

## THE DINOSAURS AND THEIR WORLD: A READING GUIDE

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The first book to be devoted to dinosaurs was W.E. Swinton's *The Dinosaurs*, published in 1934. Until the 1950's, there were few other books devoted to these vanished creatures. However, since that time, the volume of literature on them has increased enormously. In April 1998, a single book-selling source listed some 1330 books in print that had "dinosaur" in the title. Many of these works are for children (and usually bad); others are for adults (and most often quite good).

The list that follows is a distillation from this vast literature. In general, it concentrates on books, fiction and poetry being excluded. Works that were good in their time, but are now outdated or inaccessible, and works considered of limited scientific value are also excluded (though many of the latter are enriched by good illustration—the standard of dinosaur illustration is now extremely high).

The section relating to the question of dinosaur extinction, departs from this procedure in that I have included many papers published in scientific journals—simply because the few books are not adequate to properly portray the various concepts of events at the end of the Mesozoic. This is still very much a controverted question.

It is hoped that this brief guide will be of use to naturalists to whom the literature of palaeontology is unfamiliar. Most of the works listed can be borrowed

directly, or obtained on interlibrary loan, from Canada's provincial library systems or are to be found in academic libraries.

### DINOSAURS

#### General Works

Alexander, R. McNeill, 1989. *Dynamics of dinosaurs and other extinct giants*. New York and London: Columbia University Press, 168 pp.

Bakker, Robert T., 1986. *The dinosaur heresies. New theories unlocking the mystery of the dinosaurs and their extinction*. New York: Morrow, 481 pp.

Czerkas, Sylvia J. and Czerkas, Stephen A., 1990. *Dinosaurs. A complete world history*. Limpsfield, England: Dragon's World, 247 pp. [A large-format work containing some of the finest dinosaur restorations.]

Czerkas, Sylvia J. and Olson, Everett C., eds., 1987. *Dinosaurs past and present*. 2 vols. Seattle, Washington and London: Natural History Museum of Los Angeles County with University of Washington Press, xvi + 181 pp.; xii + 149 pp.

Desmond, Adrian J., 1975. *The hot-blooded dinosaurs. A revolution in palaeontology*. London: Blond & Briggs, 238 pp.

Dixon, Dougal, 1993. *Dougal Dixon's dinosaurs*. Honesdale, Pennsylvania: Boyds Mills Press, 160 pp. [Excellent illustrations.]

[Dodson, Peter], 1993. *The Age of Dinosaurs*. Lincolnwood, Illinois: Publications International, 192 pp.

Farlow, James O. and Brett-Surman,

Michael K., eds., 1997. *The Complete Dinosaur*. Bloomington and Indianapolis, Indiana: Indiana University Press, 752 pp. [I consider this the best book on dinosaurs yet published.]

Fastovsky, David E. and Weishampel, David B., 1996. *The evolution and extinction of the dinosaurs*. Cambridge: Cambridge University Press, xvi + 460 pp.

Psihoyos, Louie and Knoebber, John, 1994. *Hunting dinosaurs*. New York: Random House, xvii + 267 pp. [Excellent photographs; text unreliable.]

Taquet, Philippe, 1993. Les dinosaures, grandeurs et décadence. *La Vie des Sciences, C. r. Acad. Sci., Paris*, sér. gen., vol. 10, no. 4, pp. 265-284.

Thomas, Roger, D.K. and Olson, Everett C., eds., 1980. *A cold look at the warm-blooded dinosaurs*. AAAS Selected Symposia Series. Boulder, Colorado: Westview Press, xxx + 514 pp. [A response to Bakker and Desmond.]

### Regional Works

Dong Zhiming, 1992. *Dinosaurian faunas of China*. Beijing and Berlin: China Ocean Press and Springer-Verlag, xiii + 188 pp.

Long, John A., 1991. *Dinosaurs of Australia*. Chatswood, New South Wales: Reed, 87 pp.

Russell, Dale A., 1977. *A vanished world. The dinosaurs of western Canada*. Natural History Series, No. 4. Ottawa: National Museums of Canada, 142 pp.

Russell, Dale A., 1989. *An odyssey in time: the dinosaurs of North America*. Toronto, University of Toronto Press and National Museum of Natural Sciences, 239 pp.

### History of Study

Colbert, Edwin H., 1983. *Dinosaurs. An illustrated history*. Maplewood, New Jersey: Hammond, 224 pp.

Gillette, David D., 1993. *Seismosaurus, the Earth Shaker*. New York and

London: Columbia University Press, x + 205 pp. [The most detailed account of the history of a particular investigation.]

Norell, Mark A., Gaffney, Eugene S. and Dingus, Lowell, 1995. *Discovering Dinosaurs in the American Museum of Natural History*. New York: Knopf, xx + 204 pp. [A history of the Museum's work in the field and laboratory, with descriptions of some exhibits.]

Rudwick, Martin J.S., 1992. *Scenes from deep time: early pictorial representations of the prehistoric world*. Chicago and London: University of Chicago Press, xiii + 280 pp.

Spalding, David A.E., 1993. *Dinosaur hunters: 150 years of extraordinary discoveries*. Toronto: Key Porter Books, ix + 310 pp. [The best book on this theme.]

Wilford, John N., 1986. *The riddle of the dinosaur*. New York: Alfred A. Knopf, 304 pp.

### Systematics

Carpenter, K. and Currie, P.J., eds., 1990. *Dinosaur systematics. Approaches and perspectives*. Papers from the Dinosaur Systematics Symposium held June 3-5, 1986, at the Tyrrell Museum of Palaeontology, Drumheller, Alberta. Cambridge, New York, Port Chester, Melbourne, Sydney: Cambridge University Press, xiii + 318 pp.

Weishampel, David B., Dodson, Peter and Osmólska, Halszka, eds., 1990. *The Dinosauria*. Berkeley, California and Oxford: University of California Press, xiii + 733 pp. [By far the most rigorous taxonomic treatment.]

### Particular Groups

Dodson, Peter, 1996. *The horned dinosaurs: A natural history*. Princeton, New Jersey: Princeton University Press, xiv + 346 pp.

Lockley, Martin G., dos Santos, V.F., Meyer, C.A. and Hunt, A., eds., 1994. *Aspects of sauropod paleobiology*.



*Gaia. Revista de Geociências*, no. 10 (December), 279 pp.

Paul, Gregory S., 1988. *Predatory dinosaurs of the world*. New York Academy of Sciences Series. New York: Simon and Schuster, 403 pp.

### **Eggs and Babies**

Carpenter, Kenneth, Hirsch, Karl F. and Horner, John R., eds., 1994. *Dinosaur eggs and babies*. Cambridge and New York: Cambridge University Press, ix + 372 pp.

### **Footprints: general**

Gillette, David D. and Lockley, Martin G., eds., 1989. *Dinosaur tracks and traces*. Cambridge, New York, New Rochelle, Melbourne, Sydney: Cambridge University Press, xvii + 454 pp.

Haubold, Hartmut, 1984. *Saurierfährten*. Wittenberg Lutherstadt, Germany: Ziemsen Verlag, 3<sup>rd</sup> edition, 231 pp.

Leonardi, Giuseppe, ed., 1987. *Glossary and manual of tetrapod footprint palaeoichnology*. Brasília, Brazil: Departamento Nacional da Produção Mineral, ix + 75 pp. + 20 pls [Includes a lengthy history of their study.]

Lockley, Martin, 1991. *Tracking dinosaurs. A new look at an ancient world*. Cambridge and New York: Cambridge University Press, xii + 238 pp.

Thulborn, Tony, 1990. *Dinosaur tracks*. London: Chapman & Hall, xvii + 410 pp.

### **Footprints: regional**

Leonardi, Giuseppe, 1994. *Annotated atlas of South America tetrapod footprints (Devonian to Holocene) with an appendix on Mexico and Central America*. Brasília, Brazil: Companhia de Pesquisa de Recursos Minerais, xxiv + 248 pp.

Lockley, Martin G. and Hunt, Adrian P., 1995. *Dinosaur tracks and other fossil footprints of the western United States*. New York: Columbia University Press, xx + 338 pp.

Tresise, Geoffrey and Sarjeant, William A.S., 1997. *The tracks of Triassic vertebrates. Fossil evidence from north-west England*. London: Stationery Office, xii + 204 pp.

### **The Popular Image**

Haste, Helen, 1995. Dinosaur as metaphor (Ch. 21, pp. 359-380). In: Sarjeant, W.A.S., ed., *Vertebrate Fossils and the Evolution of Scientific Concepts. Writings in tribute to Beverly Halstead, by some of his many friends*. Reading, England: Gordon & Breach Publishers, 622 pp.

Glut, Donald F., 1980. *The dinosaur scrapbook*. Secaucus, New Jersey: Citadel, 320 pp.

Torrens, Hugh S., 1995. The dinosaurs and dinomania over 150 years (Ch. 15, pp. 255-284). In: Sarjeant, W.A.S., ed., *Vertebrate Fossils and the Evolution of Scientific Concepts. Writings in tribute to Beverly Halstead, by some of his many friends*. Reading, England: Gordon & Breach Publishers, 622 pp.

### **Reference Works**

Benton, Michael, 1984. *The dinosaur encyclopedia*. New York, Simon & Schuster, 188 pp.

Currie, Philip J. and Padian, Kevin, eds., 1997. *Encyclopedia of Dinosaurs*. New York and London: Academic Press, xxx + 869 pp. [The best reference work.]

Glut, Donald F., 1984. *The dinosaur dictionary*. New York: Bonanza Books, 218 pp.

Lambert, David and the Diagram Group, 1990. *The dinosaur data book*. New York: Avon Books, 320 pp.

Norman, David, 1985. *The illustrated encyclopedia of dinosaurs*. New York: Crescent Books, 208 pp.

### **OTHER MESOZOIC REPTILE GROUPS**

Callaway, Jack M. and Nicholls, Elizabeth L., eds., 1997. *Ancient marine reptiles*. San Diego, California and

London: Academic Press, xlvii + 501 pp. [Ichthyosaurs, plesiosaurs, sea turtles, marine crocodiles and mosasaurs.]  
Fraser, Nicholas C. and Sues, Hans-Dieter, ed., 1997. *In the shadow of the dinosaurs: Early Mesozoic tetrapods*. Cambridge and New York: Cambridge University Press, 447 pp. [Treats with the various reptile groups of the Triassic era.]

Padian, Kevin, ed., 1986. *The beginning of the age of dinosaurs. Faunal changes across the Triassic-Jurassic boundary*. Cambridge and New York: Cambridge University Press, xii + 378 pp. [Deals with the groups ancestral to the dinosaurs.]

Wellnhofer, Peter, 1991. *The illustrated encyclopedia of pterosaurs*. London: Salamander Books, 192 pp. [Pterodactyls.]

### MESOZOIC MAMMALS AND BIRDS

Dingus, Lowell and Rowe, Timothy, 1998. *The mistaken extinction. Dinosaur evolution and the origin of birds*. New York: Freeman, xiv + 332 pp. [Much on bird ancestry.]

Hecht, M.K., Ostrom, John H., Viohl, G. and Wellnhofer, P., eds., 1985. *The beginnings of birds. Proceedings of the International Archaeopteryx Conference, Eichstätt 1984*. Eichstätt, Germany: Freunde des Jura-Museums Eichstätt, 381 pp.

Lillegraven, Jason A., Kielan-Jaworowska, Zofia and Clemens, William A., eds., Mesozoic mammals: the first two-thirds of mammalian history. Berkeley, California: University of California Press, x + 311 pp.

### MESOZOIC PLANTS

[The two works that follow, although primarily concerned with Australia, are the best and most fully illustrated accounts of Mesozoic plants presently available, written in a fashion accessible to the non-specialist.]

White, Mary E., 1986. *The greening of*

*Gondwana*. Frenchs Forrest, New South Wales: Reed Books, 256 pp.

White, Mary E., 1994. *After the greening. The browning of Australia*. Kenthurst, New South Wales: Kangaroo Press, 286 pp.

### THE GREAT EXTINCTION"

[The literature on this topic is voluminous and often highly emotional. A comprehensive bibliography to that year is given by Tokaryk *et al.* 1992; an update of this is understood to be in preparation. The paper by MacLeod *et al.* 1997 is of particular importance and should be consulted by all persons seriously interested in this problem. My own views have been set forth in Blue Jay 1998, vol. 56, no. 1 (March), p. 68-70.]

Alvarez, L.W., Alvarez, W., Asaro, F. and Michel, H., 1980. Extraterrestrial cause for the Cretaceous-Tertiary extinction. *Science*, vol. 208: 1095-1108.

Archibald, D., 1996. *Dinosaur Extinction and the End of an Era. What the Fossils Say. In Critical Moments in Paleobiology & Earth History Series*. New York: Columbia University Press. xviii + 237 pp.

Archibald, D., 1997. Extinction, Cretaceous (pp. 221-230). In: Currie, P.J. and Padian, K., eds., *Encyclopedia of dinosaurs*. San Diego, California and London: Academic Press, xxvi + 869 pp.

Barrera, E., 1994. Global environmental changes preceding the Cretaceous-Tertiary boundary: early-late Maastrichtian transition. *Geology*, vol. 22: 877-880.

Benton, M.J., 1990. Scientific methodologies in collision: the history of the study of the extinction of the dinosaurs. *Evolutionary Biology*, vol. 24: 371-400.

Bryant, L.J., 1989. Non-dinosaurian lower vertebrates across the Cretaceous-Tertiary boundary in northeastern Montana. *University of California Publications in Geological*



- Sciences*, vol. 134, Berkeley, Los Angeles, Oxford: University of California Press. xii + 98 p.
- Buffetaut, E. and Le Loeuff, J., 1998. A new giant ground bird from the Upper Cretaceous of southern France. *Journal of the Geological Society*, vol. 155: 1-4.
- Charig, A.J., 1993. Disaster theories of dinosaur extinction. *Modern Geology*, vol. 18, p. 299-318. [Republ., in SARJEANT, W.A.S., ed., *Vertebrate Fossils and the Evolution of Scientific Concepts*. Reading, England: Gordon & Breach, p. 309-328.]
- Clemens, W.A. Jr., Archibald, J.D. and Hickey, L.J., 1981. Out with a whimper, not a bang. *Paleobiology*, vol. 7: 293-298.
- Clemens, W.A. and Nelms, L.G., 1993. Reply. In: Paleocological implications of Alaskan terrestrial fauna in latest Cretaceous time at high palaeolatitudes: Comment and reply. *Geology*, vol. 21: 1151-1152.
- Dodson, P., 1996. *The horned dinosaurs: A natural history*. Princeton, New Jersey: Princeton University Press, xiv + 346 pp.
- Fastovsky, D.E. and Weishampel, D.B., 1996. *The evolution and extinction of the dinosaurs*. Cambridge, New York: Cambridge University Press, xvi + 460 pp.
- Hallam, A., 1989. Mass extinctions (p. 184-215), in, *Great Geological Controversies*, Oxford and New York: Oxford University Press, xii + 244 pp.
- Hoffman, A., 1989. Mass extinctions: the view of a sceptic. *Journal of the Geological Society of London*, vol. 146: 21-36.
- Hurlburt, S.H. and Archibald, J.D., 1995. No statistical support for sudden (or gradual) extinction of dinosaurs. *Geology*, vol. 23: 881-884.
- Hut, P.W., Alvarez, W., Elder, W., Hansen, T., Kauffman, E.G., Keller, G., Shoemaker, E.M. and Weiserman, P., 1987. Comet showers as a cause of mass extinctions. *Nature*, vol. 329: 118-126.
- Jablonski, D. and Raup, D.M., 1995. Selectivity of end-of-Cretaceous marine bivalve extinctions. *Science*, vol. 268: 389-391.
- Lerbekmo, J.F., Singh, C., Jarzen, D.M. and Russell, D.A., 1979. The Cretaceous-Tertiary boundary in south-central Alberta—a revision based on additional dinosaurian and microfloral evidence. *Canadian Journal of Earth Sciences*, vol. 16: 1866-1869.
- MacLeod, N., Rawson, P.F., Forey, P.L., Banner, F.T., Boudagher-Fadel, M.K., Bown, P.R., Burnett, J.A., Chambers, P., Culver, F., Evans, S.E., Jeffrey, C., Kaminski, M.A., Lord, A.R., Milner, A.C., Milner, A.R., Morris, N., Owen, F., Rosen, B.R., Smith, A.B., Taylor, P.D., Urquhart, E. and Young, J.R., 1997. The Cretaceous-Tertiary biotic transition. *Journal of the Geological Society of London*, vol. 154: 256-292.
- McLean, D.M., 1982. Deccan volcanism and the Cretaceous-Tertiary transition scenario: a unifying causal mechanism, in, *Cretaceous-Tertiary extinctions and possible terrestrial and extraterrestrial causes II*. *Syllogeus* (National Museum of Natural Sciences), vol. 39: 143-144.
- McLean, D.M., 1985a. Mantle degassing unification of the trans- K-T geobiological record. *Evolutionary Biology*, vol. 19: 287-313.
- McLean, D.M., 1985b. Deccan Traps mantle degassing in the terminal Cretaceous marine extinctions. *Cretaceous Research*, vol. 6: 235-259.
- McLean, D.M., 1985c. Mantle degassing induced dead ocean in the Cretaceous-Tertiary transition. In Sundquist, E.T. and Broecker, W.S., eds., *Carbon cycle and atmospheric CO<sub>2</sub>: natural variations Archean to Present*. *Geophysical Monograph*, vol. 32: 493-503.
- McLean, D.M., 1988. K-T transition into chaos. *Journal of Geological Education*, vol. 36: 237-242.
- Russell, D.A., 1976. Mass extinctions of dinosaurs and mammals. *Nature*

Canada, vol. 5: 18-24.

Russell, D.A. and Dodson, P., 1997. The extinction of the dinosaurs: a dialogue between a catastrophist and a gradualist (pp. 662-672). In: Farlow, J.O. and Brett-Surman, M.K., *The Complete Dinosaur*. Bloomington and Indianapolis, Indiana: Indiana University Press, xi + [2] + 752 pp.

Sarjeant, W.A.S., 1990. Astrogeological events and mass extinctions: global crises or geological chimaerae? *Modern Geology*, vol. 15: 101-112.

Sarjeant, W.A.S., 1996. Dinosaur extinction: sudden or slow, cataclysmic or climatic? *Geoscience Canada*, vol. 23: 161-164.

Sarjeant, W.A.S., 1997. The dinosaur demise: a contrarian view. *The Ottawa Citizen*, Tuesday, 14<sup>th</sup> October, p. A17. [Republished 1998: On Extinction. *Blue Jay*, vol. 56, no. 1 (March): 68-70.]

Sloan, R.E., 1976. The ecology of dinosaur extinction. *Athlon, Royal Ontario Museum Life Sciences Miscellaneous Publications*: 134-154.

Sloan, R.E., 1985. *Gradual extinction of latest Cretaceous dinosaurs in the Hell Creek Formation, McCone County, Montana*. Boise, Idaho: Rocky Mountain Section of the Geological Society of America and Associated Societies. Paper no. 72269, [2] p.

Sloan, R.E., Rigby, J.K., Jr., Van Valen, L.M. and Gabriel, D., 1986. Gradual dinosaur extinction and simultaneous ungulate radiation in the Hell Creek Formation. *Science*, vol. 232: 629-633.

Smit, J., 1982. Extinction and evolution of planktonic Foraminifera at the Cretaceous/Tertiary boundary after a major impact. In L.T. Silver and P.H. Schultz, eds., *Geological Implications of Impacts of Large Asteroids and Comets on the Earth*. Geological Society of America, Special Paper, no. 190: 329-352.

Smit, J. and Hertogen, J., 1980. An extraterrestrial event at the Cretaceous-Tertiary boundary, *Nature*, vol. 285:

198-200.

Srivastava, S.K., 1994. Palynology of the Cretaceous-Tertiary boundary in the Scollard Formation of Alberta, Canada, and global KTB events. *Review of Palaeobotany and Palynology*, vol. 83: 137-158.

Sweet, A.R. and Braman, D.R., 1992. The K-T boundary and contiguous strata in western Canada; interactions between paleoenvironments and palynological assemblages: *Cretaceous Research*, vol. 13, p. 31-79.

Taquet, P., 1993. Les dinosaures, grandeur et décadence, La Vie des Sciences. *Compte Rendu de l'Académie des Sciences. Paris*, sér. gen., vol. 10: 265-284.

Tokaryk, T.T., Storer, J.E. and Nambudiri, E.M.V., 1992. Selected bibliography of the Cretaceous-Tertiary boundary event, through 1989. *Saskatchewan Museum of Natural History, Contributions Series*, no. 11: 1-140.

Van Valen, L. and Sloan, R.E., eds., 1977. Ecology and the extinction of the dinosaurs. *Evolutionary Theory*, vol. 2: 37-64.

Ward, P., 1995. The K/T trial. *Paleobiology*, vol. 21: 245-247.

Wellnhofer, P., 1991. The illustrated encyclopedia of Pterosaurs, London: Salamander Books, 192 pp.

Williams, M.E., 1994. Catastrophic versus non-catastrophic extinction of the dinosaurs: testing, falsifiability, and the burden of proof. *Journal of Paleontology*, vol. 68: 183-190.

Zinsmeister, W.J., 1998. Discovery of fish mortality horizon at the K-T Boundary on Seymour Island: Re-evaluation of events at the end of the Cretaceous. *Journal of Paleontology*, vol. 72: 556-570.

Zinsmeister, W.J. and Feldmann, R.M., 1994. Antarctica, the forgotten stepchild: a view of the KT extinction from the high southern latitudes. *Lunar & Planetary Institute Contribution*, no. 825: 134-135.