Blow, W. H., 1965, *Progress in the planktonic foraminiferal biostratigraphy of the Neogene*: *Nature*, v. 208, p. 1164-1166.
- Bayliss, D. D., 1969, *The distribution of Hyalinae balthica and Globorotalia truncatulinoides in the type Calabrian*: *Lethaia*, v. 2, p. 133-143.
- Bé, A. W. H., & Tolderlund, D. S., 1971, *Distribution and ecology of living planktonic foraminifera in the surface waters of the Atlantic and Indian oceans*: in *Micropalaeontology of oceans*, B. M. Furnell, & W. R. Ridel (eds.), p. 105-149, Cambridge Univ. Press (Cambridge, Mass.).
- Beard, J. H., 1969, *Pleistocene paleotemperature records based on planktonic foraminifera, Gulf of Mexico*: *Geol. Soc. America, Abstr. with Programs for 1969*, pt. 7, p. 256.
- Berggren, W. A., 1969, *Micropaleontologic investigations of Red Sea cores—summation and synthesis of results*: in *Hot brines and recent heavy metal deposits in the Red Sea*, E. T. Degens, & D. A. Ross (eds.), p. 329-335, Springer-Verlag (New York, N.Y.).—1972, *Late Pliocene-Pleistocene glaciation*: in *Preliminary reports of the Deep Sea Drilling Project*, v. 12, A. S. Laughton *et al.*, p. 953-963, U.S. Government Printing Office (Washington, D.C.).—1977, *The Pliocene/Pleistocene boundary in deep-sea sediments*: *Giorn. Geol.* (in press).
- , & Boersma, Anne, 1969, *Late Pleistocene and Holocene planktonic Foraminifera from the Red Sea*: in *Hot brines and recent heavy metal deposits in the Red Sea*, E. T. Degens & D. A. Ross (eds.), p. 282-298, 1 pl., Springer-Verlag (New York, N.Y.).
- , & Haq, Bil-al, 1976, *Biostratigraphy and biochronology of the Pliocene/Pleistocene boundary: calcareous plankton*: *First Internat. Congress Pacific Neogene Stratigraphy, Tokyo (1976)* (Abstract).
- , & Van Couvering, J. A., 1974, *The Late Neogene: Biostratigraphy, geochronology and paleoclimatology of the last 15 million years in marine and continental sequences*: *Palaeogeography, Palaeoclimatology, Palaeoecology*, v. 16 (1/2), p. 1-216.
- Blow, W. H., 1969, *Late middle Eocene to recent planktonic foraminiferal biostratigraphy*: in *Proc. 1st Internat. Conf. Planktonic Microfossils, Geneva (1967)*, 1, P. Brönnimann & H. H. Renz (eds.), p. 199-421, 54 pl., E. J. Brill (Leiden).
- Bremer, Mary, Briskin, Madeleine, & Berggren, W. A., 1977, *Qualitative paleoecology and paleobathymetry of the late Pliocene-early Pleistocene foraminifera of the Le Castella (Calabria, Italy)*: *Abstr. 10th INQUA Congress*, p. 53.
- Briskin, Madeleine, & Berggren, W. A., 1975, *Pleistocene stratigraphy and qualitative paleoceanography of tropical North Atlantic core V16-205*: in *Late Neogene epoch boundaries*, T. Saito & L. H. Burckle (eds.), *Micropaleontology, Spec. Publ. 1*, p. 167-198.
- Brock, Andrew, & Hay, R. L., 1976, *The Olduvai event at Olduvai Gorge*: *Earth and Planet. Sci. Lett.*, v. 29 (1976), p. 126-130.
- Broecker, W. S., Thurber, D. L., Goddard, J., Ku, T., Mathews, R. K., & Mesolella, K. J., 1968, *Milankovich hypothesis supported by precise dating of coral reefs and deep-sea sediments*: *Science*, v. 159, p. 297-300.
- , & Van Donk, Jan, 1970, *Insolation changes, ice volumes, and the O¹⁸ record in deep-sea cores*: *Rev. Geophys. Space Phys.*, v. 8, no. 1, p. 169-198.
- Buteux, D., 1843, *Esquisse géologique du Département de la Somme*: *Acad. Sci. Agric., Mém., Dépt. de la Somme*, p. 187-322.
- Ciaranfi, N., & Cita, M. B., 1973, *Paleontological evidence of changes in the Pliocene climates*: in *Initial reports of the Deep Sea Drilling Project*, W. B. F. Ryan, K. J. Hsu *et al.*, v. 13, no. 2, p. 1387-1399, U.S. Government Printing Office (Washington D.C.).
- Cita, M. B., 1973, *Pliocene biostratigraphy and chronostratigraphy*: in *Initial reports of Deep Sea Drilling Project*, W. B. F. Ryan, K. J. Hsu *et al.*, v. 13, no. 2, p. 1343-1379, U.S. Government Printing Office (Washington, D.C.).
- , Chierici, M. A., Ciampo, G., Moncharmont Zei, M., d'Onofrio, Sara, Ryan, W. B. F., & Scorziello, R., 1973, *The Quaternary record in the Tyrrhenian and Ionian basins of the Mediterranean Sea*: in *Initial reports of the Deep Sea Drilling Project*, W. B. F. Ryan *et al.*, v. 13, no. 2, p. 1263-1339, U.S. Government Printing Office (Washington, D.C.).
- Clark, D. L., 1971, *Arctic Ocean ice cover and its late Cenozoic history*: *Geol. Soc. America, Bull.*, v. 82, p. 3313-3324.
- , Larson, J. A., Root, R. E., & Fagerlin, S. C., 1975, *Foraminiferal patterns of the Arctic Ocean Pliocene and Pleistocene*: *Univ. Wisconsin-Madison Arctic Ocean Sedim. Studies Progr. no. 18*, Tech. Rept., 94 p.
- Cooke, H. B. S., 1973, *Pleistocene chronology: long or short?*: *Quaternary Res.*, v. 3, p. 206-220.
- Cox, Allan, 1969, *Geomagnetic reversals*: *Science*, v. 163, no. 3864, p. 237-245.
- Creuze de Lesser, Henri, 1824, *Statistique du Département de l'Hérault*: 606 p. (Montpélier).
- Dansgaard, W., & Tauber, H., 1969, *Glacial oxygen-18 content and Pleistocene ocean temperatures*:

- Science, v. 166, no. 3904, p. 499-502.
- , Johnsen, S. J., Clausen, H. B., & Langway, C. C., 1971, *Climatic record revealed by the Camp Century ice core*: in Late Cenozoic glacial ages, K. K. Turekian (ed.), p. 37-56, Yale University Press (New Haven, Conn.).—1972, *Speculations about the next glaciation*: Quaternary Res., v. 2, p. 396-398.
- Denizot, G., 1957, *Lexique stratigraphique international*: v. 1, fasc. 4a VII, Tertiaire: France, Belgique, Pays. Bas, Luxembourg: Centre Nat. Rech. Sci., Paris, 217 p.
- Desnoyers, J., 1829, *Observations sur un ensemble de dépôts marins plus récents et les terrains tertiaires du bassin de la Seine, qui constituent une formation géologique distincte; précédées d'un aperçu de la non-simultanéité des bassins tertiaires*: Ann. Sci. Nat., v. 16, p. 171-214, 402-419.
- Deuser, W. G., 1972, *Late Pleistocene and Holocene history of the Black Sea as indicated by stable-isotope studies*: Jour. Geophys. Res., v. 77, no. 6, p. 1071-1077.—1974, *Evolution of anoxic conditions in Black Sea during Holocene*: in The Black Sea—geology, chemistry and biology, E. T. Degens & D. A. Ross (eds.), Am. Assoc. Petrol. Geologists, Mem. 20, p. 133-136.
- , & Degens, E. T., 1969, O^{18}/O^{16} and C^{13}/C^{12} ratios of fossils from the hot-brine deep area of the central Red Sea: in Hot brines and recent heavy metal deposits in the Red Sea, E. T. Degens & D. A. Ross (ed.), p. 336-347, Springer-Verlag (New York).
- Donn, W. L., & Shaw, D. M., 1967, *The maintenance of an ice-free Arctic Ocean*: in Progress in oceanography, 4, Mary Sears (ed.), p. 105-113, Pergamon (Oxford).
- Duplessy, J. C., Labeyrie, J., Lalou, C., & Nguyen, H. V., 1970, *Continental climatic variations between 130,000 and 90,000 years B. P.*: Nature, v. 226, p. 631-633.
- Emiliani, Cesare, 1955, *Pleistocene temperatures*: Jour. Geology, v. 63, p. 538-578.—1961, *Cenozoic climatic changes as indicated by the stratigraphy and chronology of deep-sea cores of Globigerina-ooze facies*: New York Acad. Sci., Ann., v. 95, p. 521-536.—1964, *Paleotemperature analysis of the Caribbean cores A254-BR-C and CP-28*: Geol. Soc. America, Bull., v. 75, p. 129-144.—1966a, *Paleotemperature analysis of the Caribbean cores P6304-8 and P6304-9 and a generalized temperature curve for the last 425,000 years*: Jour. Geology, v. 74, p. 109-126.—1966b, *Isotopic paleotemperatures*: Science, v. 154, p. 851-857.—1967, *The Plio-Pleistocene boundary*: Reply to G. M. Richmond: Science, v. 156, no. 3773, p. 410.—1972, *Quaternary paleotemperatures and the duration of the high temperature intervals*: Science, v. 178, p. 398-401.
- , Mayeda, T., & Selli, Raimondo, 1961, *Paleotemperature analysis of the Plio-Pleistocene section at Le Castella, Calabria, southern Italy*: Geol. Soc. America, Bull., v. 72, p. 679-688.
- Ericson, D. B., Broecker, W. S., Kulp, J. L., & Wollin, Goesta, 1956, *Late Pleistocene climates and deep-sea sediments*: Science, v. 124, no. 3218, p. 385-389.
- , Ewing, Maurice, & Wollin, Goesta, 1963, *Pliocene-Pleistocene boundary in deep-sea sediments*: Science, v. 139, no. 3556, p. 727-737.—1964a, *Sediment cores from the Arctic and subarctic seas*: Science, v. 144, p. 1183-1192.—1964b, *The Pleistocene Epoch in deep-sea sediments*: Science, v. 146, p. 723-732.
- , & Wollin, Goesta, 1956a, *Correlation of six cores from the equatorial Atlantic and the Caribbean*: Deep-Sea Res., v. 3, p. 104-125.—1956b, *Micropaleontological and isotopic determinations of Pleistocene climates*: Micropaleontology, v. 2, no. 3, p. 257-270.—1968, *Pleistocene climates and chronology in deep-sea sediments*: Science, v. 162, p. 1227-1234.
- Ewing, Maurice, & Donn, W. L., 1956, *A theory of ice ages*: Science, v. 123, p. 1061-1066.—1958, *A theory of ice ages, 2*: Science, v. 127, p. 1159-1162.
- Fairbridge, R. W., 1972, *Climatology of a glacial cycle*: Quaternary Res., v. 2, no. 3, p. 283-302.
- Fillon, R. H., 1972, *Evidence from the Ross Sea for widespread submarine erosion*: Nature, Phys. Sci., v. 238, p. 40-42.
- Fleck, R. J., Mercer, J. H., Nairn, A. E. M., & Peterson, D. N., 1972, *Chronology of late Pliocene and early Pleistocene glacial and magnetic events in southern Argentina*: Earth Planet. Sci. Lett., v. 16, p. 15-22.
- Fleischer, R. L., 1974, *Preliminary report on Late Neogene Red Sea Foraminifera, Deep Sea Drilling Project, Leg 23B*: in Initial reports of the Deep Sea Drilling Project, T. A. Davies, B. P. Luyendyk et al., v. 26, p. 985-1011, 2 pl., U.S. Government Printing Office (Washington, D.C.).
- Forbes, Edward, 1846, *On the connexion between the distribution of the existing fauna and flora of the British Isles and the geographical changes which have affected their area, especially during the epoch of the Northern Drift*: Great Britain Geol. Survey, Mem. v. 1, p. 336-432.
- Gates, W. L., 1976, *Modeling the ice-age climate*: Science, v. 191, no. 4232, p. 1138-1144.
- Geitzenauer, K. R., 1969, *Coccoliths at late Quaternary paleoclimatic indicators in the subantarctic Pacific Ocean*: Nature, v. 223, p. 170-172.—1972, *The Pleistocene calcareous nannoplankton of the subantarctic Pacific Ocean*: Deep-Sea Res., v. 19, p. 45-60.
- Gignoux, Maurice, 1913, *Les formations marines pliocène et quaternaires de l'Italie du Sud et de la Sicile*: Ann. Univ. Lyon, n. sér., v. 36, 693 p.—1950, *Géologie stratigraphique*: 4^e édit.

- entièrement refondue, 735 p., Masson et cie. (Paris).—1955, *Stratigraphic geology*: 682 p., Freeman & Co. (San Francisco, Calif.).
- Hammen, T. van der, Wijmstra, T. A., & Zagwijn, W. H.**, 1971, *The floral record of the Late Cenozoic of Europe*: in *The Late Cenozoic glacial ages*, K. K. Turekian (ed.), p. 391-424, Yale Univ. Press (New Haven, Conn.).
- Haq, Bilal, Berggren, W. A., & Van Couvering, J. A.**, 1977, *Corrected age of the Pliocene/Pleistocene boundary*: *Nature*, v. 269, p. 483-488.
- Hays, J. D.**, 1965, *Radiolaria and Late Tertiary and Quaternary history of Antarctic seas*: *Biology of the Antarctic Sea II*, Am. Geophys. Union, Antarct. Res., ser. 5, p. 125-184.—1967, *Quaternary sediments of the Antarctic Ocean*: in *Progress in oceanography*, 4, Mary Sears (ed.), p. 117-131, Pergamon (Oxford).
- , & **Berggren, W. A.**, 1971, *Quaternary boundaries and correlations*: in *Micropaleontology of the oceans*, B. M. Funnell, & W. R. Riedel (eds.), p. 669-691, Cambridge University Press (Cambridge, Eng.).
- , **Saito, Tsunemasa, Opdyke, N. D., & Burckle, L. H.**, 1969, *Pliocene-Pleistocene sediments of the equatorial Pacific—their paleomagnetic, biostratigraphic and climatic record*: *Geol. Soc. America, Bull.*, v. 80, p. 1481-1514.
- Herman, Yvonne**, 1969, *Arctic Ocean Quaternary microfauna and its relation to paleoclimatology*: *Palaeogeography, Palaeoclimatology, Palaeoecology*, v. 6, p. 251-276.—1970, *Arctic paleo-oceanography in late Cenozoic time*: *Science*, v. 169, p. 474-477.—1972, *Quaternary Eastern Mediterranean sediments: micropaleontology and climatic record*: in *The Mediterranean Sea: A natural sedimentation laboratory*, D. J. Stanley (ed.), p. 129-147, Dowden, Hutchinson & Ross (Stroudsburg, Pa.).—1974, *Arctic Ocean sediments, microfauna and the climatic record in Late Cenozoic time*: in *Marine geology and oceanography of the Arctic seas*, Yvonne Herman (ed.), p. 283-348, Springer-Verlag (New York-Heidelberg-Berlin).
- Hoernes, M.**, 1856, *Die fossilen Mollusken des Tertiar-Beckens von Wien*: *K. K. Geol. Reichsanstalt, Abh.*, v. 3, p. 1-733.
- Hopkins, K. M.**, 1967a, *Quaternary marine transgression in Alaska*: in *The Bering land bridge*, D. M. Hopkins (ed.), p. 47-86, Stanford University Press (Stanford).—1967b, *The Cenozoic history of Beringia—a synthesis*: in *The Bering land bridge*, D. M. Hopkins (ed.), p. 451-484, Stanford Univ. Press (Stanford, Calif.).—1972, *The paleogeography and climate history of Beringia during Late Cenozoic time*: *Inter-Nord 12*, p. 121-150.—1973, *Sea level history in Beringia during the past 250,000 years*: *Quaternary Res.*, v. 3, p. 520-540.—1975, *Time-stratigraphic nomenclature for the Holocene Epoch*: *Geology*, v. 3, p. 10.
- , **Mathews, J. V., Wolfe, J. A., & Silberman, M. L.**, 1971, *A Pliocene flora and insect fauna from the Bering Strait region*: *Palaeogeography, Palaeoclimatology, Palaeoecology*, v. 9, p. 211-231.
- , **Rowland, R. W., Echols, R. E., & Valentine, P. C.**, 1974, *An Anvilian (early Pleistocene) marine fauna from Western Seward Peninsula, Alaska*: *Quaternary Res.*, v. 4, p. 441-470.
- Huene, Roland von, et al.**, 1971, *Deep Sea Drilling Project Leg 18*: *Geotimes*, v. 16, no. 10, p. 12-15.
- Hunkins, K., Bé, A. W. H., Opdyke, N. D., & Mathieu, G.**, 1971, *The Late Cenozoic history of the Arctic Ocean*: in *Late Cenozoic glacial ages*, K. K. Turekian (ed.), p. 215-237, Yale University Press (New Haven, Conn.).
- Iaccarino, Silvia**, 1975, *Planktonic and significant benthonic Foraminifera of the proposed Pliocene-Pleistocene boundary type-section of Le Castella*: *L'Ateneo Parmense, Acta Nat.*, v. 11, no. 3, p. 449-465.
- Imbrie, John**, 1972, *Correlation of the climatic record of the Camp Century ice core (Greenland) with foraminiferal paleotemperature curves from North Atlantic deep sea cores*: *Geol. Soc. America, Abstr. Programs*, v. 4, no. 7, p. 550.
- , & **Kipp, N. D.**, 1969, *Quantitative interpretations of late Pleistocene climate based on planktonic foraminiferal assemblages in Atlantic cores*: *Geol. Soc. America, Abstr. Ann. Mtg.*, 1969, Part 7, p. 113.—1971, *A new micropaleontological method for quantitative paleoclimatology: application to a late Pleistocene Caribbean core*: in *Late Cenozoic glacial ages*, K. K. Turekian (ed.), p. 73-181, Yale University Press (New Haven, Conn.).
- , **Van Donk, J., & Kipp, N. D.**, 1973, *Paleoclimatic investigation of a late Pleistocene Caribbean deep-sea core: comparison of isotopic and faunal methods*: *Quaternary Res.*, v. 3, no. 1, p. 10-38.
- Ingle, J. C., Jr.**, 1973, *Summary comments on Neogene biostratigraphy, physical stratigraphy, and paleoceanography in the marginal northeast Pacific Ocean*: in *Initial reports of the Deep Sea Drilling Project*, L. D. Kulm, R. von Huene et al., v. 18, p. 949-960, U.S. Government Printing Office (Washington, D.C.).—1975, *Pleistocene and Pliocene Foraminifera from the Sea of Japan, Leg 31, Deep Sea Drilling Project*: in *Initial reports of the Deep Sea Drilling Project, Leg 31*, D. E. Karig et al., p. 693-701, U.S. Government Printing Office (Washington, D.C.).
- Johnsen, S. J., Dansgaard, W., Clausen, H. B., & Langway, C. C.**, 1972, *Oxygen isotope profiles through the Antarctic and Greenland ice sheets*: *Nature*, v. 235, p. 429-434.
- Keany, John, & Kennett, J. P.**, 1973, *Pliocene-early Pleistocene paleoclimatic history recorded in Antarctic-subantarctic deep-sea cores*: *Deep-Sea Res.*, v. 17, p. 529-548.

- Kellogg, T. B.**, 1972, *Late Pleistocene climates in the Norwegian and Greenland seas*: Geol. Soc. America, Abstr. Programs, v. 4, no. 7, p. 560.
- Kennett, J. P.**, 1970, *Pleistocene paleoclimates and foraminiferal biostratigraphy in subantarctic deep-sea cores*: Deep-Sea Res., v. 17, p. 125-140.
- , & **Brunner, C.**, 1973, *Antarctic Late Cenozoic glaciation: evidence for initiation of ice-rafting and inferred increased bottom water activity*: Geol. Soc. America, Bull., v. 84, no. 6, p. 2043-2052.
- , & **Huddleston, Paul**, 1972, *Abrupt climatic change at 90,000 Yr BP: faunal evidence from Gulf of Mexico cores*: Quaternary Res., v. 2, no. 3, p. 384-395.
- , & **Shackleton, N. J.**, 1975, *Laurentide ice sheet meltwater recorded in Gulf of Mexico deep-sea cores*: Science, v. 188, p. 147-150.
- , **Watkins, N. D.**, & **Vella, Paul**, 1971, *Paleomagnetic chronology of Pliocene-early Pleistocene climates and the Plio-Pleistocene boundary in New Zealand*: Science, v. 171, p. 276-279.
- Kent, D.**, **Opdyke, N. D.**, & **Ewing, Maurice**, 1971, *Climatic change in the North Pacific using ice-rafted detritus as a climatic indicator*: Geol. Soc. America, Bull., v. 82, p. 2741-2754.
- Ku, T. L.**, & **Broecker, W. S.**, 1967, *Rates of sedimentation in the Arctic Ocean*: in Progress in oceanography, 4, Mary Sears (ed.), p. 95-104, Pergamon (Oxford).
- Kukla, G. J.**, **Mathews, R. K.**, & **Mitchell, M. J.** (eds.), 1972, *The present interglacial: How and when will it end?*: Quaternary Res., v. 2, no. 3, p. 261-445.
- Lamb, J. L.**, 1969, *Planktonic foraminiferal datums and Late Neogene epoch boundaries in the Mediterranean, Caribbean and Gulf of Mexico*: Geol. Soc. America, Abstr. with Programs for 1969, pt. 7, p. 280.—1971, *Planktonic foraminiferal biostratigraphy and paleomagnetism of late Pliocene and early Pleistocene strata at Le Castella, Italy*: Gulf Coast Assoc. Geol. Soc., Trans., v. 21, p. 411-418.
- , & **Beard, J. H.**, 1972, *Late Neogene planktonic foraminifers in the Caribbean, Gulf of Mexico and Italian stratotypes*: Univ. Kansas Paleont. Contrib., Art. 57 (Protozoa 8), 67 p., 25 text-fig., 36 pl.
- Larson, J. A.**, 1975, *Arctic Ocean Foraminifera abundance and its relationship to equatorial Pacific Ocean solution cycles*: Geology, v. 3, no. 9, p. 491-492.
- Laughton, A. S.**, et al., 1970, *Deep-Sea Drilling Project, Leg 12*: Geotimes, v. 15, no. 9, p. 10-14.
- 1972, *Initial reports of the Deep Sea Drilling Project, XII*: p. iv-xxi + 3-1243, U.S. Government Printing Office (Washington, D.C.).
- Lyell, Charles**, 1833, *Principles of geology*: v. 3, 398 p. (plus 109 p.), Murray (London).—1839, *Nouveaux éléments de géologie*: 648 p. Pitois-Levrault (Paris).
- McIntyre, Andrew, Bé, A. W. H.**, **Biscaye, Pierre**, **Burckle, Lloyd**, **Gardner, James**, **Geitzenauer, K. R.**, **Roche, Michael**, **Imbrie, John**, **Kipp, Nilva**, **Ruddiman, W. F.**, **Moore, T. C.**, & **Heath, Ross**, 1972, *The glacial North Atlantic 17,000 years ago: paleoisotherm and oceanographic maps derived from floral-faunal parameters by CLIMAP*: Geol. Soc. America, Abstr. Programs, v. 4, no. 7, p. 590.
- , et al., 1976, *The surface of the Ice-Age earth*: Science, v. 191, no. 4232, p. 1131-1137.
- , **Ruddiman, W. F.**, & **Jantzen, R.**, 1972, *Southward penetration of the North Atlantic polar front: faunal and floral evidence of large-scale surface water mass movements over the last 225,000 years*: Deep-Sea Res., v. 19, p. 61-77.
- Margolis, S. V.**, & **Kennett, J. P.**, 1970, *Antarctic glaciation during the Tertiary recorded in sub-Antarctic deep-sea cores*: Science, v. 170, p. 1085-1087.—1971, *Cenozoic paleoglacial history of Antarctica recorded in sub-Antarctic deep-sea cores*: Am. Jour. Sci., v. 271, p. 1-36.
- Mercer, J. H.**, 1973, *Cainozoic temperature trends in the Southern Hemisphere: Antarctic and Andean glacial evidence*: in Palaeoecology of Africa, E. M. van Zinderen Bakker (ed.), v. 8, p. 87-114, A. A. Balkema (Capetown-Rotterdam).
- Mercey, A. de**, 1874-77, *Sur la classification de la période Quaternaire en Picardie*: Soc. Linn. Nord France, Mém., v. 4, p. 18-29.
- Mesolella, K. J.**, **Mathews, R. K.**, **Broecker, W. S.**, & **Thurber, D. L.**, 1969, *The astronomical theory of climatic change: Barbados data*: Jour. Geology, v. 77, no. 3, p. 250-274.
- Meunier, E. S.**, 1908, *Géologie*: 989 p., 152 text-fig., Vuibert et Nony (Paris).
- Muratov, V. M.**, **Ostrovsky, A. B.**, & **Fridenberg, E. O.**, 1974, *Quaternary stratigraphy and paleogeography on the Black Sea coast of Western Caucasus*: Boreas, v. 3, p. 49-60.
- Nakagawa, Hisao**, **Niitsuma, Nobuaki** & **Hayasaka, I.**, 1969, *Late Cenozoic geomagnetic chronology of the Boso Peninsula*: Geol. Soc. Japan, Jour., v. 75, no. 5, p. 267-280.
- Nelson, C. H.**, **Hopkins, D. M.**, & **Scholl, D. W.**, 1974a, *Cenozoic sedimentary and tectonic history of the Bering Sea*: in Oceanography of the Bering Sea, D. W. Hood & E. J. Kelley (eds.), Inst. Mar. Sci., Univ. Alaska, Fairbanks, p. 485-516.—1974b, *Tectonic setting and Cenozoic sedimentary history of the Bering Sea*: in Marine geology and oceanography of the Arctic seas, Y. Herman (ed.), p. 119-140, Springer-Verlag (New York-Heidelberg, Berlin).
- Niitsuma, Nobuaki**, 1970, *Some geomagnetic stratigraphical problems in Japan and Italy*: Mar. Geology, v. 6, no. 2, p. 99-112.
- Olausson, Eric**, 1961, *Remarks on Tertiary sequences of two cores from the Pacific*: Geol. Inst. Uppsala, Bull., v. 40, p. 299-303.—1965, *Evidence of climatic changes in North Atlantic*

- deep-sea cores with remarks on isotopic paleo-temperature analysis: in *Progress in oceanography*, 3, Mary Sears (ed.), p. 221-252, Pergamon (Oxford).
- Opdyke, N. D., Glass, B. P., Hays, J. D., & Foster, J. H., 1966, *Paleomagnetic study of Antarctic deep-sea cores*: *Science*, v. 154, p. 349-357.
- Parker, F. L., 1958, *Sediment cores from the Mediterranean Sea and the Red Sea: No. 4. Eastern Mediterranean Foraminifera*: Rept. Swedish Deep-Sea Expedition, v. 8, p. 219-283.
- Parkin, D. W., & Shackleton, N. J., 1973, *Trade wind and temperature correlations from a deep-sea core off the Saharan Coast*: *Nature*, v. 245, no. 5426, p. 455-457.
- Parmentier, C., & Folger, D. W., 1974, *Eolian biogenic detritus in deep sea sediments: a possible index of equatorial ice age acidity*: *Science*, v. 185, p. 695-697.
- Phleger, F. B., 1961, *Ecology and distribution of recent Foraminifera*: 297 p., Johns Hopkins Press (Baltimore, Md.).
- Reboul, Henri, 1833, *Géologie de la période Quaternaire, et introduction à l'histoire ancienne*: 222 p., F.-G. Levrault (Paris).
- Repenning, C. A., 1967, *Paleartic-Nearctic mammalian dispersal in the late Cenozoic*: in *The Bering land bridge*, D. M. Hopkins (ed.), p. 288-311, Stanford University Press (Stanford, Calif.).
- Richmond, G. M., 1970, *Comparison of the Quaternary stratigraphy of the Alps and Rocky Mountains*: *Quaternary Res.*, v. 1, no. 1, p. 3-28.
- Rio, Domenico, 1974, *Remarks on late Pliocene-early Pleistocene calcareous nannofossil stratigraphy in Italy*: *Ateneo Parmense, Acta Natur.*, v. 10 (1974), p. 409-449.
- Ross, D., Neprochonov, Y., Hsu, K. J., Muhitten, S., Stoffers, P., Supko, P., Trimonis, E. A., Percival, S., Traverse, A., Ericson, A. J., Degens, E. T., Hunt, J. M., & Manheim, F., 1975, *Glomar Challenger drills the Black Sea*: *Geotimes*, v. 20, no. 10, p. 18-20.
- Ruddiman, W. F., 1971, *Pleistocene sedimentation in the equatorial Atlantic: stratigraphy and faunal climatology*: *Geol. Soc. America, Bull.*, v. 82, p. 283-302.
- , & McIntyre, Andrew, 1976, *Northeast Atlantic paleoclimatic changes over the past 600,000 years*: *Geol. Soc. America, Mem.* 145, p. 111-146.
- Ruggieri, Giuliano, 1971, *Calabriano e Siciliano nei dintorni di Palermo, Part 1*: *Rivista Min. Sicil.*, v. 22(130-132), p. 160-171.—1972, *Alcune considerazioni sulla definizione del piano Calabriano*: *Soc. Geol. Italiana, Boll.*, v. 91 (1972), p. 639-645.
- , Buccheri, Giuseppe, Greco, Antonio, & Sprovieri, Rodolfo, 1976, *Un affioramento di Siciliano nel quaero della revisione della stratigrafia del Pleistocene inferiore*: *Soc. Geol. Italiana, Boll.*, v. 94, p. 889-914.
- Ryan, W. B. F., 1972, *Stratigraphy of Late Quaternary sediments in the Eastern Mediterranean*: in *The Mediterranean Sea*, D. J. Stanley (ed.), p. 149-169, Dowden, Hutchinson & Ross, Inc. (Stroudsburg, Pa.).
- Saito, Tsunemasa, 1969a, *The Miocene-Pliocene and Pliocene-Pleistocene boundaries in deep-sea sediments*: Congr. INQUA 8^e, Paris 1969, *Résumés des Communications*, sec. 2, 72 bis (abstract). —1969b, *Late Cenozoic stage boundaries in deep-sea sediments*: *Geol. Soc. America, Ann. Mtg., Abstr.*, v. 82, pt. 7, p. 289-290.
- Savage, D. E., & Curtis, G. H., 1970, *The Villafranchian Stage—Age and its radiometric dating*: in *Radiometric dating and paleontologic zonation*, O. L. Bandy (ed.), *Geol. Soc. America, Spec. Paper* 124, p. 207-231.
- Scholl, D. W., et al., 1971, *Deep Sea Drilling Project, Leg 19*: *Geotimes*, v. 16, no. 11, p. 12-15.
- Selli, Raimondo, 1967, *The Pliocene-Pleistocene boundary in Italian marine sections and its relationship to continental stratigraphies*: in *Progress in oceanography*, 4, Mary Sears (ed.), p. 67-82, Pergamon (Oxford).—1971, *Calabrian*: *Giorn. Geol.*, ser. 2, v. 37, no. 2, p. 55-64.—1977, *The Neogene/Quaternary boundary in the Italian marine formations*: *Giorn. Geol.* (in press).
- Serres, Michael de, 1830, *De la simultanéité des terrains de sédiments supérieurs*: in *La Géographie Physique de l'Encyclopédie Méthodique*, v. 5, 125 p., 1 pl.—1855, *Des caractères et de l'importance de la période Quaternaire*: *Soc. Géol. France, Bull.*, sér. 2, v. 12, no. 1, p. 257-263.
- Shackleton, N. J., 1967, *Oxygen isotope analyses and Pleistocene temperatures re-assessed*: *Nature*, v. 215, no. 5096, p. 15-17.
- , & Kennett, J. P., 1975a, *Paleotemperature history of the Cenozoic and the initiation of Antarctic glaciation: oxygen and carbon isotope analyses in DSDP sites 277, 279, and 281*: in *Initial reports of the Deep Sea Drilling Project*, v. 19, J. P. Kennett, R. E. Houtz et al., p. 743-755, U.S. Government Printing Office (Washington, D.C.).—1975b, *Late Cenozoic oxygen and carbon isotopic changes at DSDP Site 284; implications for glacial history of the Northern Hemisphere and Antarctic*: in *Initial reports of the Deep Sea Drilling Project*, v. 19, J. P. Kennett, R. E. Houtz et al., p. 801-807, U.S. Government Printing Office (Washington, D.C.).
- , & Opdyke, N. D., 1973, *Oxygen isotope and paleomagnetic stratigraphy of equatorial Pacific core V28-238: oxygen isotope temperature and ice volumes on a 10⁵ year scale*: *Quaternary Res.*, v. 3, no. 1, p. 39-55.—1976, *Oxygen-isotope and paleomagnetic stratigraphy of Pacific core V28-239: Late Pliocene to latest*

- Pleistocene*: Geol. Soc. America, Mem. 145, p. 449-464.
- Smith, L. A.**, 1969, *Pleistocene discoasters from the stratotype of the Calabrian Stage (Santa Maria di Catanzaro) and the section at Le Castella, Italy*: Gulf Coast Assoc. Geol. Soc., Trans., v. 19, p. 579-583.
- Sprovieri, Rodolfo, d'Agostino, Salvatore, & Di Stefano, Enrico**, 1973, *Giacitura del Calabriano nei dintorni di Catanzaro*: Riv. Italiana Paleont. Stratigr., v. 79, no. 1, p. 127-140 (incl. Eng. summ.).
- Takayama, T.**, 1970, *The Pliocene-Pleistocene boundary in the Lamont core V21-98 and at Le Castella, Italy*: Jour. Marine Geology, v. 7, no. 2, p. 70-77.
- Van Montfrans, H. M.**, 1971, *Paleomagnetic dating in the North Sea basin*: Earth Planet. Sci. Lett., v. 11, p. 226-235.
- Van Straaten, L. M. J. U.**, 1972, *Holocene stages of oxygen depletion in deep waters of the Adriatic Sea*: in The Mediterranean Sea: a natural sedimentation laboratory, D. J. Stanley (ed.), p. 631-643, Dowden, Hutchinson & Ross, Inc. (Stroudsburg, Pa.).
- Van Voorthuysen, J. H., Toering, K., & Zagwijn, W. H.**, 1972, *The Plio-Pleistocene boundary in the North Sea basin: revision of its position in the marine beds*: Geol. Mijnb., v. 6, p. 627-640.
- Vezián, Alexandre**, 1865, *Prodrome de Géologie*: v. 3, F. Savy (Paris).
- Watkins, N. D., & Kennett, J. P.**, 1971, *Antarctic bottom water: major change in velocity during the late Cenozoic between Australia and Antarctica*: Science, v. 173, p. 873.—1972, *Regional sedimentary disconformities and upper Cenozoic changes in bottom water velocities between Australia and Antarctica*: in Antarctic Res. Ser. 19, Antarctic oceanology 2: The Australian-New Zealand sector, D. E. Hayes (ed.), p. 273-293, American Geophysical Union (Washington, D.C.).
- , **Kester, D. R., & Kennett, J. P.**, 1974, *Paleomagnetism of the type Pliocene/Pleistocene boundary section at Santa Maria di Catanzaro, Italy, and the problem of post-depositional precipitation of magnetic minerals*: Earth and Planet. Sci. Lett., v. 24, p. 113-119.
- , **Kristjansson, L., & McDougall, I.**, 1976, *A detailed paleomagnetic survey of the type location for the Gilsa geomagnetic polarity event*: Earth and Planet. Sci. Lett., v. 27, p. 436-444.
- Zagwijn, W. H.**, 1974, *The Pliocene-Pleistocene boundary in western and southern Europe*: Boreas, v. 3, p. 75-97.
- , **Van Montfrans, H. M., & Zandstra, J. G.**, 1971, *Subdivision of the "Cromerian" in the Netherlands: pollen-analysis, palaeomagnetism and sedimentary petrology*: Geol. Mijnb., v. 50, p. 41-58.

INDEX

Authors' names in this index are set in small capitals with an initial large capital, and suprafamilial names are distinguished by the use of full capitals. Page references having chief systematic importance are in boldface type (as **A100**). The few italicized names are considered to be invalid.

- ABBOTT**, A32
ABDULLAEV, A152
ABDULLAEV & KHALETSKAYA, A152
ABEL, A21, A22, A70
ABELSON, A68
ABICH, A300, A343
ACACIAPORA, A272
ACANTHATIA, A246
ACANTHOCERAS, A459
ACANTHOCERATACEAE, A441
ACANTHOCERATIDAE, A457, A459, A467
ACANTHOCERATINAE, A459
ACANTHOCLADIA, A322-A325
ACANTHONAUTILUS, A276
ACANTHOPECTEN, A305
ACANTHOPYGE, A201
ACANTHOTRIGONIA, A459
ACASTELLA, A195
ACASTOIDES, A201
ACERVOSCHWAGERINA, A308, A315
ACHARAX, A475
ACINOPHYLLUM, A223
ACRITARCHS, A80, A109, Silurian, A170, A177
ACROPHYLLUM, A223
ACROSALENIIDAE, A441
ACROSPIRIFER, A196, A197, A202, A. *kobehana* Zone, A226
ACROTEUTHIS, A408, A457, A467
ACROTRETIDA, Cambrian, A120
ACTAEONELLIDAE, A458, A472
ACTINOCAMAX, A458, A459
ACTINOCERATOIDEA, A275, A276
ACTINOTRIGONIA, A476
ACTINOTRYPPELLA, A324
ACTUALISM, A4
ACTUOPALEONTOLOGY, A5
ADAMANOPHYLLUM, A270, A271
ADAMS & AGER, A463
ADELAIDEAN, A82
ADOLPHIA, A197
ADRIANITES, A300
AENONA, A469
AEROBIC DECAY, A16
AFGHANELLA, A312
AFRICAN STRATA, Silurian, A174
AGAPELLA, A472
AGASSIZ, A507
AGATHICERAS, A300, A302, A305, A335
AGATHICERATIDAE, A276
AGE CORRELATIONS, Precambrian, A85
AGELASINA, A474
AGER, A393, A395, A462, A468, A471, A508
AGER & WESTERMANN, A395
AGERINA, A141
AGNOSTID DISTRIBUTION AND TEMPERATURE, A129
AGNOSTIDA, A122-A128, A131, A160
AGNOSTIDAE, A123
AGONIATITES, A201, A243
AGRAULIDAE, A125
AHTIELLA, A143
AITKEN, A247
AKAGOPHYLLUM, A319, A320
AKASAKAN SERIES, A294, A302, A312
AKIDOCHILUS, A410
AKIOSHIELLA, A266
AKIOSOPHYLLUM, A271
AKMILLERIA, A331, A334
AKNISOPHYLLUM, A223
AKTUBINSKIA, A334
ALBERTELLA, A123, Zone, A131-A132
ALBERTI, A189, A192, A195, A198, A201, A208, A226
VON ALBERTI, A352
ALBIAN, A423, A446-A448, A453, A457-A458
ALBUNARES, A92
ALDINGER, A381
ALGAE, Precambrian, A108-A110, A111
ALISPIRIFER, A260
ALJUTOVELLA, A266
"ALLANARIA", A245
ALLEN, A57, A222
ALLENETES, A197
ALLOCHTHONOUS BURIAL, A23-A48
ALLOGENIC CAUSES OF DEATH, A6
ALLOITEAU, A394
ALLOTROPIOPHYLLUM, A269, A270, A272, A299, A318, A320
ALMITES, A334
ALPINE FACIES, A352
ALTAY-SAYAN AREA, Devonian fauna of, A196, A201, A206
ALVEOLINELLA, A497
ALVEOLINIDAE, A472
AMALTHEUS, A399, A402
AMANDOPHYLLUM, A273
AMBER, Eocene, preservation in, A12, A13, A14
AMBIENT POLISHING, A25
AMBOCOELIA, A300
AMBOCOELIIDAE, A329
AMMODISCIDAE, A316
AMMONITES, A359
AMMONOID FAUNA, Devonian, A227, A234, A243, A244, provincialism of, A231-A234, A242-A243, A246-A247, zones, A190
AMMONOIDEA, A275, A276
AMMONOIDS, Jurassic, A397-A408, Permian, A331-A337, Triassic, A370-A371
AMNIGENIA, A247
AMOS & BOUCOT, A231
AMOS & SABATTINI, A260
AMPHIGENIA ZONE, A223, A231, A234
AMPHINOMORPHA, A103
AMPHIPORA, A199, A246
AMPHIPYNDACIDAE, A441
AMPHIPYNDAX ENESSEFFI ZONE, A461
AMPHISTEGINA, A497
AMPHITRISCOELUS, A473
AMPHOTON, A127, A130
AMPLEXIZAPHRENTIS, A318, A319
AMPLEXOCARINIA, A269, A299, A300, A318, A319, A321
AMPLEXUS, A269, A270
AMPYXINELLA, A149
AMSDEN, A154
AMUROLITES, A202
AMYGDALOPHYLLUM, A270, A271
ANABACIA, A393
ANABARITES, A89, **A104**
ANABARITIDAE, **A104**
ANADARA, A469
ANAEROBIC DECAY, A16
ANAFLEMINGITES, A363
ANAGAUDRYCERAS, A475
ANAPACHYDISCUS, A471
ANARCESTES, A202, A203, A242
ANASTOMOPORA, A323
"ANASTROPHIA", A196
ANATAPHRUS, A150, A154, A161
ANCHIGNATHODUS, A338, A339, Zone, A301, A. *typicalis* Zone, A339, A379
ANCHIOPSIS, A226
ANCHURA, A469
ANCISTRORHYNCHIA, A146
ANCYLOCERATIDAE, A456, A457
ANCYLOCERATINA, A455, A471, A472
ANCYRODELLA, A243
"ANCYROGNATHUS" TRIANGULARIS ZONE, A243
ANCYROPYGE, A242
ANDERSON, A85, A193, A210, A353
ANDERSON & ANDERSON, A353
ANDERSON, BOUCOT, & JOHNSON, A202
ANDERSONOCERAS, A301
ANDICERAS, A402
ANDREEVA, A141
ANDREEVA & DRONOV, A403
ANETOCERAS, A195, A196, A234
ANGARAN PALEOFORAL REGION, A285
ANGARELLA, A140, A152
ANGUSTIOCHREA, A104
ANGUSTIOCHREIDA, A104
ANIMAL PROTISTS, evolution of, A81
ANNELIDA, A102
ANNELIDS, Cambrian, A120, Precambrian, A88

- Anodontopleura, A473
 Anofia, A474
 Anolis electrum, A11
 Anomalofusus, A469
 Anomocarella, A127
 Anomocarellidae, A130
 Anomocaridae, A125
 ANOMURA, A410
 Anopisthodon, A476
 Anoplothea, A195
 anoxybiotic polychaetes, A8-A9
 Antedon, A411, A499
 ANTHOZOA, A89
 anthozoans, Jurassic, A393-A394,
 Permian, A317-A321
 Anthracoceras, A260
 Antilocaprina, A473
 Antinomia, A395
 ANZYGIN, A148
 Apatognathus, A280
 Apatorthis, A152
 Aphelaceras, A276
 Aphroidophyllum, A240
 Aphrophyllodes, A271
 Aphrophyllum, A271
 Apiocrinus, A411
 Apiograptus, A155
 Apiotrigonia, A461, A465
 Aploceras, A275
 APOLLONOV, A152, A153, A158
 Aporrhaidae, A458
 Aporrhais, A39
 Appalachian province, Devonian,
 A209-A210
 Appohimchi subprovince, A230-
 A231, A231
 Aptian, A423, A446-A448, A453,
 A457
 Apulites, A473
 Arachnastrea, A271, A272, A273
 Arachnolasma, A269-A272
 ARAKELIAN, A299, A311
 Araxathyris, A382
 Araxilevis, A336
 Araxoceras, A300, A301, A336
 Araxoceratidae, A336
 Araxopora, A324, A325, A326
Arborea, A99
 Arca, A35
 Archaediscus, A263, A265
 Archaeocidaris, A306
 ARCHAEOCYATHA, A120,
 A123, A124, A126, A127,
 A129, A130
 Archegosaurus, A297
 d'ARCHIAC, A3
 Archidiscodon, A500
 ARCOIDA, A375
 Arctica islandica, A508, A510
 Arctic-Boreal area, Jurassic, A391
 Arcticeramus, A396
 Arctioceras, A401, A402
 Arctiopora, A326
 Arctoccephalites, A401, A402
 Arctomytilus, A472
 Arctostrobium urna Zone, A460
 Arctotis, A396
 Arcullaea, A473
 ARCULLAEINAE, A441
 ARDUINO, A506
 Arenicola marina, A8
 Arenigian shelly faunas, A140-
 A142, Balto-Scandian, A140-
 141, Chinese, A141, Mediterra-
 nean, A141-A142, North Amer-
 ican, A140
 Argocheilus, A276
 Arguinelia, A397
 Aricticeras, A399
 Arietites, A398
 Arietitidae, A398
 Aristocystites, A149
 ARKELL, A391, A394, A398,
 A400, A402, A440
 Arkelloceras, A401
 Armenina, A299, A300
 ARMSTRONG, A305
 Arnaudia, A473
 Arnioceras, A398
 ARRHENIUS, A517
 ARTHABER, A363
 ARTHROPODA, A104
 arthropods, Cambrian, A120, Pre-
 cambrian, A87-A88, Tertiary,
 A499
 Artinskia, A331
 Artinskian Stage, A255, A293,
 A294, A305, ammonoids of,
 A334-A335, brachiopods of,
 A330, bryozoans of, A322,
 A324, A325, A326, corals of,
 A318-A319, fusulinaceans of,
 A311
 Artioceras, A334
 Artostrobium urna Zone, A460
 Arumberia, A83, A102
 Asaphopsis Province, A142
 Asaphus, A143, A148
 Ascopora, A322, A325, A326
 Ashgillian, A149, lower and mid-
 dle faunas of, A150-A152
 Asiatotrigonia, A472
 Asiptychaspis, A127
 asphyxiation, A8-A10
 Aspidagnostus, A124
 Aspidoceras, A406, A407
 Aspidoceratidae, A401, A403
 Aspidura, A62, A63
 Asselian Stage, A255, A259,
 A267, A293, A305, A306, am-
 monoids of, A331, brachiopods
 of, A330, bryozoans of, A322,
 A323, A324, corals of, A318,
 fusulinaceans of, A310
 assemblages, Cambrian, A120
 ASSERETO, A357
 Assilina, A497
 Astartella, A305
 Astartidae, A375
 Astartila, A305
 Asterias rubens, A7, A20-A21
 Asteroarchaediscus, A265
 Asterobillingsa, A223
 Astroceras, A398
 Astrophyllum, A201
 Astycorpe, A242
 Ataxioceras, A407
 Athyris, A300, *A. angelica* Zone,
 A245
 Athyrisinidae, A327, A330
 Atokan Series, A248, corals of,
 A272, foraminifers of, A266
 Atomodesma, A305
 Atractites, A408
 Atriboniidae, A327
 "Atrypa," A240
 Atrypa, A242
 Atrypella, A223, A227
 Atrypidae, A161
 ATRYPOIDEA, A203, A246
 Atsabites, A335
 Attribonium, A246
 Aucellina, A457, A458
 AUDLEY-CHARLES, A363
Augustiochreidae, A104
 Aulacella, A246
 Aulaceridae, A161
 Aulacnautilus, A408
 Aulacopleurum, A476
 Aulacosphinctes, A403, A406
 Aulacosphinctoides, A403
 Aulacostephanus, A407
 Aulacoteuthis, A449
 Aulina, A271, A272
 Auloclesia, A318
 Aulophyllum, A272
 Aulopora, A273, A321
 Aulosteges, A380
 Aulostegidae, A329, A330
 AUSTIN, A189, A206
 Australian biogeographic region,
 in the Carboniferous, A270,
 A271
 Australocoelia, A197, A230
 Australospirifer, A197, A230, A231
 Austrotigonia, A476
 autogenic causes of death, A6
 autolysis, A6
 Autunian Series, A295-A297
 Avicula, A362
 Aviculopecten, A305
 AYZENBERG, A258
 azimuthal orientation, A33-A36
 Azygograptus, A156
 AZZAROLI, A516
 BAARS, A245
 BACHOFEN-ECHT, A80
 bacteria, Proterozoic, A80
 Bactrognathus, A280, A281
 Baculites, A459
 Baculitidae, A459-A461, A467
 Baikalina, A102
 Bainella, A230
 BAKER, A222
 Bakevelloides, A369
 Balanus, A6, A7
 BALDIS & BLASCO, A153
 Balto-Samartian shield, A124
 BANDO, A363, A364
 BANDY, CASEY, & WRIGHT, A530
 BANDY & WILCOXON, A510, A513
 BANKS & NAQVI, A305
 BANNER & BLOW, A513
 Barcoona, A476
 BARGHOORN & TYLER, A80
 BARKHATOVA, A259
 Barnea, A30
 BARNES, A156, A158
 BARNES & FAHRAEUS, A156, A158

- BARRANDE, A195
 Barrandeophyllum, A196
 Barremian, A423, A446-A448, A453, A457
 Barretia, A473
 Barroisiceratinae, A460
 BARTENSTEIN, A410
 BARTHEL, A15, A47, A48, A369, A403, A428
 Bartramella, A266, A268
 Baryconites, A473
 Barytichisma, A272
 Bashkirian Stage, A259, corals of, A272, foraminifers of, A265-A266
 Basidechenella, A201
 Basilicorhynchus, A246, Zone, A205, A245
 basinal shale facies, Lower Devonian fauna of, A195
 BATE, A69
 BATES, A143
 BATHURST, A49, A53, A63, A69
 Bathyuriscus, A123, A130
 BATTEN, A377, A378
 BAUMANN, A58
 Bayleia, A472
 Bayleioidea, A473
 BAYLISS, A510, A513, A514
 Bé & TOLDERLUND, A532
 Beanicerias, A399
 BEARD, A514
 Becken facies, A187, A195
 BEECHER, A32
 BEEDE & KNIKER, A292, A313
 Beedeina, A266, A267, A268, Zone, A266, A267
 BEHME & GEYER, A399
 BEHNKEN, A337, A338
 Belemnella, A458, A461, A468
 Belemnitella, A458, A461, A468, A472
 Belemnitellinae, A441
 belemnites, Jurassic, A408-A409
 Belemnitidae, A408, A441
 Belemnopsidae, A410
 Belemnopsis, A410, A454, A455, A472, A475, A476
 Belemnoteuthidae, A441
 BELL, A281
 BELLEROPHON, A302
 Bellerophontidae, A378
 Belliscalca, A469
 Beloceras, A205, A207
 ?*Beltanella*, A96
 BELYEA & McLAREN, A245
 BENDER & STOPPEL, A337, A339
 BENSARD, A189, A190, A208
 benthic communities, Silurian, A170
 BERCKHEMER & HÖLDER, A407
 BERDAN, A223, A230
 BERDAN & MARTINSSON, A180
 BERGGREN, A503, A516, A520, A530, A532, A533
 BERGGREN & BOERSMA, A533
 BERGGREN & VAN COUVERING, A505-A543
 Bergoceras, A275
 BERGSTRÖM, A145, A156, A157
 BERNER, A429
 Berriassella, A406, A408, A453
 Berriassellidae, A454, A456, A471
 Berriasian, A423, A442-A444, A453
 BERRY, A156, A172, A226, A439
 BERRY & BOUCOT, A161, A172-A175, A178-A181
 BERRY & MURPHY, A226
 BEUF, A159
 BEURLENS, A410
 BEUSHAUSEN, A195
 BEYRICH, A499
 Bibucia, A270, A271
 BIERNAT, A208
 Bifida, A195
 Bifossularia, A270, A271
 Bihenthithyrus, A395
 Bilobia, A145
 Bimuria, A145, A147, A151
 biocoenosis, A22
 biofacies realms, Cambrian, in North America, A122-A124
 biogeography, Cambrian, A128-A130, in North America, A122-A124, Early, A129; Carboniferous, A260-A261, A283-A286; Cretaceous, A461-A476, North Temperate realm, A465-A469, South Temperate realm, A473-A476, Tethyan realm, A469-A473; Silurian, A168
 Biolgina, A140
 biomes, Cambrian, A131-A134
 BION, A378-A379
 biostratigraphy, Cambrian, A130-A134, of North America, A131-A132; Cretaceous, A443-A461, Lower Cretaceous, A449-A453, Upper Cretaceous, A458-A459; Silurian, A170-A172; Tertiary, A499
 biostratigraphic information, from soft parts, A15-A19, observations, early, A5
 biostratigraphy, A3, A5
 BIRADIOLITINAE, A441
 BIRENHEIDE, A192, A201
 Birostrina, A453, A457
 BISAT, A276
 Bisatoceras, A279
 BISCHOFF & ZIEGLER, A190
 Bistrialites, A276
 Bithynia, A397
 BITTNER, A378, A380
 bivalves, Jurassic, A395-A397, Silurian, A179, Triassic, A372-A377
 Biwaella, A315
 Blanfordiceras, A403, A406
 blattoid assemblages, Carboniferous, A281
 BLIND, A398
 Blountiidae, A123
 BLOW, A503, A510, A513
 BLUMENSTENGEL, A191
 Bochianites, A403, A471
 BOEKSCHOTEN, A20
 BOGOSLOVSKIY, A196, A201, A205, A206, A207
 Bohemian facies, Old World Devonian, A195, A198, A209
 BOLL, A503
 BOND, A430
 BONDAREV, A147
 Bonnia-Olenellus Zone, A131-A132
 Boreioteuthis, A467
 Borelis, A497
 "Borelis princeps," A310
 Bornhardtina, A201, A202
 Bositra, A396
 Bothrophyllum, A271-A273, A319
 BOTTINO & FULLAGAR, A219
 BOUČEK, A154, A191, A195
 BOUCKAERT, A189
 BOUCKAERT & STREEL, A189
 BOUCOT, A167-A182, A192, A194, A195, A196, A197, A199, A205, A210, A222, A223, A230, A231
 BOUCOT, CASTER, IVES, & TALENT, A197
 BOUCOT & JOHNSON, A223
 BOUCOT, JOHNSON, & STRUVE, A199, A202, A240
 BOUCOT, JOHNSON, & TALENT, A194, A231, A234
 Boucotia, A197
 Bouleiceras, A400
 Bouleigmus, A472
 Boultonia, A299, A308, A316
 Boultoniinae, A309
 Bouroz, A258
 BOWEN, A231, A424, A425
 Brachina, A92
 Brachiograptus, A156
 brachiopod fauna, Devonian, A223, A226, A227, A230, A231, A234, A235, A238, A240, A242, A243, A244, A245, A246, in Africa, A198, in Asia, A202, in Australia, A197, A208, in Europe, A199, A205, Middle Devonian extinctions, A199
 brachiopod zones, Devonian, A191-A192, A195
 BRACHIOPODA, Cambrian, A120
 brachiopods, as Cambrian index fossils, A130; Jurassic, A394-A395; Lower Carboniferous, A273, A275; Permian, A326-A330, associations and diversity patterns of, A329-A330, dispersal patterns of, A327-A329; Silurian, A172, A177, A178-A179, cosmopolitan, A178, endemic, A178; Tertiary, A499; Triassic, A378-A382
 "Brachyaspis," A154, A161
 Brachybelus, A408
 Brachymeris, A469
 Brachythyrididae, A273, A329
 Brachyura, A410
 Bradyina, A265, A266
 Bradyinidae, A267
 Bradyphyllum, A319
 BRANCHIOPODA, A105
 Brancoceratidae, A457, A475
 Brancoceratinae, A475
 Branneroceras, A279

- BRANSON, A258
 BREDDIN, A58
 BREMER, BRISKIN, & BERGGREN, A510, A513
 BRENCHELY & NEWALL, A32
 BRENNAND, A354
 BRENNER, H., A70
 BRENNER, K., A40, A44
 BRENNER & EINSELE, A57
 Brevaxina, A299
 Briantelasma, A223
 BRICE, A202, A207
 BRICE & MEATS, A230, A240, A242
 BRIDEN, A159
 BRIDEN, DREWRY, & SMITH, A208, A353
 BRINKMANN, A397, A401
 BRISKIN & BERGGREN, A521, A523, A531
 Bristolina, A123
 BROCK & HAY, A513
 BROECKER & VAN DONK, A518, A526
 Broinsonia parca Zone, A461
 BROMLEY, A20
 BRONGNIART, A506
 Brongniartella, A153
 BROUWER, A184
 BROWN, A68
 Brunzia, A261, A263
 BRUNTON, A208
 bryozoans, Permian, Andean Sea, A323, Franklinian Sea, A322-A323, geographical distribution of, A326, southern North America, A323, Russian platform, A322, Tasman geosyncline, A325-A326, Tethyan sea, central, A324, northern, A323-A324, southern, A324-A325, Zechstein Sea, A322-A323; Silurian, A178; Tertiary, A499
 bubble levels, geologic, A17, (figs.) A17, A18, A19
 Buccinum, A30, A39
 BUCHAN, A365
 Buchanathyris, A197
 BUCHER, A49
 Buchia, A391, A396-A397, A453, A455
 Buchiidae, A441, A449, A453, A457, A458
 BUCKLAND, A184
 Budaiceras, A469
 BUGGISCH, A205
 BUGGISCH & CLAUSEN, A189, A208
 BULMAN, A154, A155, A172
 BULTYNCK, A189, A190
 Bumastoides, A149, A150
 Bunter, A352
 buoyancy, decomposition, A17, simulation of effect of, A19
 burial, A2, assemblage, A22-A24
 Burmeisteria, A195, A231
 BURRETT, A137, A142, A159, A210
 BUTEUX, A507
 BUTLER, A222
 Buxtoniidae, A275, A327, A329
 Cabrioceras, A201, A203, A235, A242, A243, C. crispiforme Zone, A189, A201, A203
 Cadoceras, A401
 Cadomella, A395
 Caeceleras, A195
 Caenodontus, A339
 CAENOGASTROPODA, A498
 Calabrian, A508, A509-A510
 Calcareous algae, Silurian, A181
 calcareous nannoplankton and climatic change, A531
 Calceola, A202
 Calcicalathina, A456, A457
 Calcisphaera, A263, A265
 CALDWELL, A238
 Callianassa, A10
 Calliomphalus, A469
 Callipteris, A297
 Callispirina, A380
 Callocadia, A325
 CALLOMON, A401
 Callucina, A472
 Calmonia, A230
 Calodiscus, A123, A126
 Calophyllum, A319
 Calpionella, A403, A453
 Calpionellidae, A453
 Calpionellites, A455
 Calpionellopsis, A456
 CALVER, A255
 Calvinaria, A244, A245, A246, C. albertensis zones, A245, C. variabilis zones, A244
 Calyoceras, A459
 Calymenina, A199
 Calyptrina, A107
 Camarocrinus, A180
 Camarotoechiidae, A327
 Cambrian, Lower-Middle boundary, A130
 Cambrian-Ordovician boundary, A130, A137, transgression, A138-A139
 Camerisma, A329
 CAMERON, A69
 Campanian, A423, A454-A456, A460-A461
 CAMPBELL, A153, A259
 CAMPBELL & McKELLAR, A259
 Campophyllum, A270, A272
 Camptonectes, A441
 Campyloceras, A275
 Canavaria, A399
 Cancellina, A299, A312, Subzone, A313, Zone, A312, A313
 Cancrinella, A260, A297
 Caninia, A269, A270, A271, A272, A299, A318, A319, A320
 Caninophyllum, A269, A270, A271, A273, A299, A319
 Caninostrotion, A271
 Cantabrian Stage, A258
 Caprinidae, A441
 Caprinuloidea, A473
 Caprotina, A472
 Carbactinoceras, A275
 carbonate banks, Middle & Late Cambrian, Siberian platform, A130
 carbonate compensation depth (CCD), A30, variations, Cretaceous, A429
 carbonate sediment belt, Cambrian, A122
 Carboniferous deposition, in Australia, A259, in South Africa, A260, in South America, A259-A260
 Carboniferous rock subdivisions, A255-A260; correlations among subdivisions, A256-A257, A259; western European subdivisions, A255-A258; North American subdivisions, A258, Russian subdivisions, A258-A259
 Carboniferous-Permian boundary, A255, A292
 Carcinophyllum, A272
 Cardinia, A395
 Cardioceras, A401
 Cardioceratidae, A401, A406
 Cardiograptus, A155, A156
 Carditidae, A375
 Cardium, A35, C. echinatum, A29, A35, C. edule, A6, A24, A25, A27, A28, A29, A35
 Carinapyga, A227
 Carinatina, A201
 "Carinatina" dysmorphostrota Zone, A240
 Cariniferella, A246
 CARIOU, A400
 CARLS, A188, A189, A190, A195, A199
 Carniaphyllum, A272
 Carnithiaphyllum, A320
 Carota, A469
 Carruthersella, A270, A272
 CASEY, A440, A462, A468, A471
 CASEY & RAWSON, A440, A449, A453, A457, A463, A464, A465
 Cassidulidae, A411
 Cassiope, A469
 CASTER, A222, A231, A259, A307
 Cathaysian paleofloral region, A285
 Catilicephalidae, A130
 causes of death, A5, A6, external, A6, internal, A6
 Cavusgnathus, A280, A281
 CECIONI & WESTERMANN, A398
 Cedaria, A123
 "Cedaria" of inner detrital belt, A123
 Cenoceras, A372, A408
 Cenomanian, A423, A450-A452, A459
 Central American strata, Silurian, A175
 Centronella, A234
 Centropleura, A123, A125
 Cephalonia, A307
 cephalopods, Carboniferous, A275-A279, Silurian, A179
 Ceratites, A52, A355, C. nodosus, A55
 Ceratonurus, A226
 Ceratopea, A140
 Ceratopygidae, A124, A127, A130, A139, A140

- Ceraurus, A150
 Chaetetes, A272, A273
 CHANG, A207
 Changhsingoceras, A301, A337
 CHAO, A207, A292, A301, A302, A320, A337, A362
 CHAPPELL, A53
 Charnia, A83, **A99**
Charnia, A99
 Charniidae, **A99**
 Charniodiscus, A83, A94, **A99**
 Chasmops, A148, A150-A153
 CHAVE, A25
 Cheiloceras, A206, A208, A244, A245, A247
 Cheirurus, A201
 CHELICERATA, A104
 CHEN, A312
 CHERNYSHEV, A292, A330
 Chesterian Series, A258, A280
 Chetaites, A453
 CHETVERIKOV, A6
 Chia, A270
 Chiapasella, A473
 Chiastozygus, A457, A459, *C. irregularis* Zone, A459
 Chihsiaphyllum, A319
 Chimbuites, A475
 China south of Peking platform, Devonian faunas of, A196, A202, A207
 Chinese coral province, Visean, A271
 chitinozoans, Silurian, A170, A172, A177
 Chlamydoephyllum, A223
 Chlamys, A476
 CHLUPÁČ, A187, A189, A195, A223
 Choffatella, A471
 Choffatia, A402
 Chomatoseris, A393
 CHONDROPHORINA, **A91**
 Chondroplidae, **A91**
 Chondroplon, A88, **A91**
 Chonetella, A300, A380
 Chonetellidae, A327
 Chonetes, A301
 Chonetidae, A329
 Choristilidae, A273
 Chouteauceras, A276
 Christiania, A143, A145, A151
 chronostratigraphy, Precambrian, A85-A86
 Chuangiidae, A127
 Chubbiniinae, A473
 CHUGAEVA, A140, A141, A143
 CHURKIN, A210
 CHURKIN & BRABB, A227
 Chusenella, A299, A308
 CIARANFI & CITA, A532
 Cibolites, A335
 CIDAROIDEA, A411
 CILIATA, A393
 circum-Pacific arcas, Jurassic, A391
 Cisticephalus Zone, A306
 CITA, A530, A532
 Cladoceramus, A460
 Cladochonus, A270, A318-A320
 Cladophlebis, A301
 Cladopora, A321
 Claraia, A300, A313, A337, A357, A358, A362, A363, A366, A372, A375, A379, A380, distribution of, A373
 CLARK, A103, A382, A525, A526
 CLARK & BEHNKEN, A337
 CLARK & ETHINGTON, A337
 CLARKE, A194, A231
 Clarkeia, A161, A178
 CLAUSEN, A190
 CLAUSILIACEAE, A498
 Clausotrypa, A322-A326
 Cleiothyridina, A297, A380
 Clelandia, A140
 CLIFTON, A32
 Climacamina, A263, A265, A266
 Climacotrigonia, A476
 climate, Carboniferous, A285-A286, Jurassic, A393, Ordovician, A159-A160, Silurian, A168, Tertiary, A489-A490
 climatostratigraphy, Quaternary, A515-A536; Antarctic-subantarctic Ocean, A527-A531, Antarctic marginal seas, A530, Australia-New Zealand, A527-A530; Arctic region, A525-A527; Atlantic Ocean, A520-A525, Gulf of Mexico, A524-A525; calibration of, A517-A520; Mediterranean, A531-A536, Black Sea, A533-A536, Red Sea, A533; Pacific Ocean, A527, Sea of Japan, A527
 Clinophyllum, A269
 Cliona, A427
 Clioscaphites, A468
 Clisiophyllum, A271, A272, A318
 CLITAMBONITACEA, A161
 Clitambonites, A148
 Closs, A71
 Closteriscus, A469
 CLOUD, A30, A84, A85, A87, A103, A199, A435
 Cloudina, A83, A89, **A102**
 Clycymeris, A473
 Clydagnathus, A281
 Clydoniceratidae, A400
 Clymenia Zone, A247
 clymeniid faunas, Devonian, A204, A206
 Clypeastridae, A499
 Clypeolampadidae, A441
 Clypeus, A411
 Coalcomana, A473
 COATES, A462, A469, A471-A473
 COATES, KAUFFMAN, & SOHL, A449, A469
 COBBAN & REESIDE, A458
 COBBAN & SCOTT, A458
 Cocolithus pelagicus, A531
 Cochlearites, A396
 Cochlocioceras, A403
 COCKS, A159, A161
 COCKS & MCKERROW, A161
 COCOLITHOPHORIDA, A393
 Codonofusiella, A300, A302, A312, A313, A314, A320, -Reichelina Zone, A300, A312, Zone, A320
 COELENTERATA, **A91**
 coelenterates, Precambrian, A88, Silurian, A177-A178
 Coeloceras, A399
 Coelodoceras, A399
 Coelodiscus, A397
 Coelogasteroceras, A276
 Coelospira, A234
 Coilopoceratidae, A471
 Colaniella, A300
 COLLIGNON, A359, A394, A406, A472, A476
 Collignonocardia, A472
 Collignonoceras, A460
 Collignoniceratidae, A460, A467
 Collignoniceratinae, A460
 COLLINSON, REXROAD, & THOMPSON, A280
 Collyrites, A411
 COLO, A399
 Columellaria, A397
 Colveria, A473
 Comelicania, A300
 Composita, A382
 Comura, A201
 Conaspis, A124
 Conchopeltidae, **A94**
 CONCHOPELTINA, **A94**
 concretions, A65-A67, diagenetic, A66, epigenetic, A67, syn-genetic, A65-A66
 Condraoceras, A276
 Confusiscala, A469
 Congeria, A498
 Coniacian, A423, A450-A452, A460
 CONIL, A261
 CONIL & LYS, A261
 CONIL, PAPROTH, & LYS, A261
 CONIL & PIRLET, A189
 Conobelus, A410, A471, A472
 Conolypeidae, A499
 Conocoryphidae, A125, A130
 Conodicoelites, A410
 conodont faunas, Devonian, A226, A227, A230, A234, A235, A238, A240, A242, A243, A244, A246, in Australia, A197, A202, A208, in Europe, A206; Ordovician, A138, A156-A157, A158, in North American Midcontinent province, A156-A157, in North Atlantic province, A156-A157
 conodont zones, Devonian, A190-A191, A208
 conodonts, Cambrian, A120, A130, A132, Carboniferous, A279-A281, Permian, A337-A339, Silurian, A170, A172, A181, Triassic, A382-A384
 Conolichas, A153
 Conomedusites, A88, **A94**
 Conularia, A306
 CONULARIIDA, A88, **A94**
 CONULATA, **A94**
 Conulidae, A441
 Conulus, A460
 CONYBEARE & PHILLIPS, A254
 COOK & TAYLOR, A157

- COOKE, A516, A517
 COOPER, A142, A219, A234, A235, A330, A339
 COOPER & GRANT, A314, A330, A334
 COOPER & PHELAN, A235, A240
 COOPER & WARTHIN, A235
 COOPER & WILLIAMS, A235
 COPE, A178
 COPELAND, A238
 coprolite "bubble levels," A17-A19
 Corallochama, A473
 coral faunas, Devonian, A223, A231, A234, A235, A238, A240, A242, in Africa, A198, A203, in Asia, A202, in Australia, A197, A203, in Europe, A201, A203, A205
 corals, Carboniferous, A268-A273, Lower Carboniferous, A269-A270; Permian, faunal provinces of, A318-A321, Midcontinent North American, A320-A321, Tethyan, A319-A320, Ural-Artinsk, A318-A319; Tertiary, A498-A499
 Corbicula, A397
 Corbiculopsis, A472
 Corbinia apopsis Subzone, A138
 Corbula, A397
 Corbulamellidae, A441
 Cordania, A223
 Cordiceramus, A460
 Cordylodus, A138
 Cornuproetus, A230
 Cornuspira, A263
 Cornuspiridae, A267
 Corollithium exiguum Zone, A459
 Corongoceras, A403, A406
 Coronoceras, A398
 correlation, Cambrian global, A130-A134
 Cortezorthis, A196, A227
 Corvus frugilegus, A24
 Corwenia, A272
 Corycephalus, A226
 CORYNEXOCHIDA, A130
 Coscinotrypa, A323, A325, A326
 Costaloria, A375
 Costellacesta, A469
 Costispirifer, A196
 Costispiriferidae, A203
 Cotylederma, A411
 COUSMINER, A246
 Couvinian faunas, A234, A240
 COWEN & RUDWICK, A395
 COWRIE, A120, A129
 Cox, A352, A396, A405, A513, A520
 Craniscus, A395
 Cranocephalites, A401
 Craspedites, A406, A408
 Craspeditidae, A454, A455
 Crassatellina, A468
 Crassiproetus, A226
 Cravenia, A269, A270
 Cravenoceras, A279
 Cravenoceratoides, A279
 CREATH & SHAW, A140
 Cremonoceras, A460
 Creonella, A469
 Crepicephalus, A123
 Cretaceous, boundaries, A440-A443, definition of, A439-A440, extinctions, A418-A419, A441; marine environments, A419-A420, A424-A438, benthonic, A432-A436, eustatic changes, A430-A432, temperature, A424-A426, water chemistry, A426-A430
 Cretaceous-Tertiary boundary, A419, A441-A443, A500
 Cretarhabdus, A456
 CRIBICYATHEA, A102
 Cribrogenerina, A266
 Cribrospira, A263, A265
 Cribrostomum, A263, A265
 Crickites, A205, A243, A244
 CRICKMAY, A238, A240, A244, A245
 cricoconarid fauna, Devonian, A185, A191, A195, A198, A199, A201, A203, A206
 Crimites, A334
 CRINOIDEA, A410
 CROCKFORD, A325
 Crurithyris, A246, A260, A380
 CRUSTACEA, A87, A88, A105, Precambrian, A87-A88
 crustaceans, Jurassic, A410
 Cryptonellidae, A330
 Cryptophyllum, A269, A319
 CRYPTOSTOMATA, A321-A322
 Cryptothyrella, A154
 CUERDA, A137, A155
 Cumminsia, A272
 Cuneolina, A471
 Cupularostrum, A246
 Curtihibolites, A457, A472
 Curviceras, A398
 CYANOPHYTA, A80
 Cyathaxonia, A269-A272, A299
 Cyathocarina, A30
 Cyathoclisia, A269
 Cyathophyllum, A223
 Cybelurus, A142
 Cycloclypeus, A497
 Cyclococcolithus leptoporus, A531
 Cyclobolus, A298, A307, A336, A381
 Cyclomedusa, A83, A94
 Cyclondendron, A306
 Cyclopygidae, A151, A160
 Cyclorisma, A469
 Cyclorismina, A476
 Cyclotrypa, A323, A324, A326
 Cyctophora, A273
 Cylindroteuthididae, A454, A457
 Cylindroteuthis, A408, A410
 Cymaceras, A407
 Cymaclymenia, A207, A247
 Cymatoceras, A408
 Cymoceras, A279
 Cymostrophia, A197
 Cyphomena, A145
 Cyphoterorhynchus, A207
 Cyprinia islandica, A29
 Cyrenopsis, A476
 Cyrocopora, A300
 Cyrtina, A195, A197, A223, A226, A227, A246
 Cyrtiopsis, A207, A208, A245
 Cyrtoclymenia, A247
 Cyrtometopus, A143
 Cyrtotonotella, A146
 Cyrtophyllum, A152
 Cyrtospirifer, A205, A208, A243-A244, A244, A245, A246, C. charitopes Zone, A245, C. variabilis zones, A244
 Cyrtosymbole, A207
 Cyrtothoracoceras, A275
 Cystilophophyllum, A272
 Cystophora, A272
 Cystophrentis, A269, A270
 CYSTOPORATA, A321-A322
 Cytheridae, A453
 DABROWSKA, A407
 DACQUÉ, A395, A400
 Dactylethrata, A441
 Dactylioceras, A399, A400
 Dactyloceratidae, A399
 Dadoxylon, A305
 Daghanirhynchia, A395
 DAGIS & ZAKHAROV, A399
 Daguinaspis, A122, A125
 DAILY, A134
 Dainella, A263
 Daixina, A267, A268, A310, A311, A313
 DALMANITACEA, A203
 Dalmanites, A226
 Dalmanitina, A151, A153, A154, -Hirnantia fauna, A149, A153, A154
 DALMATSKAYA, A258
 DALQUIST & MAMAY, A5
 Damesellidae, A127, A130
 Damesites, A471
 DANSGAARD, A524
 DANSGAARD & TAUBER, A517
 Daonella, A362, A372
 Darvasites, A299
 Darvazian Stage, A299-A300
 DAVID & BROWNE, A305
 DAVIDSONIACEA, A327
 Davidsonitrypa, A227
 Davidsoninidae, A273
 DAVITASHVILI, A22
 DAVOUDZADEII & SEYED-EMANI, A358
 DEAN, A141
 DEAR, A304
 death, A5, by desiccation, A14, flooding, A14, overgrowth by other organisms, A6, submergence in substrates, A10-A14; struggle, A14-A15, of insects, A15
 DECAPODA, A410
 decay, soft part, and buoyancy, A17-A19, as it affects hard parts, A20-A22
 Dechseauxia, A472
 Dechenella, A242
 Dechenellurus, A226

- decomposition, A5, A15-A19, selective, A20-A22
 DEECKE, A3, A7, A17
 degassing, effects of on organic material, A16, A17-A19; canals, A16, in sapropelic environments, A16
 Delepinoceras, A279
 Delepinoceratidae, A276
 Delthyridae, A246
 Deltoplectinidae, A329
 DENIZOT, A508
 DENMEAD, A363
 Derbyia, A298, A300, A380
 Deshayesitidae, A457, A469
 desiccation, cracks, A14, death by, A14
 Desmoceras, A475
 DESMOCERATACEAE, A441
 Desmoceratidae, A456, A457, A459, A461, A465, A471, A475
 Desmoceratinae, A460
 Desmoinesian Series, A258, foraminifers of, A266
 Desmoscaphites, A468
 DESNOYERS, A506, A507
 "Desquamatia" cosmata Zone, A244
 Desquamatia independensis Zone, A240
 detrital belt, inner, A122-A124, A129, in Middle & Late Cambrian, A130; outer, A122-A124, A129
 DEUSER, A536
 DEUSER & DEGENS, A518, A533
 Devonian continental deposits, A247
 Devonian, eastern hemisphere, A183-A210, global reconstruction, A208-A210, history of establishment, A184; European, stage nomenclature, A187-A189, zonal correlation, A189-A192; see also Lower, Middle, Upper Devonian
 Devonian faunas, western hemisphere, see Lower, Middle, Upper Devonian
 Devonian outcrops, eastern hemisphere, A192-A193, Africa, A193; Australasia, A193, China and Asia, A193, western & southern Europe, A192; Soviet Union, A192-A193, western hemisphere, A219-A223, in Antarctica, A222-A223, Greenland, A222, North America, A219-A222, South America and Falkland Islands, A222
 Devonian-Carboniferous boundary, A189, A206, A219, A254-A255
 Devonoproductus, A246, D. walcotti Zone, A245
 Diabloceras, A279
 Diallytophyllum, A201
 Dibunophyllum, A270-A272, A321
 Diceratocephalina, A140
 Dicerocardiidae, A441
 DICKENS & McTAVISH, A363
 Dickersonia, A402
 DICKINS, A304, A305
 Dickinsonia, A83, **A103**
 Dickinsoniidae, **A103**
 Dicoelites, A410
 Dicoelosia, A152, A154
 Dicoclosiidae, A161
 Dictyoclostidae, A275, A327, A329
 Dictyoclostus, A298-A301, A337
 Dictyoconus, A471
 Dictyomitra veneta Zone, A459
 Dictyonema flabelliforme, A138
 Dictyonema shale, A138
 Dictyoptychus, A473
 Didymograptus, A155, A156, D. murchisoni Zone, A143
 Didymotis, A460
 Dielasma, A297, A299
 DIENER, A353, A360, A361, A363, A370
 Dienerian, A353
 Dieneroceras, A363
 Dieranurus, A226
 DIETZ & HOLDEN, A298, A339, A475
 Digenophyllum, A201
 Dikelocephalus, A124
 DILLEY, A462, A465, A468, A469, A471, A472, A473
 Dimetobelidae, A475
 Dimitobelinae, A441
 Dinantian, A255
 DINARITACEAE, A371
 Dindymene, A151
 Dindymeninae, A151, A160
 Dinesus, A127
 DINOFLAGELLATA, A393
 Dinorthis, A154
 Diodoceras, A276
 Dionidae, A151, A160
 Diorogoceras, A276
 Diphyphyllum, A270, A272
 Diploporaria, A325, A326
 Discinidae, A329
 Discinisca, A395
 Discitoceras, A276
 Discoaster brouweri, A513
 Discocyclinidae, A497
 Discohelix, A397
 Discoididae, A441
 Discometra, A499
 DIXON, A40
 Djurdjuriceras, A406
 DOBROLYUBOVA, A270
 Dohmophyllum, A201, A202
 Dolerorthis, A151, A161
 Dolgeluoma, A140, A152
 Doliognathus, A280, A281
 Dollymae, A281
 Domatoceras, A276, A371
 Donax, A35, D. vittatus, A30
 DONN & SHAW, A525
 Donophyllum, A272
 DONOVAN, A395, A399
 Dorlodotia, A270
 Dorp facies, A187
 Dorsoplanites, A406
 Doryceras, A335
 Dorypygidae, A123
 Dosinobia, A476
 doubtful taxa, Precambrian, A110-A111
 DOUGLAS, A368, A438
 DOUGLAS & SAVIN, A425, A438
 DOUMANI, A223, A231
 Douvilleiceratidae, A457, A469
 Douvillina, A246
 Drabovinae, A149
 DRAHOVZAL, A276
 Drakeoceras, A469, A472
 Dreissena, A26, A27
 Drepanochilus, A469
 Dresbachian-Franconian boundary, A123-A124
 DROMIACEAE, A410
 DROOGER, A503
 DROT, A198, A203
 DRUCE, A208, A280, A281
 DRUCE & JONES, A138
 DRUCKMAN, A357
 druse, A17
 DUBAR, A394, A395, A396
 DUBATOLOV & SPASSKIY, A202, A206
 Dudaiceras, A473
 Duerleyoceras, A276
 Dufreynoyia, A469, A473
 Dumortieria, A400
 DUNBAR, A292, A297, A298, A310, A314
 DUNBAR & SKINNER, A310, A313
 Dunbarinella, A266
 Dunbarites, A279
 Dunbarula, A312
 DUNCAN, A199, A246
 DUNN, A81, A91
 DUNNING, A86
 Dunveganoceras, A459
 DUPLESSY, A524
 Duplophyllum, A318
 DURDEN, A281, A283
 Durga, A396
 Durhamina, A272, A273, A319, A321
 Durhaminidae, A317
 DURKOOP, A202
 Duvalia, A410, A455, A471, A472
 Duvaliidae, A454, A457, A472
 Dyaster, A411
 Dyscritella, A322-A325, A326
 Dyscritellina, A326
 Dzhulfian, ammonoids of, A336-A337
 Dzhulfites, A358, A381
 Dzhulfoceras, A336
 Dzhungaro-Balkhash area, Devonian faunas of, A196, A202, A207; links with Appalachian province, A210
 Dzieduszichia, A206
 Earlandia, A261, A265
 EARP, A187
 Eastern Americas realm, Devonian, A233, A242
 EASTON, A271
 Eastonoides, A319
 Echigophyllum, A271

- Echinauris, A382
 Echinobrisus, A411
 Echinocardium, A8
 Echinoconchidae, A275, A327, A329
 Echinoconchus, A300
 Echinocorys, A458
 echinoderm ossicles, A227, A230, A238, A240
 ECHINODERMATA, Cambrian, A120
 echinoderms, Silurian, A180, Tertiary, A499
 Echinolichas, A226
 Echinospheerites, A63
 Echinosteginae, A275
 ECHINOZOA, A410
 Echioceras, A398, A399
 ecology, of Ordovician fauna, A157-A159, regional zonation, A158, salinity, A158, substrates, A158, temperature, A158, water depth, A158
 ecostratigraphic correlation, A172
 Ectenaspis, A150
 Ectenonotus, A142
 Ectillaeninae, A151, A160
 Ectorenselandia, A240
 Edaphoceras, A276
 Edaphophyllum, A223
 EDGELL, A363
 Ediacaran, A82, faunas, A82, A87-A88
 Ediacaria, A94, A96
 Edmondia, A305
 Edmondiidae, A329
 EDWARDS, A184
 EFREMOV, A2, A3
 EGOYAN, A440
 EHRENBERG, A22, A310
 Eifelian, A188, A201, A231, A234, A238, A240, A241, A242
 Eiffelithus, A459, E. eximius Zone, A461
 Einkippung, A32, A36, A41
 Einkippungsregel, A33
 Einregelung, A32
 Einsteuerung, A32, A44
 EKMAN, A463
 Ekvasophyllum, A270, A271
 Elateridae, A15
 Electroma, A476
 Elephas, A508
 Eleutherokomma zones, A244, A245, A246
 Eligmus, A397
 ELLES & Wood graptolite zones, A172
 Ellipsactinia, A394
 Ellipsocephalidae, A125
 Ellisonia, A338, A339
 Elmoan assemblage, A282, A283
 Elphidium oregonense Zone, A516
 Elviniidae, A125
 Elytha, A234
 Elythidae, A329, A330
 Elythyna beds, A226
 Emanuella, A238, A240, A242, E. vernilis Zone, A240
 EMERY, A33
 EMILIANI, A510, A517
 EMILIANI, MAYEDA, & SELLI, A514, A517
 Emmanuella, A201
 Emmonsia, A269
 Empodesma, A272
 Emsian, A188, A194, A195, A223, A226, A230, A231, A234, A238
 ENAY, A394, A404, A406
 Encrinurella, A149
 Encrinuroides, A149
 Encrinurus, A223
 endemic trilobites, in North America, A123
 ENDOCERATOIDEA, A161
 Endocostea, A460, A461
 Endolobus, A276
 Endomoceras, A457
 Endophyllum, A202
 Endostaffella, A263
 Endothiodon Zone, A306
 Endothyra, A263, A265, A266
 Endothyranopsis, A263, A265
 Endothyridae, A261, A267
 Endymionia, A142
 Engonoceratidae, A457
 Ensis, A30, A35
 Enteletella, A300
 Enteletes, A299-A301, A380
 Enteletidae, A330
 Enterolasma, A223
 Entolium, A476
 Entolliidae, A441
 Entomozoidae, A187
 entrapment, in crude oil, asphalt, tar, A10, mud, silt, A10, quicksand, A11, resin, A11-A14
 Enygmophyllum, A269
 Eoaxoceras, A336
 Eoasianites, A260
 Eobeloceras, A207
 Eocarcinus, A410
 Eocene, A499-A504
 Eocephalites, A402
 Eocoelia, A172
 Eoconchidium, A154
 Eocrioceratites, A455, A472
 EODEROCERATACEAE, A399
 Eodevonaria, A231
 Eodiscidae, A122-A123, A125, A127
 EODISCINA, A126
 Eoendothyranopsis, A263, A267
 Eoforschia, A261, A263
 Eofusulina, A265, A266
 Eoglossinotoechia, A196
 Eognathodus, A226, A227, A230, A242
 Eolasiiodiscus, A266
 Eolithostrotionella, A270, A272, A273
 Eolytoceras, A398
 Eomiodon, A397
 Eoparafusulina, A308, A313, A314
 Eoparaphorhynchus Zone, A205, A245
 Eoparastaffella, A263
 Eopecten albertii, A24
 Eoplacognathus, A157
 Eopectodonta, A143
 Eoporpita, A83, A92
 Eoschubertella, A265, A266
 Eosigmoilina, A265
 Eospirifer, A197
 Eospirigerina, A150-A154
 Eostaffella, A263, A265-A267
 Eostaffellina, A265
 Eostropheodonta, A153
 Eotextularia, A263
 Eothinites, A334
 Eotomariidae, A378
 Eowacringella, A266, A268
 Epadrianites, A336
 Ehippioceras, A276
 Ehippioceratidae, A276
 Epiaclynitrypa, A323
 Epiaster, A458
 Epicephalites, A401
 Epideroceras, A399
 Epidomatoceras, A276
 Epimastopora, A299, A300
 Epipeltoceras, A403, A407
 Episageceras, A307, A336
 Epistroboceras, A276
 Epithalassoceras, A335
 Epitornoceras, A205, A243
 Equirostra, A151
 Equus, A500, A508
 Erammoceras, A400
 ERBEN, A184, A188, A195, A199
 ERBEN & ZAGORA, A188
 Erbenoceras, A196
 ERICKSON, A40
 ERICSON, A520
 ERICSON, EWING, & WOLLIN, A520
 ERICSON & WOLLIN, A520, A524, A531
 Eridopora, A322, A324, A325
 Erixanium, A127
 Ermoceras, A400
Erniaster, A101
 Ernietta, A100, A101
 Ernietididae, A83, A99
 Erniettinae, A101
 ERNIETTOMORPHA, A99, A102
Erniobaris, A101
 Erniobeta, A102
 Erniobetinae, A102
 Erniocarpus, A102
 Erniocentris, A102
 Erniocoris, A102
Erniodiscinae, A101
Erniodiscus, A101
 Erniofossa, A101
 Erniograndis, A102
 Ernioforma, A101
 ERNIONORMIDAE, A99
Ernioforminae, A101
 Erniopelta, A102
 Erniotaxis, A102
 ERNST & SEIBERTZ, A458
 ERRERA, MAMET, & SARTENAER, A189
 Erycites, A400
 Erycitoides, A401
 Eryma, A410
 Estheria, A222, A247
 Estheripecten, A380
 Estlandia, A148
 Estoniops, A148

- Etea, A469
 Etherella, A325
 Etymothisis Zone, A223
 Eucalycoceras, A459
 eucaryotes, A80
 Eugeniocrinites, A411
 Eugenophyllum, A299
 Eulinderina, A497
 Euloxoceras, A276
 Eumedlicottia, A334, A335, A336
 Eumorphoceras, A279
 Eunanatica, A469
 EUOMPHALACEA, A397
 Euomphalidae, A378
 Eupleuroceras, A279
 Euptera, A474
 Euramerican paleofloral region, A284
 Eurasian zoogeographic region, in the Carboniferous, A269-A273
 Eureka spirifer pinyonensis Zone, A226, A227, A230
 Eurekaia, A124
 European strata, Silurian, A174, geosynclinal, A174, platform, A174
 Eurydesma, A259, A260, A305, A306, A307
 Eurydesmatidae, A329
 Euryphyllum, A318, A320
 eurypterids, Silurian, A179
 Eurypteris, A247
 Euryspirifer, A202
 eustatic changes, in Cretaceous seas, A430-A432, causes of, A430
 Eusthenoceras, A275
 Eutrephoceras, A408
 Evactinopora, A325, A326
 Evactinostella, A325, A326
 evaporites, Silurian, A168
 evolution, Precambrian metaxoan, A88-A90, Silurian, rate of, A170, A172
 EWING & DONN, A525
 Exogyra, A7, E. columba, A33
 Exogyrinae, A458
 Exogyrini, A441
 EYNOR, A259, A260, A267, A284
 Faberophyllum, A270, A271
 faceting, A26-A28, anchor-facets, A26-A27, glide-facets, A27-A28, roll-facets, A27
 facies, European Devonian, A184-A187
 facies regions, Cambrian, in the Soviet Union, A126, in south eastern Asia, A126-A127
 Fagesia, A471
 FAHRAEUS, A227
 FAIRBRIDGE, A524, A531
 Fallotaspis, A122, A125
 Fammennian, A189, A203, in Europe, A205-A206, faunas, A243, A245, A246-A247
 FANCK, A58
 FARSAN, A360
 Fasciostella, A197
 FATMI, A360, A403
 faunal province maps, Cretaceous, A464, Jurassic, A392, A409, Ordovician, A139, A142, A145, A146, A147, A148, A150, A151, A155, Silurian, A169
 faunal regions, Cambrian, in North America, inner, A122-A123, outer, A122-A123
 faunal zone, range charts, Arenigian, A141, Cambrian, A132-A134, Carboniferous, A257, A262, A264, A269, A274, A277, A278, A282, A283, Cretaceous, A442-A444, A446-A448, A450-A452, A454-A456, Devonian, A190, A191, A239, A241, Jurassic, A404-A405, Permian, A308-A309, A317, A321, A328, A332-A333, Quaternary, A519, Silurian, A171, Tertiary, A501, A502, Tremadocian, A138, Triassic, A354-A355, A383
 faunal zone succession, Cambrian, in Australia, A134, in China, A133-A134, in central and southern Europe, A132-A133, in northern Europe, A132, in North America, A131-A132
 Fencostella, A322-A326
 Fenestellidae, A322
 FENNINGER & HÖTZL, A394
 Ferganoceratidae, A276
 FILLON, A530
 Filosina, A472
 Fimbria, A475
 Fimbrispirifer, A202, A235
 FISCHER, A., A87, A393
 FISCHER, J., A359
 FISCHER, R., A398
 FISCHER & ARTHUR, A422, A424, A425, A426, A427, A428, A430, A431, A432, A437, A477, A478
 Fischerinidae, A267
 Fissiluna, A476
 Fistulamina, A323-A326
 Fistulipora, A322-A326
 Fistulotrypa, A325, A326
 Fitzroyella, A208
 FLECK, A516
 FLEISCHER, A533
 FLEMING, C., A364
 FLEMING, P., A363
 Flemingites, A363
 Fletcherina, A223
 Flinz facies, A187
 floatability constants, A25
 flooding, death by, A14
 flora, Tertiary, A500, Carboniferous, A285
 FLÜGEL, A271, A298, A319, A320, A394
 FLÜGEL & FRANZ, A393
 FLÜGEL & SCHÖNLAUB, A302
 FÖRSTER, A410
 FOLK, A61, A69
 FONTAINE, A271
 Fontannelliceras, A399
 Foordites, A201, A234, A242
 FORAMINIFERA, A441, A496, A497-A498
 foraminifers, Carboniferous, A261-A268, of North American craton, A267, of Tethyan realm, A267; Silurian, A177; Tertiary, A497-A498, planktonic, zones of, A501-A503
 FORBES, A507
 FORD, A99
 Fordilla, A120
 Forschia, A263, A265
 Forschiella, A263, A265
 Forschiidae, A267
 FORTEY, A158
 FORTEY & BRUTON, A143
 fossil deformation, A53-A58, by fracture, A56, plastic, A55-A56, by tectonic stress, A58, by volume decrease of sediment, A53-A55
 fossil diagenesis, A3, A48-A71
 fossilization, A2-A3
 Fossil-Lagerstätten, A22, A23
 fossils, Precambrian, A81, geographic distribution of, A83-A84, preparation and investigation of, A81
 Fossulites, A473
 Fouchouia, A127
 fracture systems, A57
 fracturing, A28-A30
 FRANCIS & WOODLAND, A260
 Franconites, A407
 Frasnian, A189, A203, European, A204-A205; faunas, A235, A243, A244, A245, A246, extinctions, A246, A247
 Frasnian-Famennian boundary, A244
 FREBOLD, A298, A381, A395, A398, A399, A400, A401, A402
 Frechiella, A400
 FREDERIKS, A292, A330
 Freicistarte, A475
 FRERIGHS & ADAMS, A425, A438
 FRIEND, A222
 FRIEND & HOUSE, A219
 FRUSH & EICHER, A428, A432
 FUCHS, A195, A362
 Fucinoceras, A399
 FÜCHTBAUER & GOLDSCHMIDT, A63, A69
 Fulpia, A469
 Furcaster, A42, A44-A45
 Furcyrhynchia, A395
 FURNISH, A298, A330, A331, A334, A335, A336, A337
 FURNISH & GLENISTER, A335, A336
 FURON & ROSSET, A360
 Fusiella, A266, A268, A310, A311
 Fusulina, A266, A267, A268, A312
 FUSULINACEA, A308-A316
 fusulinaceans, Permian, geographical distribution of, A314-A316, Cordillera, A314, North America, A313-A314, Russian platform and Urals, A309-A311, Tethyan region, A311-A313, zonation, A307-A316
 Fusulinella, A266, A267, A268,

- A312, Zone, A266, A267
 Fusulinellinae, A308, A309
 Fusulinidae, A268, A308, A316
 Fusus, A469
 FUTTERER, A32, A35, A40, A44

 Gagaticeras, A398
 Galeola, A458
 Galeritidae, A441
 Galeropygus, A411
 Gangamophyllum, A270-A272
 Gangamopteris, A305, A306
 GANSSER, A361
 Garantiana, A403
 Garniericeras, A408
 GARRISON & FISCHER, A391
 Gartnerago obliquum Zone, A460
 gas cavities in sediment, A16
 Gasterocoma?, A238, A240
 Gastrioceras, A279, Zone, A280
 Gastrodotoechia, A206, A207,
 Zone, A245
 Gastrodorus, A410
 Gastroplites, A457
 Gastroplitidae, A468
 Gastroplitinae, A457
 gastropods, Jurassic, A397, Silu-
 rian, A179, Triassic, A377-A378
 GATES, A537
 Gattendorfia, A189, G. subinvo-
 luta Zone, A254-A255
 GAUDRY, A506
 Gaudryceras, A471, A475
 Gedinnian faunas, A223, A226,
 A227, A230, A231, A234
 Gedinnian Stage, A188, A195
 GEIKIE, A184
 GEITZENAUER, A531
 GEKKER, A40
 GEMMELLARO, A335
 Genuclymenia, A208
 Geocoma, A15
 geodes, A65-A67
 geographic distribution of fossils,
 maps of, Arenigian trilobites,
 A142, Ashgillian trilobites,
 A150, 151, Bathyuridae, A146,
 Bimuriidae, A147, Cambrian,
 A121, Caradocian trilobites,
 A148, Christianiidae, A146,
 Devonian, A185, A220-A221,
 A224-A225, A228-A229, A232-
 A233, A236-A237, Draboviinae,
 A147, graptoloids, A155,
 Hirnantian trilobites, A153,
 Llanvirnian, A145, Precambrian,
 A84, Tertiary, A490, A492,
 A493, A494, A495, Tremado-
 cian trilobites, A139
 GEORGE, A255
 GEORGE & WAGNER, A189
 Gephyrocapsa, A510, A511, G.
 caribbeana, A513, A514,
 A531, G. oceanica, A513, A514,
 G. protohuxleyi, A513
 Geragnostus, A124
 Geranocephalus, A240
 GERHARZ, A48
 Germanic facies, A352
 GERMS, A85, A96
 Gervilleia, A297
 Gervilleia, A362, G. socialis, A24
 GEYER, A394, A396, A398, A400,
 A406, A407
 Gigantoproductidae, A275
 Gigantopteris, A301
 GIGNOUX, A508, A510, A513
 Gilbertharrisella, A474
 GILL & COBBAN, A438, A445
 GIRTY, A323, A330
 Girtyopora, A323, A324, A325
 Girtyoporina, A323, A324
 Girtypecten, A305
 Girvanella, A300
 Givetian, A189, A201, faunas,
 A234, A235, A238, A240,
 A241, A242
 glaciation, continental, Antarctic,
 A516, Arctic, A516, Kansan,
 A516, Mindel-Elsterian, A516,
 Nebraskan, A516, Northern
 Hemisphere, A516; Late Ordo-
 vician, A159, A161
 Gladigondolella, A411
 GLAESSNER, A79-A118, A410,
 A492
 GLAESSNER & WALTER, A96
 Glaessnerina, A83, A99
 Glascoceras, A335
 Glaucolithites, A406, A407
 Gleboceras, A279
 GLENISTER, A208
 GLENISTER & FURNISH, A305,
 A334, A335
 GLENISTER & KLAPPER, A208
 glide marks, during rigor mortis,
 A15
 Globigerina, A393, A496, A503,
 G. bulloides, A527
 GLOBIGERINACEA, A471
 Globigerinelloides, A457, A458
 Globigerinoides, A497, G. ob-
 liquus, A513, G. ruber, A532-
 A533, G. sacculifer, A533
 Globivalvulina, A265
 Globoendothyra, A263, A265
 Globorotalia, A498, G. aragonen-
 sis Zone, A503, G. inflata,
 A523, A530, G. menardii,
 A520, A524, G. tosaensis, A513,
 G. truncatulinoides, A513,
 A514, Zone, A503
 Globotruncana, A460, A461
 Globotruncanella, A461
 Globotruncanidae, A419, A441
 Glochiceras, A402, A406, A407
 Glomospira, A265
 Glomospiranella, A261
 Gossinotoechia, A195
 Glossopleura, A123, Zone, A131,
 A132
 Glossopteris, A305, A306, A307,
 -Gangamopteris flora, A307
 GLUSKO & FEDOROV, A293
 Glyptagnostus, A123, A124, A127
 Glyptambonites, A145
 Glyptograptus teretiusculus Zone,
 A156
 Glyptophiceras, A301, A362
 Gnathodus, A280, A281, G. girtyi
 simplex Zone, A280
 GOBBETT, A202, A298, A315
 GOETHE, A24
 GOLBERT, A440
 GOLDFUSS, A7
 Gonatocheilus, A410
 Gondolella, A280, A287
 Gondwanaland, in the Ordovician,
 A137, paleofloral region of,
 A285, -Laurasia separation,
 A125
 goniatites, Carboniferous distribu-
 tion, A276-A278; Devonian,
 A199, A201, A203, A205, A206,
 A226, A234, A240, A243, ex-
 tinctiions, A208
 Goniatiitidae, A276
 Gonilia, A472
 Gonioceras, A146
 Goniocladia, A322-A326
 Goniodromites, A410
 Gonioglyphioceras, A279
 Goniograptus, A155
 Gonioloboceras, A279
 Goniophoria, A473
 Gonioteuthis, A328, A460
 Gordius tenuifibrosus, A71
 GORDON, A258, A268
 Gorjanovicia, A473
 GORJUNOVA, A322, A324
 Gorskites, A269
 GRABAU, A202, A324
 Gracianella, A223
 GRÄF, A58
 Granophyllum, A300
 GRANT, A301, A339, A343, A380
 GRANT & COOPER, A379, A382
 Graphidula, A469
 Graphoceras, A400
 graptolite deformation, A59
 graptolites, Devonian, A190-A191,
 A195, A196, A197, A226, A227,
 A230
 graptolites, planktonic, Ordo-
 vician, A154-A156, Atlantic
 province, A155-A156, Balto-
 Scandia, A156, biogeography
 of, A154, A157, A158-A160,
 Pacific province, A155-A156, in
 South America, A155
 graptolites, Silurian, A170, A172,
 A180
 Gravesia, A407
 GRAY, A170
 GRAY, LAUFELD, & BOUCOT, A181
 Graysonites, A459
 Greenops, A226
 GRÉGOIRE, A68
 GRÉGOIRE & TEICHERT, A68
 Gregoryceras, A403, A407
 Gresslya, A57
 Griesbachian, A353
 GRIPP & TUFAR, A69
 GROOS-UFFENORDE & UFFENORDE,
 A191
 DE GROOT, A272
 Grossouvirites, A475
 GRUNT & DMITRIEV, A343
 GRYC, A222

- Gryphaea, A367, A396, *G. dilatata*, A33
 Grypoceras, A371
 Grypoceratidae, A276, A371
 Grypophyllum, A202, *G. mackenziense* Zone, A240
 Gshelia, A272, A273
 Gshelian Stage, A255, A259
 Guadalupian Series, A294, A303, A314, A319, ammonoids of, A335, bryozoans of, A323, A324, A325, corals of, A321
Guericlina strangulata Zone, A227
 GUNTER, A9
 Gurjevskiiella, A202
 Gygi, A403
 Gymnocodium, A300
 Gymnograptus, A156
 Gypidula, A197, A227, *G. pelagica* beds, A226, A227
 Gyroceratites, A195, A242, *G. gracilis* boundary, A199
 Gyronites, A358, A363
 Gzheloceras, A276
- Hadrocheilus, A410
 Hadrophyllum, A269
 Hadrorhynchia, A238, A240
 HÄNTZSCHEL, A33, A44, A81, A91, A96
 HÄNTZSCHEL, EL-BAZ, & AMSTUTZ, A20
 HAKES, A41
 HALL, A219, A463
 HALL & KENNEDY, A67, A68
 HALLAM, A24, A26, A184, A195, A196, A399, A419, A426, A430, A463
 HALLAM & O'HARA, A68
 HALLE, A285
 HALLER, A222
 Hallidaya, A83, A92
 Halobia, A362, A366, A372
 HALSTEAD & TURNER, A184
 HAMADA, A196, A202, A207
 Hammatoceratidea, A400
 Hammatocnemidae, A152, A160
 VAN DER HAMMEN, WIJMSTRA, & ZAGWIJN, A523
 Hamulinites, A471
 Hanchunglithus, A141
 HANCOCK, A431, A439, A443
 Haploceras, A406
 Haploceratidae, A403
 Haplophragmella, A263, A265
 Haplophyloceras, A403, A405
 Haplopleuroceras, A400
 Haplostiche, A40
 Hapsiphyllum, A318, A319
 HAQ, BERGGREN, & VAN COUVERING, A513, A514
 hard parts, before final burial, A22-A48, mechanical destruction of, A25-A28
 Hardaghia, A472
 HARDY, A88
 HARKER & THORSTEINSSON, A298
 HARLAND, A159, A199, A419
 HARLAND & GAYER, A137
 HARLAND & HEROD, A82
- Harpagodes, A397
 Harpes, A230, A242
 Harpoceras, A399, A400
 HARRINGTON, A222, A231, A246, A369
 HARRINGTON & MOORE, A103
 HART, A343
 Hastitidae, A408, A410
 HAUG, A391
 Hauterivian, A423, A442-A444, A453, A456-A457
 HAVLIČEK, A141, A149, A160, A195
 HAY, A429
 Hayasakaia?, A271
 Hayasakapora, A323, A326
 Hayasakia, A320
 HAYDEN, A301, A359, A360, A379
 Haydenella, A300
 HAYS, A517, A523, A527, A530
 HAYS & BERGGREN, A514
 HAYS & PITTMAN, A430
 HEALEY, A362
 Hebediscus, A126
 Hebertoechia, A196
 HECHT, A55
 Hectoroceras, A453, *H. kochi* Zone, A440
 Hedbergella, A457, A459, A469
 Hedinaspis, A124
 LE HEGART & REMANE, A393
 HELICACEA, A498
 Heliophyllum, A202, A203
 Hellenocyclina, A497
 HEMICHORDATA, Cambrian, A120
 Hemifusulina, A266
 Hemigordiopsis, A316
 Hemihaploceras, A406
 Hemihoplitidae, A456
 Hemiporitidae, A441
 HEMIPTERA, A305
 Hemiptychina, A300, A380
 Hemispiticerias, A402
 Hemitrypa, A326
 HENSON, A393
 Heptabronteus-Pliomerina Province, A149
 Hercynian/Bohemian facies, A184, A199
 Heritschiella, A319, A320, A321
 Heritschioides, A319
 HERMAN, A525, A533
 Herzogina, A476
 Heteraster, A458
 Heterelasminidae, A329, A330
 Heterocaninia, A271
 Heteroceratidae, A457
 Heterohelix, A469
 Heterolasmina, A300
 Heterophrentis, A223
 Heterophyllia, A271
 Heterorthella, A174
 Heterostegina, A497, A504
 HEXACTINELLIDA, A393
 Hexagonaria, A245
 Hexagonella, A322, A324-A326
 Hibolithes, A410, A455, A457, A471, A472, -Curttohibolites plexus, A454
 Highatella, A140, Province, A139
 Hildaites, A400
 Hildoceras, A400
 HILDOCERATAEAE, A399
 Hildoglochiceras, A403, A406
 HILL, A129, A197, A203, A259, A268-A270, A272, A273, A317
 HILLEBRANDT, A402
 Himalayites, A403, A406
 Hindeodella, A338, A411
 Hinganella, A323, A325
 Hipparion, A500
 Hipparionyx, A197
 HIPPURITACEA, A458, A471
 Hippuritidae, A441
 Hirnantia, A153, A154, A159, assemblage, A153
 Hirnantian shelly faunas, A153-A154, Hiberno-Salairian, A153-A154, Mediterranean, A153, A154, North American Mid-continent, A153-A154, North Estonian belt, A154, Tungusian, A154
 HODSON & RAMSBOTTOM, A276
 HÖLDER, A390-A417
 HÖLDER & ZIEGLER, A407
 HOERNES, A499, A508
 HOFFMANN, A399
 Holaster, A458, A459, A460
 Holasteridae, A411
 HOLECTYPIDA, A411
 Holoctypidae, A441
 Holoctypus, A411, A458
 HOLLARD, A189, A198, A203
 HOLLARD & LEGRAND, A197, A203
 HOLLMANN, A17, A27, A28, A30, A63, A64, A67
 Holmia, A122, A125
 Holocene, A507
 Holorhynchus, A154
 HOLTEDAHL, A222
 Holotrachelus, A150, A152, A153
 Holzpfeloceras, A201
 Homalonotus, A226
 Homalophyllites, A269
 Homoceras, A279, Zone, A265, A280
 Homoctenidae, A203
 HOPKINS, A527
 HOPLITACEAE, A441
 Hoplitidae, A457, A459, A467
 Horsundia, A318
 Horridonia, A297
 HOUSE, A183-A217, A219, A222, A227, A234, A235, A242-A247
 HOUSE & KIRCHGASSER, A243
 HOUSE & PEDDER, A234, A240, A242, A243
 Howaiskya, A407
 HOWARTH, A399
 Howchinia, A265
 Howellella, A195, A196, A197
 Howittia, A197
 Hu, A137
 Huangia, A272
 HUCKRIEDE, A397
 HUDSON, A255, A397

- VON HUENE, A516
 HUGHES, A208, A463
 HUME, A245
 Humeoceras, A161
 Hungaia magnifica fauna, A124
 HUNKINS, A525
 HUPÉ, A132
 Hustedia, A301, A337, A380
 Hwang-ho facies, A127, in Middle and Late Cambrian, A130
 Hyalinae baltica, A508, A510, A513, A514
 Hyattoceras, A336
 Hyboniticeras, A406, A407, Zone, A406, A407
 Hydrobiidae, A397
 hydrogen sulfide, A9, A10, A61
 HYDROIDA, A91
 HYDROZOA, A88-A89, A91
 hydrozoans, Jurassic, A395
 HYOLITHA, Cambrian, A120
 Hypacanthoplites, A469, A472
 Hypelloceras, A400
 Hyphantoceras, A471
 Hyphasporopora, A322
 Hypoclypeus, A411
 Hypodicranotus, A152
 Hypophylloceras, A475
 Hypothyridina, A205, A206, A245, A246
 Hysterolites, A195, A196
 Hystricurus, A139

 Iapetus Ocean, A137, A140
 Iberg facies, A187
 Iberian assemblage, A282, A283
 Icanotiidae, A441
 ichnia, A2
 ichnocoenoses, A22
 Icriodus, A227, A230, A240, A242, A246, I. latericrescens, A234, A235, I. pesavis fauna, A226, I. woschmidti, A196, Zone, A223
 Idahoiidae, A124
 idiobiology, A5
 Idiognathodus, A280, A281, A337, I. ellisoni Zone, A337
 Idiognathoides, A280, A281
 Idoceras, A402, A407
 Illaenus, A142
 ILLIES, A55, A67
 Ilmarinia, A152, A153
 IMBRIE, A520
 IMBRIE & KIPP, A520, A531
 IMBRIE, VAN DONK, & KIPP, A520
 Imitoceras, A206
 Imlay, A396, A398-A403, A453
 Imlayoceras, A402
 Immanitas, A473
 immuration, A7
 Incardium, A473
 index fossils, Cambrian, nontrilobite, A130
 Indopolia, A300
 Indospirifer, A201
 Indotrigonia, A396
 Induan, A353
 Ingelarella, A305

 INGLE, A527
 Inoceramidae, A419, A428, A434, A441, A453, A457, A458, A460, A465
 Inoceramus, A57, A391, A426, A453, A459, A460, A461, A468, I. dubius, A56
 INSECTA, A281-A283
 insects, Carboniferous, A281-A283
 Integricardium, A472
 invertebrate faunas, Albanian, A437, Aptian, A436, Barremian, A436, Berriasian, A436, Campanian, A438, Cenomanian, A437, Coniacian, A438, Cretaceous, A436-A438, Hauterivian, A436, Maastrichtian, A438, Santonian, A438, Turonian, A437, Valangian, A436
 Iotrigonia, A475
 Iowanella, A266, A268
 Iowaphyllum, A202
 Ipciphyllum, A319, A320
 Iranites, A358
 Iranophyllum, A319, A320
 Irenicoceras, A468
 Irvingella, A124, A125, A127
 Isalaux, A148
 ISHII, A316
 ISHII, FISCHER, & BANDO, A343, A359
 ISHII, OKIMURA, & NAKAZAWA, A343
 Isogramma, A299
 Isogrammidae, A330
 Isograptus, A155
 Isophragma, A146
 ISOPODA, A410
 Isoprusia, A226
 Isorthis, A197
 Isotancredia, A476
 Isotelus, A150
 Iteria, A397
 IVANOVA, A273
 IVANOVSKIY, A270

 JAANUSSON, A136-A166
 JACKSON & LENZ, A227
 Jacobites, A475
 JAEGER, A191, A195, A196
 JAEGER & MARTINSON, A89
 JAEGER, STEIN, & WOLFART, A196
 JAGO & DAILY, A134
 JANICKE, A46, A47
 Janischewskina, A263, A265
 Janius, A201, A227
 JARKE, A30, A61
 JARVIK, A222
 JAWORSKI, A369
 JEFFERIES & MINTON, A396
 JELETZKY, A22, A29, A397, A453, A455, A462, A463, A465
 JEN, A137
 JENKINS, A99, A208
 Jigulites, A267, A268, A310
 JOHNSON, A524
 JOHNSON, J., A203, A219, A226, A227, A230, A231, A235, A238, A245, A246
 JOHNSON, R., A32
 JOHNSON & BOUCOT, A195, A196, A219, A226, A235, A242, A246
 JOHNSON, BOUCOT, & MURPHY, A226
 JOHNSON & DASCH, A219
 JOHNSON & FOX, A103
 JOHNSON & LANE, A238
 JOHNSON & MURPHY, A226
 JONES, A134, A177, A453
 JONGMANS, A285
 JONGMANS & GOTHAN, A189
 JORDAN, A397
 JOUFIA, A473
 Juddiceras, A455, A471
 Jurassic-Cretaceous boundary, A410, A440-A441
 Juresanites, A305, A331

 KAEVER, A359
 KAHLER, A343
 Kahlerina, A299
 KALJO, A152, A153
 KALJO & KLAAMANN, A150, A153, A161
 Kallirhynchia, A395
 Kanabicerias, A459
 Kansanella, A266, A268
 Kap Stosch Formation, A297, A319
 KAPELLOS & SCHAUB, A503
 Karachalyrian Stage, A299
 Karadjalia, A206
 Kargalites, A331
 Karpinskia, A196
 KARPINSKY, A292
 Karsteniceras, A471
 Kasmovian Stage, A259
 Katroliceras, A406
 KAUFFMAN, A418-A487
 KAUFFMAN, COBBAN, & EICHER, A421, A458
 KAUFFMAN, HATTIN, & POWELL, A427, A445
 KAUFFMAN & SCHOLLE, A431, A432, A481
 KAUFFMAN & SOHL, A420
 KAY, A39
 Kazachiphyllum, A272
 Kazanian Stage, A293, A295, A305, A316, ammonoids of, A335-A336, brachiopods of, A330, bryozoans of, A322, A324-A326, corals of, A319
 KEANY & KENNETH, A527, A529, A530
 KEAST & GLASS, A343
 KELLER, A82, A83
 KELLER & PREDTECHENSKY, A137
 KELLOGG, A520
 KENNEDY, A435
 KENNEDY & COBBAN, A462, A463, A471
 KENNEDY & HALL, A67, A68
 KENNEDY & JUIGNET, A439
 KENNEDY & KLINGER, A66
 KENNEDY & TAYLOR, A67, A68
 KENNETT, A30, A529, A531
 KENNETT & BRUNNER, A530
 KENNETT & HUDDLESTON, A524
 KENNETT & SCHACKLETON, A524

- KENNETT, WATKINS, & VELLA, A530
 KENT, OPDYKE & EWING, A527
 Kepplerites, A401, A402
 Keriophyllum, A201
 KERR, MCGREGOR, & MCLAREN, A245
 KESSEL, A28, A61
 Keuper, A352
 Keyserlingophyllum, A269, A270
 KHALYMBADZHA & CHERNYSHEVA, A206
 KHALYMBADZHA & TIKHVINSKIY, A273
 KHRAMOV, A208
 KHÚC, A362
 Kiangsicerias, A301
 Kiangsiella, A380
 KJELAN, A150, A151, A152
 Kimberella, A94
 Kinderhookian Series, A258, A280
 KINDLE, A40
 KING, P., A303, A313, A334
 KING, R., A330
 Kingoceras, A336
 Kingopora, A322
 Kingstoniidae, A123
 Kinkaidia, A271
 Kinnella, A153
 Kionelasma, A223
 Kionophyllum, A272, A273
 KIPARISOVA, OKUNEVA, & OLEYNIKOV, A365
 KIPARISOVA & POPOV, A353
 KIPARISOVA, RADCHENKO, & GORSKIY, A365
 Kipia, A473
 KIRCHGASSER, A243
 KITTL, A357
 Kladognathus, A280
 KLÄHN, A24-A28
 KLAPPER, A226, A227, A234, A235, A238, A244
 KLAPPER, BERRY, & BOUCOT, A181
 KLAPPER, PHILIP, & JACKSON, A202
 KLAPPER & ZIEGLER, A190, A235
 Kleopatrina, A318, A319
 KLOVAN & EMBRY, A245
 Knightoceras, A276
 KNOCKE, A3
 KNOLL & BARGHOORN, A80
 KOBAYASHI, A120, A127, A142, A395
 KOBAYASHI & HAMADA, A207
 Kochiproductus, A298
 KOENEN, A499
 Koenenites, A247
 VON KÖNIGSWALD, A41, A44
 KOLB, A19, A46
 Koninckina, A395
 Koninckioceratidae, A276
 Koninckites, A363
 Koninckocarina, A272
 Koninckophyllum, A269-A272
 Kootenia, A123
 KORCHINSKAYA, A365, A366
 KOREJWO & TELLER, A191
 KORSCHULT, A6
 Kosmoceras, A401
 Kosmoceratidae, A401, A406
 Kosovopeltis, A226
 Kossmatia, A403
 Kossmaticeras, A471, A475
 Kossmaticeratidae, A460, A461, A465, A475
 KOVACS, A399
 KOZLOWSKI, A88, A192
 KOZUR, A337
 VON KRAFFT, A361
 VON KRAFFT & DIENER, A361
 KRANTZ, A17
 KREBS, A184
 KREBS & RABIEN, A205
 KREBS & WACHENDORF, A210
 KREBS & ZIEGLER, A190
 KREJCI-GRAF, A36
 KRINSLEY, A39
 Krotovia, A382
 KRZYSTYN, A397
 KU & BROECKER, A525
 Kubergandinian Stage, A294, A313, A324
 Kuehnia, A473
 Kueichouphyllum, A270, A271
 Kueichowpora, A217
 KÜPPER, A27
 KUKLA, MATHEWS, & MITCHELL, A524
 KULIKOV, PAVLOV, & ROSTEVTSEV, A296
 Kullervo, A145, A151
 KULLMAN, A196, A202
 KULLMAN & ZIEGLER, A189
 Kuman Series, A294, A302, A312
 KUMMEL, A335, A336, A351-A389, A408
 KUMMEL & ERBEN, A359
 KUMMEL & FUCHS, A369
 KUMMEL & TEICHERT, A300, A301, A336, A337, A339, A343, A358, A360, A380, A387
 Kumpapanophyllum, A272
 Kunda Stage, A143
 Kungurian Stage, A293, A295
 Kushanian Series, A313
 KUTASSY, A370
 KUTEK, A408
 KUTEK & ZEISS, A408
 KUTSCHER & SCHMIDT, A188, A189
 Kuzbasophyllum, A270, A271
 Kuzbassocrinus, A196
 Kwangsiphyllum, A271

 La Brea tar pits, A11
 Lacunoporaspis, A227
 Ladogia, A206
 Ladogioides, A206, Zone, A244, A245
 Längs-Einsteuerung, A39
 Lagenidae, A316
 Lagonibelus, A408
 Lahillia, A476
 LAMB, A514
 LAMB & BEARD, A510, A513, A514
 land plant remains, Silurian, A181
 LANE, A281
 LANGE, A205, A398

 LANGERFELDT, A47
 LANGHEINRICH, A55, A58
 Lapeirousia, A472
 LAPEIROUSIINAE, A441
 LAPKIN & SOLOVYEV, A299
 DE LAPPARENT, A292, A506
 LARDEUX, A191, A195, A198, A201
 Larma, A469
 LARSON, A526
 Larus argentatus, A23
 Lasiodiscus, A300
 Latnarcestes, A202
 Laticrura, A145
 Latiendothya, A261, A263
 DE LATTIN, A393
 LAUGHTON, A516, A520
 Laurentide deglacial process, A524
 LAWRENCE, A69
 LAZELL, A11, A70
 LEANZA, A243, A396
 Lebachian assemblage, A283
 lebensspuren, A2, A31, A44
 Le Castella section, A510, A513
 LECOMPTE, A199, A205
 LE CONTE, A506
 Leella, A300, A314
 LEGRAND, A137
 LEHMANN, A17, A69, A71
 LEHMANN & WEITSCHAT, A17, A69
 Leioceras, A400
 Leioclema, A325
 Leioproductidae, A275
 Leiiorhynchoidea, A327
 Leiiorhynchus, A238, L. castanea Zone, A238, L. hippocastanea Zone, A238, A240
 Leiospheridia, A83
 LELESUS, A152, A153
 LE MAITRE, A203
 Lenella, A396
 Lenticeratinae, A460, A461
 LENZ, A227, A230
 LENZ & JACKSON, A227
 LENZ & PEDDER, A238
 Leonardian Series, A294, A303, A313-A314, corals of, A321
 Leonardophyllum, A273, A319, A321
 Leonaspis, A242
 Leperditidae, A140
 Lepidocyclus, A497
 Lepidodendron, A301
 Lepidolina, A302, A312, A313, Zone, A313
 Lepidobitoides, A496
 Lepidotus, A71
 Leptathyris circula Zone, A235, A238, A241
 Leptellina, A146
 Leptobos, A508
 Leptoceras, A453, A471
 Leptocheilus, A410
 Leptocheilia, A196, A231
 Leptoinophyllum, A201
 LESPÉRANCE, A151, A153
 Leukadiella, A400
 Leuroceras, A276
 LEVEN, A312, A313

- Leveneia, A234
 Levifenestella, A325
 LEVITSKIY, A147
 Lewesiceras, A460, A468
 Leymeriellidae, A457
 LIABEUF & ALPERN, A258
 Liangshanophyllum, A320
 Liardiphyllum, A270
 Libyaconchus, A472
 Lichidae, A203
 Liguloclema, A325
 LIKHAREV, A293
 LIKHAREV & MIKLUKHO-MAKLAY, A299
 Lilloetia, A401
 Limnaea auricularis, A23, L. stagnalis, A23
 Limnaeidae, A397
 Limneidae, A498
 Limnocaridiidae, A498
 Limnocyrena, A397
 LIN, A402
 Lindostroemia, A223
 LINDSTRÖM, A160
 Lindstroemia, A196
 Lingula, A247, A395
 Lingulidae, A329
 Linoproductidae, A275, A327
 Linoproductus, A300, A380
 Linter, A469
 Liopeplum, A469
 "Lipalian interval," A86
 LIPINA, A261, A267, A316
 LIPINA & REYTLINGER, A267, A268
 Lipinella, A266
 Lioceras, A276, A371
 Lioceratidae, A276, A371
 Lisopceras, A276
 Lispodesthes, A469
 Lissatrypa, A197
 Lithiotes, A396
 LITHISTIDA, A393
 lithospheric plates, Ordovician, A137
 Lithostrotion, A270, A271, A272
 Lithostrotionella, A270, A271, A272, A319
 Lithraphidites, A457
 Lithraphidites alatus-Stauroolithes orbiculofenestrus Zone, A459, L. bollii Zone, A457, L. quadratus Zone, A461
 Litorina, A24, A30
 LITUOLACEA, A471, A472
 Lituolidae, A316, A393
 Lituotubella, A263, A265
 Liu, A137, A362
 lizard, in amber, A11
 Llandoveryan, faunal break, A177, faunas, A168-A169
 Llanoaspididae, A123
 Llanvirnian shelly faunas, A142-A143, Balto-Scandian, A143, Mediterranean, A143, North American, A142-A143
 Lobatannularia, A301
 LOCHMAN-BALK & WILSON, A120, A122, A125, A128, A131
 Loeblichia, A265
 Loftusia, A472
 Lonchocephalus, A123
 Longiproetus, A201
 Longispina, A234
 LONSDALE, A184
 Lonsdaleia, A269-A272
 Lonsdaleiastraea, A320
 Loo, A324
 Lophia, A375, A460
 Lophamplexus, A321
 Lophinae, A458
 Lophocarinophyllum, A319
 Lophoceras, A276
 Lophophyllidium, A272, A273, A299, A318, A320, A321
 Lophophyllum, A272
 Lophotichium, A272
 Lorenzinites, A96
 Lotagnostus, A124, A127
 LOWENSTAM, A61, A68
 LOWENSTAM & EPSTEIN, A424, A425
 Lower Devonian faunas, A194-A198, A224-A234, in Antarctica, A231, Malvinokaffric province, A194, A197-A198, in eastern North America, A223-A226, in northern North America, A227-A230, in northwestern North America, A226, in western North America, A226, Old World province, A194-A197, in South America and Falkland Islands, A230-A231
 Lower-Middle Devonian boundary, A188, A195, A198
 Lu, A133, A149
 Ludlovian faunas, A170
 LUDVIGSEN, A227
 Ludwigia, A400
 Lunatia, A30
 LUPHER & PACKARD, A396
 LYASHENKO, A191, A201, A205
 Lycettia, A469
 Lycophoria, A143
 LYELL, A499, A506, A507, A508
 Lyelliceratidae, A457, A459, A469, A475
 Lyem, A312
 Lyradora, A325, A326
 Lyrielsasma, A223
 Lyriomyophoria, A375
 Lyssatrididae, A199
 LYTOCERATACEA, A397-A398
 LYTOCERATACEAE, A441
 Lytoceratidae, A457
 LYTOCERATINA, A397, A399
 Lytohoplites, A406
 Lytophiceras, A362
 Lytonia, A300, A380
 Lytoniaceae, A329
 Lytoniidae, A330
 Lytvolasma, A319
 Lyttophyllum, A272
 MAACK, A246
 Maastrichtian, A423, A454-A456, A461
 Maccoyella, A475
 Maccoyoceras, A276
 McDougall, A219
 McElhinny, A85
 Macegia, A202
 MCGREGOR & UYENO, A230, A240, A246
 Machari facies; see Yangtze
 McINTYRE, A520, A537
 McINTYRE, RUDDIMAN, & JANTZEN, A520, A521
 McKee, A303
 McKellar, A208
 Mackenziophyllum, A240
 McLaren, A187, A203, A223, A244, A245
 McLaughlin, A145
 MACLURITINA, A441
 Macoma baltica, A25, A30
 Macrocephalitidae, A402, A403, A406
 Macropyge, A140
 McTAVISH, A157, A363
 McTAVISH & DICKENS, A363
 Mactra, A24, A35, M. corallina, A27, A29, A35, M. solida, A35, M. subtruncata, A30
 MACURDA & MEYER, A63
 Madigania, A94
 MAEDA, A396, A397
 Maenioceras, A201, A242, A243
 Magadiceramus, A460
 MAGLIO, A516
 MAILLIEUX, A195
 DE MAISTRE, A258, A282
 Majella, A108
 Malagasitrigonia, A472, A476
 Malayomaorica, A397
 Malurostrophia, A197
 Malvinokaffric province, Devonian, A194, A197-A198, A209
 Malvinokaffric, realm, A168, A176, A230, A231, A242
 MAMET, A261
 MAMET & SKIPP, A261, A267, A286
 MAMET, SKIPP, BANDO, & MAPEL, A265
 Mammitinae, A459
 Mamthus, A516
 MANTELL, A439
 Mantelliceratinae, A453
 Manticoceras, A205, A206, A207, A208, A243, A244, A246, A247, -Cheiloceras boundary, A189, A208, A244
 MANTON, A88
 Manuaniceras, A469
 Maoristrophia, A196, A197
 Maorites, A475
 maps, paleogeographic, Carboniferous, A284-A285, Cretaceous, A421, Devonian, A194, A198, A204, A209, Permian, A340-A341, Silurian, A169, Tertiary, A491, Triassic, A356
 Marathonites, A300, A331
 Marginifera, A300, A380
 Marginiferidae, A327, A329
 MARGOLIS & KENNETT, A530
 Marjumidae, A130
 Marken, A44

- Marshallites, A475
 Marsupites, A460
 Marthasterites, A460, *M. tribra-*
chiatus Zone, A503
 MARTINI, A503
Martinia, A299, A300, A301,
 A380, A381
 "Martinia" Shale, A297
 Martinifera, A300
 Martiniidae, A329
 MARTINSON, A397
 MARTINSSON, A23, A132, A188
 MARWICK, A364
 Marwickia, A476
 Marywadea, **A104**
 mass mortality, A6, A9
 Mastodon, A500
 MATERN, A190
 Matheronia, A472
 MATSUMOTO, A462, A463, A465,
 A467, A468, A471, A472, A475
 MAURIN & RAASCH, A244
 Mawsonites, A94, **A96**
 Mayaitidae, A406
 Maychella, A324
 MAYER-EYMAR, A499
 MAYNC, A397
 MAYR, A20
 Mazapilites, A402
 Mazonian assemblage, A282
 MECOPTERA, A305
 Medeela, A472
 Mediocris, A263, A265
 Mediospirifer, A235
 Mediterranean Fauna, Arenigian,
 A141-A142
 Medlicottia, A297, A302, A334,
 A335
 Medusinites, **A96**
 Meekellidae, A330
 Meekia, A465
 Meekopora, A323, A324, A326
 Meekoporella, A323
 Megacanthopora, A325
 Megacacullaea, A476
 Megadesmidae-Ceratomyidae,
 A375
 Megadesmus, A305
 Megaglossoceras, A276
 Megakozlowskiella, A231, A234
 Megalocardia, A473
 Megalodon, A359, A361
 Megalomus, A179
 Meganteris, A195
 Megastephanoceras, A402
 Megastrophia, A201
 Megatrigonia, A475
 Megaxinus, A476
 Megistaspidella, A143
 MEISCHNER, A280
 Melanophyllum, A270, A272
 Melanopsidae, A498
 Meleagrinnella, A367
 menisci, A16-A17
 MENNER, A343
 Menomonina, A123
 Menophyllum, A269
 Menuthiocrioceras, A472
 Meramecian Series, A258
 Mercaticeras, A400
 Mercenaria mercenaria, A68
 MERCER, A516
 MERCER, A506
 Meristella, A196
 Meristellidae, A161
 Meristellinae, A246
 Merlewoodia, A270, A271
 MEROSTOMATA, A87, A88
 Mesochasmoceras, A276
 Mesohibolites, A457, A472
 Mesolimulus walchi, A14
 Mesopuzosia, A475
 Mesosaurus, A306, A307
 Mesotaxis asymmetrica Zone,
 A243, A244
 Mesozoic-Tertiary boundary, A496
 Mestognathus, A281
 Metacoceras, A371
 Metacryphaeus, A230
 Metalegoceras, A305, A331, A332
 METALEGOCERATINAE, A331
 Metaperrinites, A334
 metasomatism, A61, A69
 METAZOA, Precambrian, A81-
 A89, characterized, A86, evolu-
 tion of, A89
 Metioceratinae, A459
 MEYEN, A268, A285, A343
 MEZESHNIKOV & ZAKHAROV, A408
 Michelinia, A269-A271, A319
 Micracanthoceras, A403, A406
 Micrantholithus hoschulzi Zone,
 A457
 Micraster, A458, A460
 Microcyclus, A269
 Microderoceras, A399
 Micromelanidae, A397
 microphytoliths, A81, A111
 Microtrigonia, A461
 Micula decussata-Tetralithus pyra-
 midus Zone, A460, *M. mura*,
 A461
 Middle Devonian faunas, A198-
 A203, North American, A234-
 A243, eastern, A234-A235,
 northern, A240-A242, north-
 western, A238-A240, western,
 A235-A238
 middle Ordovician shelly faunas,
 A143-A149, Balto-Scandinavian,
 A148, Heptabronteus-Pliome-
 rina Province, A149, Mediter-
 ranean, A149, North American
 Midcontinent, A143-A147, Sco-
 to-Appalachian, A147, Tunga-
 sian, A147
 MIDDLEMISS, A301, A379
 MIDDLEMISS & RAWSON, A463
 MIDDLETON, A36, A201
 Middle-Upper Devonian bound-
 ary, A103, A189, A199, A235
 MIKAN & SWEET, A379
 Mikhailovella, A263
 MIKHAYLOVA, A309
 MIKLUKHO-MAKLAY, A293
 Milanovicia, A473
 MILLER, A138, A445
 MILLER & COLLINSON, A247
 MILLER & FURNISH, A276, A298,
 A335, A381
 Millerella, A265, A266, A267,
 Zone, A267
 Millericrinus, A411
 Millkoninckioceras, A276
 Mimagoniatites, A196
 Mimatrypa, A235
 MINATO, GORAI, & HUNAHASHI,
 A364, A365
 MINATO & KATO, A272, A317,
 A319
 mineralized tissue, evolution of,
 A89
 Minilya, A324, A325, A326
 Minojapanella, A299
 Miocene, A499-A504
 Miocene-Pliocene boundary, A500
 Miogypsina, A497, A503-A504
 Misellina, A299, A311, A316,
 Subzone, A313, Zone, A313
 MISRA, A84
 MISSARZHEVSKY, A104
 Missisquoiia, A140
 Mississippian System, A258, A280
 Missourian Series, A258, A266
 Mizzia, A300
 Mobergella, A130
 Modiola, A35, A57
 Modiolopsis, A362
 Modiolus, A375
 VON MOELLER, A310
 Moelleritia, A238
 VON MOJSISOVICI, WAAGEN, &
 DIENER, A352
 Mojsisovicziinae, A469, A473,
 A475
 Mojsvaroceras, A371
 molecular rearrangements in di-
 agnesis, A61-A69, concretions,
 A65-A67, recrystallization, A61-
 A65, into stable modifications,
 A67-A69
 MOLLUSCA, Cambrian, A120
 mollusks, Tertiary, A498-A499,
 A499
 MONAXONIDA, A393
 MONGER & ROSS, A304, A314,
 A315, A319
 Mongolia and Tikhookian area,
 Lower Devonian faunas of,
 A196, A207; link with Appa-
 lachian province, A210
 Monodioxodina, A308
 monograptids, Devonian, A226,
 A230
 Monograptus, A187, A195, A197,
M. hercynicus, A195, Zone,
 A226, A227, *M. praehercynicus*
 Zone, A226, *M. thomasi*, A227,
M. ultimus Zone, A187, *M.*
uniformis, A195, A198, Zone,
 A223, A226, A227, *M. yu-*
konensis Zone, A227
 Monopleuridae, A441
 Monotaxinoides, A265
 Monothyra, A475
 Monotis, A360, A362, A365,
 A367, A369, A372, A375-A376,
 distribution of, A374, *M. ocho-*
tica group, A375, A376, *M. sala-*
riana group, A375, A376, *M.*

- subcircularis group, A375, A376, *M. typica* group, A375, *M. zabaikalica* group, A375, A376
- Montiparus, A266, A268
- MOORE, A258
- MOORE & DUDLEY, A323
- MOORE & JEFFORDS, A321
- Morea, A469
- MOROZOVA, A316, A322-A324
- Morphoceratidae, A403
- Morrowan Series, A258, conodonts of, A280, corals of, A272, foraminifers of, A265-A266
- MORTELMANS, A255
- Moscovian Stage, A255, A259, A266, corals of, A272-A273, A273
- MOSEBACH, A61
- Mstikhinoceras, A275
- MU, A155, A196, A202, A207
- Mucrospirifer, A202, A206, A235, A243
- MÜLLER, A2-A78, A382
- MÜLLER & MOSHER, A411
- MUIR-WOOD, A395
- MUIR-WOOD & COOPER, A273
- Muirwoodia, A298
- Mulinoides, A476
- Multispirifer, A195
- Muniericeratidae, A459, A460
- MURATOV, OSTROVSKY, & FRIDENBERG, A536
- MURCHISON, A184, A291, A292
- MURCHISON, DE VERNEUIL, & VON KEYSERLING, A292
- Murchisoniidae, A378
- Murciella, A472
- Murex, A30, A39
- Murgabian Stage, A294, A299, A300, A313, bryozoans of, A324, A325
- Muschelkalk, A352, A354
- Mutationella, A195, A197
- Mya, A57, *M. arenaria*, A24, A25, A29
- Mylitoides, A459, A460
- MYOCONCHINAE, A441
- Myophorella, A396
- Myophoria, A362
- Myrtea, A476
- Mystrocenhalia, A226
- MYTILOIDA, A375
- Mytilus, A35, A55, A57, *M. edulis*, A6, A25
- Nabeyaman Series, A294, A302, A312
- Nadiastrophia, A197
- NAEF, A21, A22
- Nagatoella, A299, A311
- Nagatophyllum, A271, A272
- NAKAGAWA, NIITSUMA, & HAYASAKA, A514
- NAKANO, A453
- NAKAZAWA, A301, A343, A361, A363, A379, A380, A381
- NAKAZAWA, ISHII, A311
- NAKAZAWA, KAPOOR, A311
- NAKAZAWA & RUNNGAR, A372, A375
- NALIVKIN, A192, A201, A202, A203, A206, A207, A223, A293, A296
- NALIVKIN, RZHONSNITSKAYA, & MARKOVSKIY, A191, A192, A196, A201, A205, A206, A207
- Nalivkinella, A223
- Namalia, A83, A102
- Namurian Series, A255, conodonts of, A280, corals of, A271-272, foraminifers of, A265, insects of, A279-A283
- Nankinella, A299, A312
- Nankinolithus, A152
- Nannoconus, A453
- nannoplankton, Tertiary, zones of, A501-A503
- Nanothyris Zone, A223
- Naoides, A270, A271
- Nascepa, A83, A102
- Nassa, A30
- NASSICHUK, A243
- NATICACEA, A397
- Naulia, A474
- NAUTILIDA, A275-A276, A371
- NAUTILOIDEA, A275, A276, A498
- nautiloids, Jurassic, A408, A410, Silurian, A179, Triassic, A371-A372
- Nautilus, A22, A44, A275
- nearshore clastic facies, Lower Devonian fauna of, A195
- NEAVERSON, A440
- Nebroditas, A402, A407
- necrosis, A6, necrotic processes, A5
- Neithea, A441, A458
- Nejdia, A400
- NELSON, HOPKINS, & SCHOLL, A526
- Nelttia, A469
- Nemagraptus gracilis Zone, A149, A154, A156, A160
- Nemetia, A473
- Neoaganides, A337
- NEOAMMONOIDEA, A397
- Neoarchaediscus, A265, A266
- Neoasaphus, A143
- Neocaprina, A473
- Neochetoceras, A407
- Neoclesiophyllum, A270
- Neocomian, A453
- Neocrassina, A475
- Neocrimites, A305, A334, A335
- Neofusulinella, A300
- Neogastroplites, A457, A468
- Neogene, A499, A503, A508, sediments, A490-A491, A495, A496
- Neogoceras, A335
- Neogloboquadrina dutertrei, A532, *M. pachyderma*, A523, A525, A527
- Neogondolella, A338, A339, *N. bisselli-Sweetognathus whitei* Zone, A337, *N. carinata* Zone, A379, *N. rosenkrantzi-Neospathodus arcuicristatus* Zone, A338-A339, *N. rosenkrantzi-Neospathodus divergens* Zone, A339, *N. serrata postserrata* Zone, A339, *N. serrata serrata* Zone, A338, A339
- Neohibolites, A449, A457, A458, A459, A472
- Neokoninckophyllum, A272, A321
- Neolobites, A471
- Neophylloceras, A475
- Neoprobolium, A223
- Neoradiolites, A473
- Neoschizodus, A369
- Neoschwagerina, A300, A312, *N. craticulifera* Subzone, A312, *N. margaritae* Subzone, A312, *N. simplex* Subzone, A312, *Neoschwagerina* Zone, A312, A313, A314, A316, A319, A320, A323
- Neospathodus, A339, *N. crastagalli* Zone, A379, *N. dieneri* Zone, A379
- Neospirifer, A380
- Neospiriferinae, A273
- Neostacheoceras, A300
- Neostreptognathodus, A338, *N. pequopensis* Zone, A338, *N. sulcoplicatus-N. prayi* Zone, A338
- Neozaphrentis, A269, A318
- NERINACEA, A397
- Nerinea, A397
- Nerineidae, A458, A472
- Nerinella, A397
- Neritopsidae, A378
- Nervophyllum, A272
- Nervostrophia, A246
- Nesuretus, A141
- NEUMAN, A143, A151
- NEUMAN & BRUTON, A143
- NEUMANN, A401
- NEUMAYR, A391
- Neuqueniceras, A401
- Neuropteris, A301
- Nevadella, A123
- Nevadia, A122
- New Zealand subprovince, of Lower Devonian, A197, A198-A199, A202
- NEWELL, A303
- NEWELL & BOYD, A375
- Nicklesopora, A322
- Nicomedites, A364
- Nigericeras, A471
- NIITSUMA, A514
- NIKIFOROVA, A322
- NIKIFOROVA & PREDTECHENSKIY, A187, A192
- NIKIFOROVA & SApELNIKOV, A154
- NIKIFOROVA, A324, A326
- NIKITIN, A143
- NIKITINA, A316, A323
- NIKOLAEV, A150
- Nileus, A142
- Nipponitella, A308
- Nipponitrigonia, A396
- Nodosaria, A266
- Nodosinellidae, A316
- ROSENKRANTZI-NEOSPATHODUS, A90, A107
- NOGAMI, A363

- NOHDA & SETOSUCHI, A411
 NORITACEAE, A371
 NORRIS, A218-A253
 North American fauna, Arenigian, A140, Tremadocian, A139, A140
 North American strata, Silurian, A173-A174; geosynclinal, A173-A174, platform, A173
 North American zoogeographic region, in the Carboniferous, A269, A270, A271, A273
 North Silurian realm, A168
 North Temperate Realm, Cretaceous, A465-A469; Euramerican Region, A467-A469, Japanese-East Asian Subprovince, A465, North American Province, A468-A469, North European Province, A467-A468; North Pacific Province, A465-A467, Northeast Pacific Subprovince, A465
 Nostoceratidae, A461, A467
 Notanopia, A197
 Nothaphrophyllum, A271
 Notiochonetes, A230
 Notospirifer, A305
 Notothyris, A299, A300
 Nototrigonia, A476
 Novella, A265, A266
 Nowakia, A235
 Nowakidae, A203
 Nucleolitidae, A441
 NUCULOIDA, A375
 Nummulitidae, A497
 Nymphorhynchia, A227, A238

 OBRADOVICH & COBBAN, A426, A439, A445
 Obsoles, A266, A268
 Occidentoschwagerina, A299, A308
 Ocheteros, A402
 Ochoan Series, A294, A314
 Odontocephalus, A226
 Odontochile, A195, A226
 Odontopleuridae, A203
 ÒPIK, A127, A134
 Offaster, A458, A461
 Offneria, A473
 Ogbinopora, A324, A325, A326
 Ogilviella, A227
 OGOSE, A69
 Ogygopsis, A128, A130
 Oketaella, A266
 OKIMURA, A316
 OLAUSSON, A517, A532
 Olcostephanidae, A454-A456
 Old Red Sandstone facies, A184, A205, A206
 Old World province, Devonian, A194-A197, A198, A209
 Oldhamina, A300, A301, A336, A337
 Olenekian, A353
 "olenellid province," A129
 Olenellus, A123, A125
 Olenidae, A125, A126, A130
 Oligocene, A499-A504
 OLIVER, A198, A202, A203, A208, A223, A234, A235, A244, A246
 O'MALIUUS D'HALLOY, A439
 Ombonia, A380
 Omphalotis, A263, A265
 Omphalotrochidae, A378
 ONCOCERIDA, A275-A276
 Oncograptus, A155
 Omega, A104
 ?*Onegia*, A99
 Onychocella cyclostoma, A7
 OPDYKE, A513, A527
 Opeliidae, A457
 open ocean "provinces," Middle & Late Cambrian, A130
 Operculina, A497
 Ophiceras, A301, A358, A360, A366, A379
 Ophiceratidae, A371
 Ophiomorpha, A10
 OPINAE, A441
 Opisma, A396
 Opisthotrigonia, A396
 Oppedala, A402, A403, A407
 ORADOVSKAYA, A143, A147
 D'ORBIGNY, A3, A439, A440
 Orbirhynchia, A459
 Orbitoides, A496
 Orbitolina, A471
 Orbitopsella, A393
 Orbulina, A497
 ORCHARD, A205
 Ordovician, middle, A143
 Ordovician-Silurian transition, A160-A161
 organic evolution, Precambrian, A80
 organic material, products of decay of, A15-A19
 oriented embedding of objects, A31-A48, barrel-shaped, A40-A41, bowl-shaped, A32-A36, cone-shaped, A36-A40, irregular, A41-A48
 Oriocrassatella, A305
 Orionastraea, A270-A272, A318
 Oriskania beds, A226
 ORMISTON, A223, A226, A227, A230, A234, A241, A242, A246
 ORR, A234, A235
 Orthacea, A203
 ORTHIDA, A329
 Orthidiella, A142
 "Orthoceras" limestones, A179
 ORTHOCERATACEAE, A275
 ORTHOCERIDA, A275
 Ortholomidae, A395
 Orthoptychus, A472
 Orthothetina, A301, A380
 Orthotichia, A380
 Oryctocephalidae, A122, A123, A126, A128, A130
 Osagian Series, A258
 Osculigera, A473
 Osteocrinus, A411
 OSTRACODA, A410
 ostracodes, Devonian, A191, A205, A206, Silurian, A172, A180
 Ostrea, A29
 Ostreidae, A453, A458
 OSTREINA, A395
 OSWALD, A184, A188, A189, A192, A195, A196, A197, A198, A201, A202, A203, A205, A207, A208
 Otapiria, A365
 Otarian, A242
 Otoceras, A366, A367, A379, A380, A381, -Ophiceras Zone, A330
 Ottweilerian assemblage, A282, A283
 Ovatoscutum, A88, A91
 Overtonidae, A275
 OWEN, A462, A465, A467, A471
 Owenoceras, A279
 oxygen content, in Cretaceous marine environments, A427-A429; effects of, A432-A434; of water, A9
 oxygen requirements, variations in, A8-A10
 oxygen-isotope climatic record, Quaternary, A517-A520
 Oxynticeras, A403
 Oxynoticeras, A398, A399
 Oxyopelia, A407
 Oxyteuthididae, A457
 Oxytoma, A365, A395
 Oxytomidae, A441
 Oxytropidoceras, A469
 Ozarkodina, A227, A230
 Ozawainella, A265, A266, A299
 Ozawainellidae, A308, A309, A315
 Pachyceratidae, A403
 Pachydesmoceras, A475
 Pachydiscida, A457, A460, A461, A465
 Pachydiscoceras, A301, A337
 Pachymegalodon, A396
 Pachymutilus, A396
 Pachyphloia, A300
 Pachysphaerica, A263
 Pachyteuthis, A408, A410
 Pacitrigonia, A475
 Paeckelmannellidae, A273
 PAECKELMANN, A196
 Pagetidae, A122, A123, A128
 Paguridae, A410
 PAINE, A69
 PARUCKAS, A363
 Palacohatteria, A297
 Palaeacis, A271, A272
 Palaeofusulina, A300, A301, A302, A312, A313, A316, A337, -Reichelina Zone, A312, Zone, A313
 Palaeoniscus, A42, A66, A297, A306
 Palaeoscia, A91
 Palaeosmia, A269-A272, A321
 Palaeospiroplectammina, A261
 Palaeostrophomena, A146
 Palaeoteuthis, A410
 Palaeotextularia, A263, A265, A266
 Palaeotextulariidae, A267
 Palafereilidae, A199
 Paleocene, A499-A504
 paleoecology, Precambrian, A86,

- Silurian marine, A176
 Paleogene, A499, sediments, A490, A491, A495, A496
 paleogeography, Cambrian, in Europe, A124-A125, Jurassic, A391, Ordovician, A137, A159, Permian, A399-A340, Tertiary, A488-A489, Triassic, see stratigraphy
 paleoisootherm shifts, Quaternary, in the Atlantic, A520-A521
 paleolatitudes, Devonian, A219
 Paleolina, **A107**
 paleomagnetic data, Devonian, A208, Ordovician, A136, A137, A159
 "Paleotethys," A139
 Palinuridae, A410
 PALY, A83
 Palmatolepis, A205, A208, A243, A244, A246, *P. crepida* Zone, A244, *P. gigas* Zone, A205, *P. triangularis* Zone, A189, A208, A243, A244, A246
 PALMER, A119-A135, A157
 Paltechioceras, A398
 Palus, A473
 Pamirella, A324, A326
 Pamirian Stage, A294, A299, A300, A313, bryozoans of, A323, A324
 Panderia, A141
 Pandorinellina, A227, A230, A243, *P. insita*, A235, A244
 Panguridae, A23
 PANTIC, A316
Papilionata, A103
 PAPILLACEAE, A498
 PAPP, A26, A27, A69, A488-A504
 Paraboloceras, A403
 Parabolinoiidae, A124
 Parabournonia, A473
 Paracalmonia, A230
 Paracaprinnula, A473
 Paracelites, A300, A306, A335
 Paracenceras, A408
 Paradoxides, A128
 Paradoxididae, A125, A126, A130
 Paradunbarula Zone, A313
 Parafenestralia, A322, A326
 Parafusulina, A299, A308, A311, A312, A313, A314, A316, Zone, A312, A313, A319, A323, A335
 Paragastrioceras, A331
 PARAGASTRIOCERATINAE, A331
 Paraglossograptus, A155, A156
 Paragnathodus, A280
 Parahastites, A408
 Parahibolites, A457-A459, A472
 Paraiiciphyllum, A319
 Paralegoceras, A279
 Paraleioclema, A323-A326
 Paralithostrotion, A270, A272
 Paraloxxoceras, A275
 Paranautilus, A371
 Paranoia, A469
 Paranorella, A327
 Paranorites, A363
 Parapedioceras, A455, A472
 Parapholas, A475
 Parareichelina, A312
 Parareineckeia, A402
 Pararinoceras, A276
 Paraschwagerina, A299, A308, A311, A312, A313, A315
 Paraspidoceras, A406
 Paraspirifer, A199
 Parastaffella, A266
 Parastereophrentis, A272
 Parastringoccephalus, A235, A238
 Parastroma, A473
 Paratirolites, A300, A337, A358, A381
 Paravasoceras, A471
 Paraverbeckina, A300
 Parawentzelella, A319, A320
 Parawocklumeria, A207
 Parazellia, A308, A315
 PARAZOEA, A81
 Parengonoceras, A471
 Parhabdololithus, A457
 PARKER, A426, A532
 PARKIN & SHACKLETON, A524
 Parkinsoniidae, A403
 PARMENTIER & FOLGER, A531
 Paronella, A473
 Paroniceras, A400
 Parvancorina, A87, **A105**, A106
 Parvancorinidae, **A105**
 PASCOE, A361
 Paurorhyncha, A245
 Paurorthis, A141
 Pavastephyllum, A319, A320
 Pavlovia, A406, A407
 PAVONI, A3, A47
 Pecopteris, A300
 Pecten, A362
 Pectinatites, A406, A407
 Pectinidae, A453, A458
 Pedavis, A226
 PEDDER, A238, A240
 Pemphix, A410
 Pennaia, A230
 Penniretepora, A323-A326
 Pennsylvanian System, A258, conodonts of, A280, foraminifers of, A266
 Pentagonia, A231, A234, A235
 Pentameracea, A161
 Pentamerella Subzone, A238
 PENTAMEROIDEA, A203, A246
 Pentamerus, A172
 Pentamplexus, A319
 percentage endemism, A463
 peregrinella, A468
 Peregrinoceras, A453
 Periplomya, A469
 PERISPINHCTACEAE, A404
 Perispinctidae, A402, A403, A406
 Peritrochia, A335
 Permian biostratigraphy, in type area, A293-A296, correlation of, A294-A295; in northwestern Europe, A296-A297; in Gondwana continents, A305-A309, in Africa, A306, in Australia, A304-A305, in India-Pakistan, A306, in Madagascar, A307, in South America, A307; in Greenland, A297-A298; in North America, A303-A304; in Tethyan area, A298-A303, in Japan, A302, in the Pamirs, A304-A305, in the Salt Range, A300-A301, in South China, A302, in the Trans-Caucasus, A300
 Permian faunas, ammonoids, A330-A337, brachiopods, A326-A330, bryozoans, A321-A326, conodonts, A337-A339, corals, A317-A321, fusulinaceans, A307-A316, other foraminiferids, A316
 Permian-Triassic boundary, A292, A369, A371, A378-A382
 Permocalculus, A300
 Permoceras, A408
 Permodiscus, A263
 Permoleioclema, A323, A326
 Permopora, A326
 Perna, A396
 Peroniceratinae, A460
 Perrinites, A300, A331, A334, A335
 Peruarca, A473
 "PETALONAMAE," A87, A88-89, A96
 Petalonamidae, A96
 Petalostroma, **A108**
 PETERSEN, A208
 PETRÁNEK & KOMÁRKOVÁ, A39
 Petricola, A35, *P. pholadiformis*, A29, A30
 PETRUNINA, A140
 PETER, A208
 Petteroceras, A208
 Pettersia, A473
 PFANNENSTIEL, A33
 PFLUG, A88, A96, A99
 Phacoceras, A276
 Phacopidae, A204
 Phacopina, A226
 Phacops, A201, A226
 Pharciceras, A189, A201, A205, A235, A247, *P. lunulicosta* Zone, A189, A201, A208
 Pharodina, A469
 Phaxas, A35
 Phestia, A305
 PHILIP & JACKSON, A208
 PHILIP & PEDDER, A197, A202
 Phillipsastrea, A203, A205, A207, A245
 Phillipsinella, A150, A151, A158
 Phillipsinellidae, A160
 Phisonites, A300
 PHLEGER, A527
 Phlycticeras, A406
 Pholadomvidae, A329, A375
 Pholas dactylus, A29
 Pholonyx, A201
 Phragmodus, A157
 Phragmostrophia, A196
 Phylloceras, A398, A401
 PHYLOCERATACEA, A397-A398
 PHYLOCERATACEAE, A441

- Phylloceratidae, A465, A471, A475
 Phyllytoceras, A397
 Phymatopleuridae, A378
 Physodoceras, A406
 Pia, A398, A399
 PICARD & FLEXNER, A357
 PICKETT, A192, A202, A208
 Pictonia, A407
 Pileochama, A473
 Pinacites, A242, P. jugleri, A201, A202, A203
 PINACOCERATACEAE, A371
 Pinegopora, A322
 Pinnidae, A375
 Pisidium, A26, A27
 Pithonoton, A410
 Placenticeratidae, A460, A461, A467
 Placoparia, A143
 Plagiostoma, A395
 Plagiura-Poliella Zone, A131-A132
 Planetoceras, A276
 planktonic fluctuations, Cretaceous, A429-A430, A432-A433
 Planoarchaediscus, A263, A265
 Planocaprina, A473
 Planomedusites, A94, A96
 Planorbidae, A397
 Planospiroidiscus, A265
 plate tectonics, Cambrian, A125, Cretaceous, A420, Devonian, A210, A219, Ordovician, A136-A137, A140, A159-A160
 Platyceramus, A460, A461
 Platyclymenia, A207, A208, A245, A247
 Platycoryphe, A153
 Platygoniatites, A279
 Platylenticeras, A408
 Platyscutellum, A230
 Platysolenites, A83
 Platystrophia, A148
 Platyterorhynchus, A244
 PLAYFORD & LOWRY, A208
 Plectodina, A157
 Plectodonta, A95
 Plectothyrella, A153
 Pleistocene, A507
 Pleramphex, A320
 Pleurocephalites, A403
 Plerophyllum, A319, A320, fauna, A320
 Plethopeltides, A140
 Pleurograptus linearis Zone, A143, A149
 Pleuromya, A57
 Pleurothyrella, A197, A231
 Pleurotrigonia, A476
 Pleydellia, A400
 Plicatostylus, A396
 Plicatula, A367
 Pliocene, A499-A504
 Pliocene-Pleistocene boundary, A507-A515, age & correlation of, A513-A515
 Pliomerina, A149
 PLUMHOFF, A410
 PLUMSTEAD, A343
 Podolella, A195
 POGONOPHORA, A90, A107
 Politoceras, A279
 Pollex, A469
 POLYCHAETA, A102, A103
 Polycoelia, A320
 Polycyones, A472
 Polydesmia, A143
 Polydiexodina, A300, A308, A312, A314, Zone, A335
 Polygnathus, A202, A208, A230, A234, A235, A238, A240, A242, A243, A280, P. dehiscentis, A227, A230, P. kockelianus Zone, A202, A238, P. linguiformis, A234, A235, P. perbonus, A227, A230, P. robusticostatus, A234, P. varcus Zone, A189, A203, A208, A325
 polymerid trilobites, A122-A123, A125, A127, A131
 Polypora, A322-A326
 Polyporidae, A322
 Polytaxis, A263
 Polythecalis, A300, A319, A320
 Pomerania, A407
 Ponticeras, A205, A207, A243
 POOLE, A245
 Popanoceras, A302, A307, A334, A335
 population, dynamics, A6, waves, A6
 Populationswellen, A6
 PORAMBONITACEA, A161
 ?PORIFERA, A91
 PORIFERA, Cambrian, A120
 poriferans, Jurassic, A393, Silurian, A177
 Porpitidae, A88, A92
 PORRENGA, A435
 Posidonia, A44, A53, A56, A372, A396
 "Posidonia" Shale, A297
 Postligata, A469
 Pradoia, A195
 Praebarrettia, A473
 Praecambrium, A87, A88, A104
 Praecardiomya, A472
 Prägerkerne, A51
 Praeglobotruncana, A458, A459
 Praelapeirousia, A472
 Praeorbulina, A497
 Praesumatrina, A300
 Praetiglian beds, A516
 PRATJE, A27
 Precambrian-Cambrian boundary, A82
 preservation, A3
 PRESTWICH, A506
 PŘIBYL & VANEK, A188
 Primorella, A324, A326
 Prioniodella, A339
 Prionoceras, A207
 Prionocyclus, A460, A468
 Prionothis, A231
 Prionotropis, A460
 Prismopora, A323, A325, A326
 Proboloceras, A205, A243
 problematic fossils, Precambrian, A111
 Probolops, A230
 PROCARYOTA, A80
 Proconchidium, A154
 Proctactyliceras, A399
 Prodalmanitina, A140
 PRODUCTACEA, A327
 Productella, A246
 Productellidae, A275
 Productinae, A275
 Productininae, A275
 Productorthis, A141, A145
 Productus, A300, A379
 "Productus" bed, A297
 Profusulinella, A265, A266, A267, A268, Zone, A266, A267
 Prolecanitidae, A276
 Proniceras, A406
 Pronoritidae, A276
 Propermodiscus, A263, A265
 Properrinites, A331, A334
 Propinacoceras, A300, A305, A307, A335
 Propopanoceras, A305, A331
 Proptychites, A363, A366
 Proschizophoria, A195
 Proshumardites, A279
 Prosicanytes, A300
 Prosopiscus, A149
 Prostopon, A410
 Prostacheoceras, A331
 Protacanthodiscus, A403
 Protactyliceras, A403, A453, A471
 Protatrypa, A154
 Proterozoic, A80-A113
 PROTISTA, A80-A81
 Proto-Atlantic Ocean, A137
 Protocardia, A397
 Protoceras-Araxoceras Zone, A301
Protodipleurosoma, A96
 Protoglobigerina, A393
 Protognathodus, A280
 Protogrammoceras, A399, A400
 Protolenidae, A125, A127
 Protopleostrophia, A234
 Protolonsdaleistræa, A273, A318, A319
 Protopanoceras, A331
 Protothaca, A36
 Prototoceras, A300, A301, A336
 Protowentzella, A318
 protozoans, Jurassic, A393
 Protriticites, A266, A268
 Pseudactinoceras, A275
 Pseudagnostus, A124
 Pseudavicula, A476
 Pseudacrocephalites, A140
 Pseudobarrettia, A473
 Pseudobatosomella, A322-A326
 Pseudobelus, A472
 Pseudoblothrophyllum, A223
 Pseudobryophyllum, A319
 Pseudobryograptus, A156
 Pseudobuccinum, A469
 Pseudocodoceras, A402
 Pseudocardinia, A397
 Pseudocarniaphyllum, A320
 pseudocoenoses, A23
 Pseudocyclammina, A471
 Pseudocyrtoceras, A275
 Pseudodoliolina, A312
 Pseudodorlodotia, A271

- Pseudoemiliania lacunosa*, A524
Pseudoendothyra, A263, A265, A266, A267, A310, A311, A316
Pseudofusulina, A266, A267, A268, A299, A300, A310, A311, A312, A313, A316, *P. ambigua* Subzone, A311, *P. moelleri* Zone, A311, *P. verneuli* Zone, A311, *P. vulgaris* Subzone, A311, *Pseudofusulina* Zone, A319, A320, *Sterlitamakian* fauna, A311
Pseudofusulinella, A268, A310, A311
Pseudogastrioceras, A296, A301, A335, A336, A337
Pseudoglomospira, A265
Pseudohalorites, A334
Pseudoheligmus, A472
Pseudohuangia, A319, A320
Pseudolioceras, A400
Pseudolissoceras, A403, A407
Pseudomonotidae-Gryphaeidae, A375
Pseudomonotis, A305, A396
Pseudomyalina, A305
Pseudonautilus, A408
Pseudopavona, A271
Pseudopleurophorus, A475
Pseudopolyconites, A473
Pseudopolygnathus, A280
Pseudorhizostomites, A87, A94, A96
Pseudorhopilema, A96
PSEUDORTHOCERATAACEAE, A275-A276
Pseudoschistoceras, A305
Pseudoschwagerina, A299, A308, A310, A311, A312, A315, *P. morikawai* Subzone, A311, *P. robusta* Zone, A313, *P. uddeni* Zone, A313, *Pseudoschwagerina* Zone, A292, A302, A313, A319, A320, A323
Pseudostaffella, A265, A266, A268, A311
Pseudotirolites, A301, A337, -*Pleuronodoceras* Zone, A301-A302
Pseudotoceras, A336
Pseudotoites, A401
Pseudotrapezium, A397
Pseudotryplasma, A202
Pseudouralinia, A270
Pseudovergatitinae, A407, A408
Pseudowedekindellina, A266
Pseudozaphrentoides, A272
Pseudozygopleuridae, A378
Psiloceras, A397, A398
PSILO CERATAACEAE, A398, A399
Psiloceratidae, A398
Psilotrignonia, A472
Pteridiniidae, A96
PTERIDINIOMORPHA, A96
Pteridium, A83, A99
Pteridium, A99
Pteriidae, A375
Pterocanium trilobum, A530
Pterocephaliidae, A124, A126, A130
Pterolucina, A472
Pterospirifer, A297, A298
Pterotoceras, A366
Pterygotus, A247
Ptiloporella, A326
Ptychaspidae, A127
Ptychaspis, A124
Ptychoglyptus, A145, A150, A151
Ptychomaletocchia, A246
Ptychopariidae, A123, A125, A126
Ptylopora, A322, A325, A326
Ptyloporella, A322, A326
Pugnax, A300
Pulchelliidae, A457
Punctospirifer, A297
Purpura, A39
Pustula, A380
Pustulatia, A235
Putrella, A266
Puzosia, A475
Pygaster, A411
Pygodus, A157
Pygope, A395, A471
Pygopiidae, A471
Pygurus, A411

Quadraticephalus, A127
Quadrifarius, A195
Quadrithyrus Zone, A226, A227, A230
Quasiarchaediscus, A265
Quasienothyridae, A261
Quasifusulina, A266, A299, A312
Quasifusulinoides, A266
Quaternary, base of, A507-A515, definition of, A506-A507
QUENSTEDT, A3, A17, A22, A31, A40
Quenstedtoceras, A401
Quer-Einsteuerung, A40
QUILTY, A402
Quirllage, A42

RAASCH, A244
RABIEN, A191
Radiastrea, A238, A240
radiolarians & climatic change, A530
Radiolichas, A201
Radiolite, A472
RADIOLITINAE, A441
radiometric dating, Devonian, A219
Raisanites, A453
Ramiporida, A324
Rampora, A322, A323, A325, A326
RAMSAY, A429, A435
RAMSBOTTOM, A255, A277, A286
random embedding, A30-A31
Rangea, A83, A99
RANGEIDAE, A99
RANGEOMORPHA, A99
Ranikotalia, A497
Rasenia, A407
Rasettia, A138
Rausarella, A312, A314, A316
Rauserites, A268

RAUZER-CHERNOUSOVA, A261, A266, A292, A309, A310
RAWSON, A449
RAYMOND, A69
Raymondaspis, A142
Raymondiceras, A247
Rayonnoceras, A275
REBOUL, A506
recrystallization, A61-A65
Recticuloharpes, A227
Rectoclymenia, A247
red beds, Silurian, A168
Redkinia, A107
Redlichia, A125, A126, A127
“redlichiid province,” A129
REED, A197, A202, A207
reef carbonate facies, A203-A206
reefs, Silurian, A168, A170, A176
Reeftonia, A194, A197
Reesidites, A460
REGINEK, A55, A58
Reichelina, A300, A301, A302, A312, A320, A337, -*Codonofusiella* Zone, A312, A316
REID, A462, A471
REINECK, A31, A33
Reineckeia, A403
Reineckeidae, A403
REIS, A69, A71
rejected taxa, Precambrian, A112-A113
Remipyga, A150, A154
Remopleurididae, A160
Rensselaeria Zone, A223
REPENNING, A516
REPINA, A120, A126
Requeniidae, A441
resin entrapment, A11-A14
Reteporidae cancellata, A7
Reteporida, A325
Retha, A473
Reticonetes, A246
Reticulariidae, A329
Reticuloceras, A279, A280
Retroceramus, A396
Retziidae, A329
REYMTER, A18, A19, A40
REYTLINGER, A261, A267
Rhaddomeson, A323, A324, A325
Rhacheoporidae, A441
Rhacophyllites, A397
Rhacopteris, A307, flora, A259, A260
Rhenish facies, A184; Old World Devonian, A195, A198, A199, A209
Rhenorenselaeria, A195, A196
Rhipidomella, A246
Rhipidomellidae, A330
RHIPOPODA, A393
Rhizostomites admirandus, A46
RHODES, A434
RHODES & AUSTIN, A279
RHODES, SPEDEN, & WAAGE, A434
Rhombocladia, A325
Rhombopora, A323-A326
Rhombotrypella, A322, A324, A326
rhyntonolites, Jurassic, A410
Rhynchonella, A395, A468

- RHYNCHONELLACEA, A329
 RHYNCHONELLIDA, A327
 Rhynchonellidae, A395
 Rhynchopora, A298
 Rhynchoporiidae, A329
 Rhynchotetradidae, A329
 Rhynchoteuthis, A410
 Rhynchotrema, A149
 Rhynchotrematidae, A199
 Rhyssostrophia, A142
 Rhyssochonetes aurora, A235, A238
 Rhytistrophia, A196
 RICHARDS, A6
 Richardsonella, A138
 Richardsonellidae, A130
 RICHMOND, A516
 RICHTER, A5, A24, A30, A31, A32, A33, A99, A230
 RICHTER, R., & RICHTER, E., A192, A194, A195, A230
 Richthofenia, A380
 RICHTHOFENIACEA, A327
 Richthofeniidae, A330
 RICKARD, A243, A244
 RIDING, A210
 RIETSCHEL, A69
 rigor mortis, traces of, A15
 Rineceras, A276
 RINEHART, A49
 RIOULT, A439
 Riphean, A82, Upper, A82, Terminal, A82
 Ripidiorhynchus, A207
 RIVA, A154
 Robertella, A473
 ROBERTS, A192, A207, A259
 ROBISON, A123
 ROBISON & PANTOJA-ALOR, A138
 Robustoschwagerina, A299, A308, A311, A315, A316
 rocks, Cambrian, of southeastern Asia, A126-A127, of Australia, A127, of Europe-Mediterranean-North Africa, A124-A125, miscellaneous outcrops, A128, of North America, A120-A125, of eastern Soviet Union, A125-A126
 Roemeripora, A269
 ROLFE & BRETT, A3
 ROLL, A393
 Romaniceras, A460
 ROMER, A343
 Roncellia, A223
 Ross, A145, A157, A158, A159, A160, A254-A290, A303, A307, A313, A314, A315, A318, A322, A325, A343, A536
 Ross & NASSICHUK, A314, A323
 Ross & ROSS, A291-A350
 ROSTOVTSV & AZARYAN, A358
 Rostricellula, A149
 Rostroperna, A473
 Rotalipora, A458, A459
 Rotaliporidae, A419, A441
 Rotaraxoceras, A300, A336
 ROTHPLATZ, A18
 Rotiphyllum, A269, A270, A271
 Rotodiscoceras, A301, A337
 ROUELLE, A395
 ROUELLE & BISCH, A395
 Roussleia, A472
 ROWETT, A271, A317, A318, A321
 ROY, A208
 ROZANOV, A89, A133
 ROZKOWSKA, A205
 ROZMAN, A152
 ROZOVSKAYA, A266, A307
 RUDDIMAN, A520, A527
 RUDDIMAN & MCINTYRE, A523
 RUDWICK, A327
 RUEDEMANN, A39
 RUGGERI, A510, A514
 Rugconites, A92, A94, A96
 RUGOSA, A317-A318
 Rugosofusulina, A268, A311, A312
 Rugososchwagerina, A299, A308
 Runctonia, A453, R. runctoni Zone, A440
 RUNNEGAR, A304, A363, A375
 RUNNEGAR & ARMSTRONG, A329
 Russian substage, A553
 Rutgersella, A103
 RUTSCH, A40
 RUZHENTSEV, A268, A276, A292, A331, A334, A335
 RUZHENTSEV & SARYCHEVA, A300, A301, A336, A343, A358, A381
 RYAN, A532, A533
 RZHONSNITSKAYA, A196
 Saarinidae, A107
 SABELLIDITIDA, A107
 Sabelliditidae, A107
 Sabinia, A472
 SABLE & DUTRO, A247
 SABRODIN, A81
 Saccocoma, A411
 Saffordotaxis, A323, A324, A325
 SAHNI, A362
 SAITO & VAN DONK, A425
 SAKAGAMI, A323
 Sakamotozawan Series, A294, A302, A311
 Sakmarian Stage, A255, A293, A294, A305, A306, ammonoids of, A331-A334, brachiopods of, A330, bryozoans of, A322, A323, A324, A325, A326, corals of, A318, fusulinaceans of, A310-A311
 Sakmarites, A331
 SAKS, A398, A440
 SAKS, MESEZHNIKOV, & SHULGINA, A396
 SAKS & NALNYAEVA, A393, A402, A408
 Salenia, A458
 salinities, Cretaceous, stratified, A427
 salt pans and salt-covered muds, A10
 SANDBERG, A247, A280
 Sandbergeroceras, A243
 SANDERS, A435
 SANDO, A271
 SANDO, MAMET, & DUTRO, A261
 sandy facies, Middle and Late Cambrian, central Europe, A130
 SANFORD & NORRIS, A222, A247
 Sanguinolites, A206
 Santa Maria di Catanzaro section, A510-A513
 Santonian, A423, A454-A456, A460
 Sapeľnikov & Rukavishnikova, A154
 sapropels, A532, A536
 SAPUNOV, A399
 SAPUNOV & STEPANOV, A399
 Sargana, A469
 SARTENAER, A189, A205, A206, A207, A245, A246
 SATO, A397, A399, A402
 Saturnulus planetes, A530
 Saukiidae, A124, A127
 SAUL, BOUCOT, & FINKS, A197
 SAUVAGESIINAE, A441
 SAVAGE, A154, A197
 SAVAGE & CURTIS, A516
 SAVITSKIY, A133
 Saxoceras, A398
 Saxonian Series, A295-A297
 Scalarites, A471
 Scaliognathus, A280
 Scambula, A469
 Scaphignathus, A281
 Scaphitocoelia, A197, A230
 SCAPHITACEAE, A441
 Scaphites, A461, A468
 Scaphitidae, A459, A460, A461, A467, A468
 Scaphitinae, A461
 Scaphonyx, A307
 Schackoia, A457
 Schackoinidae, A419, A441
 SCHÄFER, A5, A7, A8, A10, A20, A21, A23, A28, A30
 SCHAUB, A497
 SCHIMPER, A499
 SCHINDEWOLF, A189, A190, A360, A397, A398, A399
 Schiosia, A472
 Schizodus, A297, A305
 Schizophoria, A223, A226, A227, A230, A235, A240, A246
 Schizoproetus, A201
 Schizothaerus nuttali, A36
 Schlachtfelder, A40
 SCHLANGER & JENKYN, A427, A428, A430, A432
 SCHLEE, A70
 Schleifmarken, A44-A46
 Schloenbachia, A468
 Schloenbachiiidae, A457, A459
 Schlotheimia, A398
 Schlotheimiidae, A398
 SCHMIDT, A190, A200
 SCHMIDT & SELLMANN, A70
 Schmidtognathus, A235, A238, A240, A243, S. hermanni-Polygnathus cristatus Zone, A235, A238, A240, A243
 Schnurella, A201
 SCHOLL, A516
 SCHOLLE & KAUFFMAN, A426, A427, A431, A432, A481
 SCHOPF, A80, A81

- SCHRAMMEN, A393
 Schubertella, A265, A266, A299, A310, A311, A313, A316
 Schubertellidae, A308, A315, A316
 "Schuchertella" adoceta Zone, A238
 Schwagerina, A266, A299, A310, A311, A313, A314, A316
 "Schwagerina" Zone, A267, A292, A293, A310
 Schwagerinidae, A308, A309, A315, A316
 SCHWEGLER, A408
 Schwelle facies, A187, A204
 Schwelm facies, A184
 Sciophyllum, A270, A271, A319
 Sciponoceras, A459
 SCOTT, A427
 Scrobicularia, A35, *S. plana*, A27, A29
 SCRUTTON, A203, A205, A231
 Scutellidae, A499
 Scutellum, A242, A246
 Scyphocrinites, A195
 SCYPHOZOA, A88-A89, A92
 SDZUY, A58, A120, A125, A132, A133
 sea level, Carboniferous, A284, Silurian, A168
 seasonality changes, Quaternary, A521-A523
 SEDDON & SWEET, A158
 SEDGWICK & MURCHISON, A184, A219, A254
 sedimentary environments, Cretaceous, A434-A435, glauconite, A435, water saturation, A434
 sedimentation, Carboniferous, A285-A286
 sediments, Tertiary, A490-A496, in Africa, A495-A496, in Asia, A491, in Australia, A492, in Central and South America, A493-A495, in Europe, A490-A491, in North America, A492-A493, nonmarine, A493
 SEIBOLD & SEIBOLD, A393
 SEILACHER, A3, A19, A23, A31, A39, A40, A42, A47, A51
 SEILACHER & WESTPHAL, A428
 Seirocrinus, A410
 selective dissolution, during diagenesis, A58, A61, of hard parts, A30
 Selenopeltis, A141, A149, Province, A149
 Sellanarcestes, A199, A203, *S. wenbachi*, A199-A201
 SELLI, A510, A514
 Sellialveolina, A472
 Semiformiceras, A403
 SEMIKHATOV, A82
 Seminovella, A265, A266
 Septaglomospiranella, A261
 Septatopora, A325, A326
 Septirhynchia, A395, A471
 Septoliphoria, A395
 Septopora, A322-A325
 Sergipia, A459, A474
 Serifusus, A469
 SERPAGLI, A157, A158, A160
 Serpukhovian Stage, A259
 DE SERRES, A506
 Serrodiscus, A123, A126
 Sestrophyllum, A272
 Setamainella, A271
 SEWERTZOFF, A7
 SEXTA, A469
 SEYED-EMAMI, A358, A399
 Seymourites, A401, A402
 SHACKLETON, A517
 SHACKLETON & KENNETT, A515, A516, A527, A532
 SHACKLETON & OPDYKE, A517, A518, A519, A520, A523, A524, A526, A527, A532
 SHCHEROVICH, A309
 SHCHUKINA, A317
 SHEEHAN, A151, A161
 shell form and fossil position, A18-A19
 SHENG, A152, A153, A301, A312
 SHENG & LEE, A313, A320
 SHERGOLD, A138
 SHEVYREV, A359
 Shevyrevites, A358
 SHIRLEY, A197, A231
 SHROCK, A32
 SHULGA-NESTERENKO, A322
 Sichtenella, A312
 SIDYARENKO & KANYGIN, A143
 Sieberella, A195, A227, A238
 Siegenian, A188, A195
 Siegenian faunas, A223, A226, A230, A231, A234
 Sigmagraptus, A155
 SILBERLING & TOZER, A352, A368
 Silberlingia, A396
 Silesian Subsystem, A255
 Silestidae, A457
 Silurian-Devonian boundary, A177, A187-A188, A195, A198, A219, A223, A227, A230
 Silurian series, duration, A168
 Simberskites, A456
 Simoceras, A403
 SINGH, A81
 Sinocystis, A149
 Sinonia, A469
 Sinophyllum, A300, A319
 Sinopora, A319
 Sinotectirostrum avellana Zone, A245
 Sinotites, A207
 Sinuatellidae, A275
 Sinituidae, A378
 Siphonodella, A255, A280, A281
 Siphonophrentis, A223
 Siphonophyllia, A269, A271
 SKEVINGTON, A154, A160
 Skiagraptus, A155
 Skinnera, A83, A94
 SKINNER & WILDE, A314
 Skinnerella, A314
 Skinnerina, A308, A312, A314, A316
 Skulptursteinkerne, A51
 SKWARKO, A364
 SKWARKO & KUMMEL, A363, A364
 SLADE, A314, A338
 SMITH, A137, A159, A160, A219, A271, A445, A459, A514
 SMITH, BRIDEN, & DREWRY, A339, A475
 Smithian, A353
 Sobolewia, A201, A243
 Sochkineophyllum, A318
 soft parts, decay of, A17, in coprogenic material, A20, destruction by scavengers, A20, phosphatization of, A71, preservation of, A69-A71, in Eocene amber, A71
 SOGNAES, A20
 SOHL, A426, A427, A458, A462, A463, A465, A467, A468, A469, A471, A472, A477, A480, A481
 Sohlites, A402
 SOKOLOV, A84, A90, A107, A187, A192, A317
 SOKOLOVA, A192, A196
 Solenochilidae, A276
 Solenochilus, A276
 Solenoparia, A127
 Solenopleuridae, A125
 SOLLE, A195, A199
 Somalirhynchia, A395
 Somalithyrus, A395
 sorting, of shells by transportation, A23-A24
 SOSHKINA, A317
 SOSNINA, A316
 SOUGY, A203
 South American strata, Silurian, A175
 South Pole, Ordovician, A137
 South Temperate Realm, A473-A476; Indo-Pacific Region, A475-A476, Andean Subprovince, A476, Austral Province, A475, East African Province, A476; South Atlantic, A473-A474
 "southern" fauna, Arenigian, A141
 SPAETH, A449
 Sparganophyllum, A201
 SPASSKIY, A202, A203, A207
 Spatangidae, A499
 SPATH, A353, A366, A381, A391, A403, A405, A406
 Spathian, A353
 Spathognathodus, A226, A280
 "Spathognathodus" costatus Zone, A246
 Spathognathus, A281
 Sphaeroschwagerina, A299, A308, A310, A313, A315, *S. fusiformis*-*S. vulgaris* Zone, A310, *S. moelleri*-*Pseudofusulina fecunda* Zone, A310, *S. sphaerica*-*Pseudofusulina firma* Zone, A310
 Sphaerostylus lanceola Zone, A453
 Sphaerulina, A299
 Sphaerulites, A472
 Sphenoceramus, A460, A461
 Sphenodiscidae, A461
 Sphenopteris, A301

- Sphenotrigonia, A476
 Spinatrypa, A240
 SPINCTOZOA, A441
 Spinella, A197
 Spinocyrta, A235, A243
 Spinoedothyra, A261, A263
 Spinomarginifera, A301, A379, A380, A382
 Spinoplasia Zone, A226, A227
 SPINOSA, A335, A336
 SPINOSA, FURNISH, & GLENISTER, A371
 Spinoseptatournayella, A261
 Spinther, A103
 Spintheridae, A103
 Spinulicosta, A238
 Spirifella, A298
 Spirifer, A260, A299
 Spiriferella, A380
 Spiriferellinidae, A273
 SPIRIFERIDA, A327, A329
 Spiriferidae, A273, A329
 Spiriferina, A297, A395
 SPIRIFERINACEA, A329
 Spiriferinae, A273
 Spiriferinidae, A330
 Spirigerella, A380
 Spirigerina, A227, A230
 Spiroceras, A402
 Spirocypeus, A497
 Spisula, A44, S. solida, A29
 Spiticeras, A453
 SPJELDNAES, A149, A160
 Sporadoceras, A206, A207, S. milleri Zone, A244, A247
 sporomorphs, A109
 SPRIGG, A82, A103
 Spriggia, A94
 Spriggina, A103
 Sprigginiidae, A103
 SPROVIERI, A514
 Spülsaum, A23, A25
 Spurenfossilien, A87
 Squamularia, A301
 SQUIRE, A81
 Stacheia, A265
 Stacheoceras, A301, A335, A336, A337
 Staffella, A312, A313, A316
 Staffellidae, A308, A309, A315, A316
 Standfläche, A42
 STANLEY, A80
 STANTON, A453
 Stantonella, A469
 STAUFFER, A196
 Staurognathus, A281
 Staurosphaera septemporata Zone, A456, A457
 Stefaniella, A472
 Stegerhynchus, A195
 STEHLI, A68
 STEHN, A58
 Steinhagella, A246
 steinkerns, A49-A53, A55, A57, A58, A67, sculptured, A51-A53
 Steinmanella, A465, A475
 Steleka, A240
 Stellatophyllum, A202
 Stenodiscus, A323, A325, A326
 Stenoparcia, A151
 Stenophyllum, A201
 Stenopoceras, A276
 Stenopora, A322-A326
 Stenoscisma, A298, A299
 STENOSCISMATACEA, A329
 Stenoscismatidae, A329, A330
 Stephanian Series, A255, A258, insects of, A281-A283
 Stephanoceras, A407
 STEPHANOCERATACEA, A401
 STEPANOV, A298, A299, A380, A381
 STEPANOV, GOLSHANI, & STÖCKLIN, A300, A343, A358
 Stereocorpha, A272
 Stereocorypha, A318
 Stereostylus, A273, A318, A319, A321
 Stewartina, A313
 STEVENS, A317, A318, A320, A391, A406, A408, A410, A449, A453, A458, A462, A463, A465, A467, A468, A471, A472, A475
 STEVENSON, A16
 Stichocapsa, A457
 Stillwasserfallen, A32
 Stolonicella schindewolfi, A7
 STRAND & KULLING, A83
 strata, Silurian, A172-A175, geosynclinal, A173, northern hemisphere, A172-A173, platform, A173, southern hemisphere, A173
 stratigraphic subdivision charts, Carboniferous, A256, Cretaceous, A423, Devonian, A188, Ordovician, A138, A141, A144, Permian, A294-A295, Proterozoic, A82, Quaternary, A509, A511, A512, A515, Tertiary, A500
 stratigraphy and paleogeography, Triassic, A353-A369, Afghanistan, A359-A360, Antarctica, A369, Arctic Canada, A367-A368, Australia, A363-A364, western Canada, A368, Caspian region, A359, China, A362-A363, northeastern Europe, A354-A355, Greenland, A366, Himalayas, A360-A362, Indonesia, A363, Iran, A358, Israel, A357, Japan, A364-A365, north Mediterranean region, A355-A357, New Guinea, A364, New Zealand, A365, Pakistan, A360, northeastern Siberia, A365, South America, A368, Svalbard, A365-A366, western United States, A368
 Streblascopora, A322-A325
 Streblites, A401, A406
 Streblocladia, A325
 Streblopteria, A305
 Streblotrypa, A322, A323, A325
 Streptognathodus, A280, A287
 Streptorhynchus, A298
 Striatifera, A275, A300
 Striatostyliolina, A235
 Strigogoniatites, A336
 Striithyrus, A395
 Stringocephalus, A199, A201, A202, A235, A240, A242
 Stringophyllum, A202
 Stroboceras, A276
 stromatolites, A80, A109-A110
 STROMBACEA, A397
 Strophalosia, A297, A305
 STROPHALOSIACEA, A327
 Strophalosiidae, A275, A329
 "Stropheodonta," A235
 Stropheodontidae, A246
 Strophomena, A146, A154
 STROPHOMENIDA, A327
 Strophonella, A227
 Strophopleura, A245
 STRUSZ, A192, A197
 STRUVE, A199
 STÜRMER, A17, A22, A69, A71, A195
 STURANI, A396
 Sturtian, A82
 Stylastraea, A318
 Stylatracta universus, A524
 Stylidophyllum, A320
 Subclymenia, A276
 Submortoniceras, A461
 Subplanites, A407
 Subrensselandia, A235, A238
 Subulitidae, A378
 Subvestinautilus, A276
 Sugiyamaella, A270
 Sulcoretepora, A323-A326
 Sumatrana, A300
 Sundaites, A336
 Sunites, A207
 Surites, A453
 Sutneria, A402, A407
 Suvorovella, A108
 Suvorovellidae, A108
 Svobodaina, A149
 SWEET, A156, A337, A339, A364, A379, A384
 SWEET & BERGSTRÖM, A149, A156, A157, A158, A161
 SWEET & MILLER, A242
 Sweetognathus, A338
 Sychnoelasma, A269, A270
 SYEMINA, A309
 SYLVESTER-BRADLEY, A461
 Symphysurina, A139, A140
 Symplectophyllum, A271
 Syngastroceras, A279
 Synocladia, A323-A326
 Synodonites, A472
 Synphariceras, A205
 Synphoria, A226
 Synphoroides, A226
 Syphysurina Zone, A138
 Syrdenites, A336
 Syringaxon, A223
 Syringoclemis, A323
 Syringopora, A269, A270, A271, A273, A319
 Syringoporella, A271
 Syringothyridae, A273
 Syringothyrididae, A329
 Syringothyris, A245
 Syrotrigonia, A473

- Sythian, A352
- Tabulipora, A322-A326
- Tachylasma, A299, A318
- Tachyphyllum, A270
- Taeniocellaria setifer, A7
- Taeniopteris, A301
- Taihungshania, A141
- Taimyrophyllum, A202, A238, A240
- Tainoceratidae, A276, A371
- Taisyakuphyllum, A271
- TAKAI, A364
- TALENT, BERRY, & BOUCOR, A175
- Tamarites, A206
- Tampsia, A473
- TAMURA, A362
- Tancrediidae, A441
- Tanerhynchia, A197, A231
- taphocoenoses, A22
- taphonomy, A2-A71, Precambrian, A87
- Taphrognathus, A280, A281
- Taphrorthis, A145
- Tapinocephalus Zone, A306
- TAPPAN, A429, A430, A432, A433, A477
- TAPPAN & LOEBLICH, A432, A433, A477, A479, A480
- Taramelliceras, A402, A406
- TARAZ, A336, A358
- Tasman geosyncline, A175, subprovince, Devonian, A197, A202-A203
- Tatarian Stage, A295, A296, A305, A325
- Tateana, A94
- Tatella, A476
- TATGE, A382
- TAUBER, A25, A27
- Tauroceras, A300
- Tavayzopora, A326
- TAYLOR, A89, A129
- Tcherskidium, A150
- tectonic phases, Tertiary, A500
- TEICHERT, A17, A71, A202, A275, A305, A306, A307, A336
- TEICHERT & KUMMEL, A297, A366, A381
- TEICHERT, KUMMEL, & KAPOOR, A379
- TEICHERT, KUMMEL, & SWEET, A337, A358, A381
- TEICHERT, MOORE, & ZELLER, A410
- TEICHERT & RILETT, A306
- TEICHERT & SCHOPF, A247
- TEICHERT & SERVENTY, A24
- Teichertceras, A227, A234
- TELFORD, A197
- Tellinimera, A469
- Tellipiura, A476
- Temnocheilus, A276
- Tenea, A469
- Tentaculitidae, A203
- Tenticospirifer, A208, A246
- Tenuipteria, A461
- Tepeyacia, A473
- Terataspis, A226
- TEREBRATELLACEAE, A394
- Terebratula, A395, A499
- TEREBRATULIDA, A329
- Terebratulidae, A395
- Terebratulina, A460
- Terebratuloidea, A299
- Terebrimya, A469
- TERMIER & TERMIER, A391, A401
- Terquemidae, A441
- Terquensidae, A375
- Tertiary-Quaternary boundary, A496, A500, A503, A507-A515
- Tethyan Realm, Cretaceous, A469-A473; Caribbean Province, A473, Antillean Subprovince, A473, West-Central American Subprovince, A473; Indo-Mediterranean Region, A469-A472, Eastern Mediterranean Subprovince, A472-A473, North Indian Ocean Subprovince, A472, Western Mediterranean Subprovince, A472-A473
- Tethys belt (Turkey to Southeast Asia), Devonian, climate of, A209, faunas of, A196, A202, A207
- Tethys, Jurassic, A391
- Tetragonites, A471
- Tetragonitidae, A465, A471, A475
- Tetralithus trifidus Zone, A461
- Tetraporinus, A269, A270
- Tetrataxis, A263, A265, A266
- Texanitinae, A460, A461
- Texigryphaea, A458
- Texoceras, A335
- Textulariidae, A316
- Thalassinoides, A10
- Thalassoceras, A302, A305
- ?Thalassocharis, A7
- Thaleops, A150
- Thamboceras, A400
- Thamboceratidae, A400
- Thamnasteriidae, A441
- Thamniscus, A322, A323, A325
- Thamnopora, A320
- thanatocoenoses, A22-A24, A87, allochthonous, A23-A48, autochthonous, A22, A23
- Thecideidae, A394
- THEIDE & DINKELMAN, A429
- Theocanus zancleus, A530
- Theocapsoma, A461
- Theodossia, A206, A245, A246, T. keenei Zone, A245
- thixotropy, A10; thixotropic substrates, A10, A11, and vibration, A10
- THOMAS, A304
- THOMPSON, A266, A267, A313
- Thompsonella, A268
- THOMSON, A369
- THORSTEINSSON, A227, A230, A298, A314
- THORSTEINSSON & TOZER, A367, A382
- Thrinoceras, A276
- Thuringian Series, A295-A297
- Thyasira, A461
- Thysanophyllum, A269, A270, A271, A272, A318, A319
- Thysanopyginae, A142
- Tibagya, A230
- Ticinella, A457, A458
- TIEN, A202
- TILLYARD, A305
- Timania, A272, A273, A319
- Timanites, A247
- Timanodictya, A322, A324-A326
- TIMOFEEFF-RESSOVSKY, A6
- Timorites, A336, A339, Zone, A298, A335
- Timorphyllum, A299
- TINTANT, A401
- Tirasiana, A94
- Tirolites fauna, A357
- Tissotiidae, A471
- Titanambonites, A145
- Titanoceras, A276
- Titanosarcolites, A473
- Tmetoceras, A401
- TOLSTIKHINA, A292
- Tommotian Stage, A130
- Toots, A30, A31, A32
- Toquimaella, A227, A230
- TORIYAMA, A302, A311, A312
- Tornoceras, A243, A245, A247
- Tornquistia, A260
- Torquatisphinctes, A406
- Torreites, A473
- Tortocardia, A473
- Tournaisian Series, A255, brachiopods of, A273-A274, conodonts of, A280-A281, corals of, A269-A270, foraminifers of, A261
- Tournayella, A261, A263
- Tournayellidae, A261, A267
- TOZER, A337, A343, A352, A353, A359
- TOZER & PARKER, A365
- trace fossils, A87, A112
- Trachyteuthis hastiformis, A14
- Trachytroch, A469
- "transeurasiatic migration route," Ordovician, A142, A149
- Trapeziidae, A441
- Tremadocian, shelly faunas, A139-A140, A157, lower boundary of, A137
- Trematospira Zone, A226, A227
- Trempealeuan, A138
- Trepeilopsis, A265
- TREPOSTOMATA, A321-A322
- Treropyge, A195
- Triacrinus, A44
- Triangulaspis, A126
- Triarthrus eatoni, A32
- Triassic stages and zones, A352, faunas, A369-A384, stratigraphy and paleogeography, A353-A369
- Tribrachidium, A89, A107
- TRICHELIDA, A410
- Trichites, A472
- Tricrepecephalus, A123
- Trigonia, A396
- Trigoniidae, A419, A453, A458, A459, A461
- TRIGONIOIDA, A375
- Trigonioididae, A441

- Trigonothyris, A395
 Trigonoceras, A276
 Trigonocerataceae, A276
 Trigonogastrites, A301, A337
 Trigonorhynchia-Subcuspidella, A195
 Trigonoretinae, A273
TRILOBITA, A88, Cambrian, A120
 trilobite, biofacies in China, A133-A134; distribution, facies-controlled, A130-A131, genetic reservoir for, A128, temperature and, A129, worldwide, A128-A129; faunas, Ashgillian, A149-A150; Cambrian, agnostid, A122, endemic-cosmopolitan contrast, A128, intercontinental exchange of, A123, in North America, A122, polymorphid, A122, "provinces," A129, A130, in Soviet Union, A126; Devonian, A192, A195, A198, A201, A203, A223-A226, A227, A230, A231-A234, A241-A242, A246; Late Ordovician, A160-A161; regional zonation, A158
 trilobites, Arenigian, A140, A142, Silurian, A179, Tremadocian, A139-A140, North American Fauna, A139, A140, Southern Fauna, A139, A140, Tungusian fauna, A140
TRILOBITOMORPHA, A87, A104
 Trinucleidae, A160
 Triops cancriformis minor, A14
TRIPP, A147
 Triticites, A266-A268, A310-A313, Zone, A266, A292
TRIZNA, A322
TRIZNA & KLAUTSAN, A322
 Triznella, A322, A326
 Trochoceramus, A461
 Trochophyllum, A270
 Trochus, A27, A28, A39
TROEDSSON, A160
 trophic relations, Silurian, A176
 Tropidoleptus, A235
TROPITACEAE, A371
TRÜMPY, A366, A387
TRUSHEIM, A14, A32, A35, A40
 Trypaulites, A226
 Tschernyschewia, A300
 Tschernyschewiidae, A327
TSCHUDY & SCOTT, A343
 Tschussovskenia, A271, A273
TSIEN, A199, A205
 Tuba, A469
 Tuberendothyra, A261
 Tuberitina, A265
 Tubiphites, A299, A300
 Turbinatocania, A270
 Turitella, A469
 Turkmenia, A472
TURNŠEK, A394
 Turonian, A423, A450-A452, A459-A460
TURRILITACEAE, A441
 Turrilitidae, A459
 Turritellidae, A458
 Tuvaella, A178
 Tylosiscoceras, A276
 Tylonautilus, A276
 Tylothyris, A243
 Tyrkanispongia, **A91**
UBAGHS, A89
UCHRSKAJA, A316
 Uddenia, A469
 Uddenites, A313
 Ufimia, A318, A320
 Ufimian Stage, A293, A295
UHLIG, A391, A403
 Uintacrinus, A460
 Ulrichotrypa, A325
 Ulrichotrypella, A323
 Uncinulidae, A330
 Uncinulus, A201
 Uniconidae, A203
UNIONIDA, A375
 Unionidae, A397
 unrecognizable taxa, Precambrian, A112-A113
 Upper Canadian shelly fauna, A140
 Upper Devonian faunas, A203-A208, A243-A246, African, A208, Asian, A206-A207, Australasian, A207-A208, European Famennian, A205-A206, European Frasnian, A204-A205, in eastern North America, A243-A244, in northern North America, A245-A246, in western North America, A244-A245, in South America, A246
 Upper Ordovician shelly faunas, A149-A153, Balto-Scandian, A152, Hiberno-Salairian, A151-A153, Mediterranean, A151, North American Midcontinent, A150, North Estonian confacies belt, A152
 "Upper Productus Limestone," A300-A301
 Uptonia, A399
URACTININIA, A441
 Uralella, A468
 Uralian area, Devonian fauna of, A196, A201, A206, climate of, A209
 Uralinia, A269, A270
 Uraloceras, A305, A331
 Urartoceras, A300, A336
 Urbanella, A261, A263
 Urushtenia, A300
 Usseliceras, A407
 Ussurian, A353
USTRITSKIY, A340, A343
 Uvigerina, A504
UYENO, A230, A240, A242, A244
UYENO & MASON, A230, A238
 Valanginian, A423, A442-A444, A454-A456
 Valenciennesia, A498
VALENTINE, A461, A463, A470
VALENTINE & MOORES, A430
 Valhallites, A276
VALKOV & SYSOIEV, A104
 Valletia, A472
 Valvatidae, A397
 Valvulinella, A263, A265
VAN HINTE, A426, A439, A445, A453, A457, A458
 Vanikoropsis, A469
VAN MONTFRANS, A516
VAN STRAATEN, A533
VAN VOORTHUYSEN, TOERING, & ZAGWIJN, A516
 Varangian, A82
VARGANOV, A148, A152
 Variatellina, A235
 Vascoceratidae, A459, A471
VASILYUK, A269, A270, A317, A318, A320
 Vautrinia, A472
VAILOV & LOZOVSKIY, A353
 Vedioceras, A300, -Oldhamina assemblage, A336
VEEVERS, A208
 Velanocorina, **A105**
 Vellamo, A154
 Vendia, A83, A87, **A105**
 Vendian, A82-A83
 Vendomia, **A104**
 Vendomian, A82-A83
 Vendomiidae, **A104**
VENEROIDA, A375
 Venerupis, A35
 Venezoliceras, A469
 Venus gallina, A29
 Vepricardium, A473
 Verbeekiella, A300, A320
 Verbeekina, A300, A312
 Verbeekinae, A309, A315, A316
 Verbella, A265, A266
VERESHCHAGIN & RONOY, A365
VERMA & WESTERMANN, A406
 Vermiceras, A398
 Vermiforma, **A108**
 Vermiporella, A300
DE VERNEUIL, A219
 vertebrates, Silurian, A181, Terrestrial, A499-A500
 Vescotoceras, A301
 Vesiculophyllum, A269
 Vescotoceras, A336
 Vestinautilus, A276
VEZIAN, A506
 Vidrioceras, A279
VIRA, A138
 Villafranchian, A516
 Vinalesites, A403
 Vinalesphinctes, A402
VINOGRADOV, A137
 Virgatixioceras, A407
 Virgatites, A407
 Virgatitinae, A407
 Virgatosphinctes, A403
 Virgatosphinctinae, A403, A408
 Virgilian Series, A258, A266
 Visean Series, A255, brachiopods of, A273-A274, conodonts of, A280-A281, corals of, A270-271, foraminifers of, A261-A262
 Vishnuites, A362
VISSARIONOVA, A310
 Vissariotaxis, A263, A265