



WILD MALAYSIA

The Wildlife and Scenery of Peninsular Malaysia, Sarawak, and Sabah

Text by Junaidi Payne
Photographs by Gerald Cubitt

Wild Malaysia is a new illustrated guide to the natural history of southeast Asia's southernmost peninsula and offshore islands. Four-hundred superb full-color photographs taken especially for this book capture plants, invertebrates, and mammals in their natural habitats. Junaidi Payne, a professional conservation biologist provides a detailed introduction to this spectacularly scenic region.

Produced in association with the World Wide Fund for Nature.

400 full-color illus. \$35.00

IMPERILED PLANET

Restoring our Endangered Ecosystems

Edward Goldsmith, Peter Bunyard, Nicholas Hildyard, and Patrick McCully

"This authoritative discussion of the various dimensions of planetary menace presents an innovative ecological interpretation of the overall challenge, and also an approach to human survival and environmental stability that rests on solid scientific foundations. *Imperiled Planet* is itself a major resource in the ecological struggle of the decades ahead."—Richard Falk, *The Albert G. Milbank Professor of International Law and Practice, Princeton University*
250 full-color illus., diagrams, maps
\$29.95 prepublication price through 12/31/90 \$39.95 thereafter

THE MIT PRESS
55 Hayward Street
Cambridge, MA 02142

Stellar Explosions

Supernovae. ALBERT G. PETSCHKE, Ed. Springer-Verlag, New York, 1990. xiv, 293 pp., illus. \$59. Astronomy and Astrophysics Library.

This book, which contains contributions from many of the leaders in the field, gives an up-to-date summary of modern ideas on supernovae, their explosion mechanisms, their spectra, and their lightcurves.

The first two chapters, by Harkness and Wheeler and by Branch, give an authoritative overview of spectral classification of supernovae. These authors discuss the differences between supernovae of type Ia, problems related to the origin of supernovae of type Ib, and possible interpretations for the differences between "linear" and "plateau" supernovae of type II. A particularly thorough discussion is given of the "missing link" supernova 1987K, which initially had a type II spectrum but later evolved into an object of type Ib. Branch's tabulation of all spectroscopically determined supernova types is particularly useful. (Note, however, that Z Centauri is actually SN1895B, not SN1895A.) Supernova light curves and their possible use as cosmological probes are discussed by Kirshner. The radio emission of supernovae is reviewed by Sramek and Weiler. Their results show that we are still profoundly ignorant about how radio emission changes as a supernova develops into a supernova remnant. Another century of observations should begin to answer this question.

Chevalier presents an authoritative review of our current understanding of the interaction of supernovae with their environment and the earliest phase of the evolution of supernova remnants. Sutherland shows how x-rays and γ -rays provide powerful diagnostic tools for the study of the nuclear evolution of supernovae. Observations of the 847-keV and 1238-keV lines of ^{56}Co provide confirmation of the $^{56}\text{Ni} \rightarrow ^{56}\text{Co} \rightarrow ^{56}\text{Fe}$ nuclear decay model for core collapse of supernovae of type II, give an estimate for the amount of iron formed, and show that the onion-like layering of supernova progenitors is destroyed by mixing after the supernova explodes.

Burrows provides a thorough discussion of neutrino processes, which dominate the energy production in core collapse supernovae. Including the energy of neutrinos, a single supernova will, for a few seconds after its collapse, be as "bright" as the entire observable universe. Burrows discusses the 19 or 20 neutrinos produced by SN1987A that were observed by the Kamiokande and IMB detectors and their implications for the theory of the collapse of supernovae of type

II. (Perhaps never before in the history of science has so much depended on so few objects with so little mass.)

An up-to-date review of the deflagration of supernovae of type I, which are believed to be due to the detonation of CO white dwarfs that are pushed over the Chandrasekhar limit by mass transfer, is given by Woosley. Cooperstein and Baron discuss the remaining problems in understanding the actual mechanism of core collapse. Among the most serious of these is how to prevent energy losses resulting from the reaction $^{56}\text{Fe} \rightarrow 13\alpha + 4n$ from sapping the energy of the core collapse detonation wave. Finally Mayle discusses the critical role played by neutrino heating during, and immediately after, the collapse of the core of a supernova of type II.

Advanced graduate students will find this book an excellent introduction to both the theory and the observation of supernovae.

SIDNEY VAN DEN BERGH

Dominion Astrophysical Observatory,
Victoria, B.C. V8X 4M6, Canada

Books Received

AIDS. *The Second Decade.* Heather G. Miller, Charles F. Turner, and Lincoln E. Moses, Eds. National Academy Press, Washington, DC, 1990. xiv, 495 pp., illus. \$30; paper, \$24.95. From the Committee on AIDS Research and the Behavioral, Social, and Statistical Sciences.

Analytical Biotechnology. *Capillary Electrophoresis and Chromatography.* Csaba Horváth and John G. Nickelly, Eds. American Chemical Society, Washington, DC, 1990. x, 213 pp., illus. \$49.95. ACS Symposium Series, 434. From a symposium, Los Angeles, CA, Sept. 1988.

Anatomy of a Controversy. *The Question of a "Language" Among Bees.* Adrian M. Wenner and Patrick H. Wells. Columbia University Press, New York, 1990. xvi, 399 pp., illus. \$55.

The Anthropology of War. Jonathan Haas, Ed. Cambridge University Press, New York, 1990. xiv, 242 pp., illus. \$49.50. School of American Research Advanced Seminar Series. From a seminar, March 1986.

Archaeological Geology of North America. Norman P. Lasca and Jack Donahue, Eds. Geological Society of America, Boulder, CO, 1990. x, 633 pp., illus. \$62.50. GSA Centennial Special Volume 4.

Argillaceous Rock Atlas. Neal R. O'Brien and Roger M. Slatt. Springer-Verlag, New York, 1990. xvi, 141 pp., illus. \$59.

The Arithmetic and Spectral Analysis of Poincaré Series. James W. Cogdell and Ilya Piatetski-Shapiro. Academic Press, San Diego, CA, 1990. vi, 182 pp. \$24.95. Perspectives in Mathematics, vol. 13.

Artificial Intelligence and the Future of Testing. Roy Freedle, Ed. Erlbaum, Hillsdale, NJ, 1990. xiv, 329 pp., illus. \$39.95. From a conference.

Astrophysics. *Recent Progress and Future Possibilities.* B. Gustafsson and P. E. Nissen, Eds. Munksgaard, Copenhagen, 1990. 220 pp., illus. Paper, DKK 400. Matematisk-fysiske Meddelelser, 42:4. From a symposium, Copenhagen, May 1988.

Atoms in Strong Fields. Cleanthes A. Nicolaides, Charles W. Clark, and Munir H. Nayfeh, Eds. Plenum, New York, 1990. xii, 540 pp., illus. \$115. NATO Advanced Science Series, vol. 212. From a meeting, Kos, Greece, Oct. 1988.

Australian Tropical Rainforests. *Science—Values—Meaning.* L. J. Webb and J. Kikkawa, Eds. CSIRO, East Melbourne, Australia, 1990 (U.S. distributor, International Specialized Book Services, Portland, OR). x, 185 pp., illus. \$70. From a symposium, Townsville, Australia, Aug. 1987.

Biochemistry of the Mevalonic Acid Pathway to Terpenoids. G. H. Neil Towers and Helen A. Stafford, Eds. Plenum, New York, 1990. x, 341 pp., illus. \$72.50. Recent Advances in Phytochemistry, vol. 24. From a meeting, Vancouver, Canada, June 1989.

Biology, Epidemiology and Management of Pyroclastic Red Tides. Gustaaf M. Hallegraaf and Jay L. Maclean, Eds. Fisheries Department, Ministry of Development, Brunei Darussalam and ICLARM, Manila, 1989 (U.S. distributor, International Specialized Book Services, Portland, OR). xii, 286 pp., illus. Paper, \$40.

The Biology of Hematopoiesis. Nicholas Dainiak *et al.*, Eds. Wiley-Liss, New York, 1990. xxviii, 554 pp., illus. \$125. Progress in Clinical and Biological Research, vol. 352. From a symposium, Cambridge, MA, Oct. 1989.

Bone Modification. Robson Bonnicksen and Marcella H. Sorg, Eds. Center for the Study of the First Americans, Orono, ME, 1990. xiv, 535 pp., illus. \$65. Peopling of the Americas Publications. From a conference, Carson City, NE, 1984.

Care and Nursing of the Brain. A Guide to Your Gray Matter. Jack Maguire. Doubleday, New York, 1990. viii, 184 pp., illus. Paper, \$14.95.

CCDs in Astronomy. George H. Jacoby, Ed. Astronomical Society of the Pacific, San Francisco, CA, 1990. xviii, 407 pp., illus. \$32. Astronomical Society of the Pacific Conference Series, vol. 8. From a conference, Tucson, AZ, Sept. 1989.

Central Regulation of Autonomic Functions. Arthur D. Loewy and K. Michael Spyer, Eds. Oxford University Press, New York, 1990. xiv, 390 pp., illus. \$85.

Children's Strategies. Contemporary Views of Cognitive Development. David F. Bjorklund, Ed. Erlbaum, Hillsdale, NJ, 1990. xvi, 339 pp., illus. \$49.95.

Classical Dynamics and Its Quantum Analogues. David Park. 2nd ed. Springer-Verlag, New York, 1990. x, 333 pp., illus. \$49.50.

The Classification of Stars. Carlos Jaschek and Mercedes Jaschek. Cambridge University Press, New York, 1990. xvi, 413 pp., illus. Paper, \$32.50.

Clinical Aspects of Panic Disorder. James C. Balenger, Ed. Wiley-Liss, New York, 1990. xvi, 328 pp., illus. \$96. Frontiers of Clinical Neuroscience, vol. 9.

Cognition, Computing, and Cooperation. Scott P. Robertson, Wayne Zachary, and John B. Black, Eds. Ablex, Norwood, NJ, 1990. vi, 424 pp., illus. \$65; paper, \$35. From a symposium, New York, May 1984.

Cognitive Psychology. A Student's Handbook. Michael E. Eysenck and Mark T. Keane. Erlbaum, Hillsdale, NJ, 1990. x, 557 pp., illus. \$49.95; paper, \$18.50.

Columbian Consequences. Vol. 2, Archaeological and Historical Perspectives on the Spanish Borderlands East. David Hurst Thomas, Ed. Smithsonian Institution Press, Washington, DC, 1990. xvi, 586 pp., illus. \$60. A Contribution from the Society for American Archaeology.

Constructing the Subject. Historical Origins of Psychological Research. Kurt Danziger. Cambridge University Press, New York, 1990. x, 254 pp., illus. \$34.50. Cambridge Studies in the History of Psychology.

Controlling the Sword. The Democratic Governance of National Security. Bruce Russett. Harvard University Press, Cambridge, MA, 1990. xii, 201 pp., illus. \$22.50.

Cool Stars, Stellar Systems, and the Sun. Sixth Cambridge Workshop. George Wallerstein, Ed. Astronomical Society of the Pacific, San Francisco, CA, 1990. xviii, 523 pp., illus. \$32. Astronomical Society of the Pacific Conference Series, vol. 9.

Created from Animals. The Moral Implications of Darwinism. James Rachels. Oxford University Press, New York, 1990. vi, 245 pp. \$19.95.

Crystallographic and Modeling Methods in Molecular Design. Charles E. Bugg and Steven E. Ealick, Eds. Springer-Verlag, New York, 1990. xviii, 269 pp., illus. \$65. From a symposium, Gulf Shores, AL, April 1989.

Cytokines and Lipocortins in Inflammation and Differentiation. Marialuisa Melli and Luca Parente, Eds. Wiley-Liss, New York, 1990. xx, 463 pp., illus. \$120. Progress in Clinical and Biological Research, vol. 349. From a conference, Siena, Italy, Oct. 1989.

Darwin and the General Reader. The Reception of Darwin's Theory of Evolution in the British Periodical Press, 1859-1872. Alvar Ellegard. University of Chicago Press, Chicago, 1990. vi, 394 pp. Paper, \$17.95. Reprint, 1958 ed.

DNA Topology and Its Biological Effects. Nicholas R. Cozzarelli and James C. Wang, Eds. Cold Spring Harbor Laboratory, Cold Spring Harbor, NY, 1990. xii, 480 pp., illus. \$97. Cold Spring Harbor Monograph Series, 20.

The Ends of the Earth. The Polar Regions of the World. Isaac Asimov. Illustrations by Bob Hines. Dutton (Penguin), New York, 1990. xiv, 363 pp. Paper, \$12.95. Reprint, 1975 ed.

Environmental and Occupational Cancer. Scientific Update, 1990. M. A. Mehlman, Ed. Princeton Scientific, Princeton, NJ, 1990. iv, 348 pp., illus. \$65. Advances in Modern Environment Toxicology, vol. 17.

Enzyme Chemistry. Impact and Applications. Colin J. Suckling, Ed. 2nd ed. Chapman and Hall, New York, 1990. xii, 383 pp., illus. \$79.95.

Evaluating a Large Group Awareness Training. J. D. Fisher *et al.* Springer-Verlag, New York, 1990. x, 142 pp., illus. Paper, \$35. Recent Research in Psychology.

Experimental Study and Characterization of Chaos. Hao Bai-lin, Ed. World Scientific, Teaneck, NJ, 1990. viii, 459 pp., illus. \$56. Directions in Chaos, vol. 3.

Fiber Reinforced Ceramic Composites. Materials, Processing and Technology. K. S. Mazhaysani, Ed. Noyes, Park Ridge, NJ, 1990. xviii, 515 pp., illus. \$78. Materials Science and Process Technology Series.

Field Theories in Condensed Matter Physics. A Workshop. Slarko Tesanovic, Ed. Addison-Wesley, Redwood City, CA, 1990. viii, 208 pp., illus. \$45.25. From a workshop, Baltimore, MD, Nov. 1988.

Formal Semantics and Pragmatics for Natural Language Querying. James Clifford. Cambridge University Press, New York, 1990. xvi, 194 pp., illus. \$29.95. Cambridge Tracts in Theoretical Computer Science, 8.

Foundations of Robotics. Analysis and Control. Tsuneo Yoshikawa. MIT Press, Cambridge, MA, 1990. xii, 285 pp., illus. \$40.

From Design to Discovery. Donald J. Cram. American Chemical Society, Washington, DC, 1990. xxii, 146 pp., illus. \$24.95. Profiles, Pathways, and Dreams. Autobiographies of Eminent Chemists.

Genetic Susceptibility to Environmental Mutagens and Carcinogens. Arthur D. Bloom, Lawrence Spatz, and Natalie W. Paul, Eds. March of Dimes Birth Defects Foundation, White Plains, NY, 1990. iv, 193 pp., illus. Paper, \$20. Environmental Health Institute, Monograph No. 2. Originally published as *Birth Defects: Original Article Series*, vol. 25, no. 2.

A Geologic Time Scale 1989. W. Brian Harland *et al.* Cambridge University Press, New York, 1990. xvi, 263 pp., illus. \$49.50; paper, \$19.95. Successor to *A Geologic Time Scale* (1982).

Glycobiology. Joseph K. Welply and Ernest Jaworski, Eds. Wiley-Liss, New York, 1990. xiv, 206 pp., illus. \$69.50. UCLA Symposia on Molecular and Cellular Biology, new series, vol. 111. From a symposium, Frisco, CA, Jan. 1989.

The Great Wall of China. From History to Myth. Arthur Waldron. Cambridge University Press, New York, 1990. xvi, 296 pp., illus. \$39.50.

Handbook of Motivation and Cognition. Foundations of Social Behavior. Vol. 2. E. Tory Higgins and Richard M. Sorrentino, Eds. Guilford, New York, 1990. xviii, 621 pp., illus. \$65.

Hematopoietic Growth Factors in Transfusion Medicine. Jerry Spivak *et al.*, Eds. Wiley-Liss, New York, 1990. xiv, 182 pp., illus. \$59.50. Progress in Clinical and Biological Research, vol. 338. From a symposium, Bethesda, MD, May 1989.

Heparin and the Prevention of Atherosclerosis. Basic Research and Clinical Application. Hyman Engelberg. Wiley-Liss, New York, 1990. x, 217 pp., illus. \$53.50.

Holoprosencephaly. An Overview and Atlas of Cases. Joseph R. Siebert *et al.* Wiley-Liss, New York, 1990. x, 420 pp., illus. \$190.

Honey Bee Pests, Predators, and Diseases. Roger A. Morse and Richard Nowogrodzki, Eds. 2nd ed. Comstock (Cornell University Press), Ithaca, NY, 1990. xii, 474 pp., illus. \$41.50.

Horizons in Membrane Biotechnology. Claude Nicolau and Dennis Chapman, Eds. Wiley-Liss, New York, 1990. xvi, 312 pp., illus. \$85. Progress in Clinical and Biological Research, vol. 343. From a meeting, College Station, TX, Sept. 1989.

Horticultural Biotechnology. Alan B. Bennett and Sharman D. O'Neill, Eds. Wiley-Liss, New York, 1990. xviii, 387 pp., illus. \$72.50. Plant Biology, vol. 11. From a symposium, Davis, CA, Aug. 1989.

Invertebrates. Richard C. Brusca and Gary J. Brusca. Illustrations by Nancy J. Haver. Sinauer, Sunderland, MA, 1990. x, 922 pp., illus. \$47.50.

The Kaiser's Chemists. Science and Modernization in Imperial Germany. Jeffrey Allan Johnson. University of North Carolina Press, Chapel Hill, NC, 1990. xii, 279 pp., illus. \$39.95.

Mapping our Genes. The Genome Project and the Future of Medicine. Lois Wingerson. Dutton (Penguin), New York, 1990. xii, 338 pp., illus. \$19.95.

Megagauss Fields and Pulsed Power Systems. V. M. Titov and G. A. Shvetsov. Nova Science, New York, 1990. xiv, 859 pp., illus. \$148. From a conference, Novosibirsk, U.S.S.R., July 1989.

Metaphors of Mind. Conceptions of the Nature of Intelligence. Robert J. Sternberg. Cambridge University Press, New York, 1990. xvi, 344 pp. \$44.50; paper, \$17.95.

Methods in Neuroscience. Vol. 2. Cell Culture. P. Michael Conn, Ed. Academic Press, San Diego, CA, 1990. xvi, 424 pp., illus. \$85; spiral bound, \$45.

Micronutrients and Immune Functions. Adrienne Bendich and Ranjit K. Chandra, Eds. *Cytokines and Metabolism.* Gerald T. Keusch, Anthony Cerami, and Fumimaro Takaku, Eds. New York Academy of Sciences, New York, 1990. x, 382 pp., illus. Cloth or paper, \$100. Annals of the New York Academy of Sciences, vol. 587. From conferences, New York, May and June 1989.

The Milky Way as a Galaxy. Gerard Gilmore, Ivan R. King and Pieter C. van der Kruit. Roland Buser and Ivan R. King, Eds. University Science Books, Mill Valley, CA, 1990. xiv, 392 pp., illus. \$42.50. Saas-Fee Advanced Course no. 19 (Vaud, Switzerland, March 1989).

Mind Sights. Original Visual Illusions, Ambiguities, and Other Anomalies, with a Commentary on the Play of the Mind in Perception and Art. Roger N. Shepard. Freeman, New York, 1990. xii, 228 pp., illus. \$24.95; paper, \$14.95.

Minimalist Mobile Robotics. A Colony-Style Architecture for an Artificial Creature. Jonathan H. Connell. Academic Press, San Diego, CA, 1990. xviii, 175 pp., illus. \$29.95. Perspectives in Artificial Intelligence, vol. 5.

The Mississippian Emergence. Bruce D. Smith, Ed. Smithsonian Institution Press, Washington, DC, 1990. xviii, 280 pp., illus. \$39.95.

Mobilizing R & D for Economic Survival. Proceedings of the Forty-Third Annual National Conference on the Advancement of Research. (New Orleans, LA, Sept. 1989.) A. W. Betts and E. L. Gavlick, Eds. Technomic, Lancaster, PA, 1990. vi, 141 pp., illus. Paper, \$35. NCAR 43.

Modern Concepts in Penicillium and Aspergillus Classification. Robert A. Samson and John I. Pitt, Eds. Plenum, New York, 1990. x, 478 pp., illus. \$115. NATO Advanced Science Institutes Series, vol. 185. From a workshop, Baarn, The Netherlands, May 1989.

Modern Thin-Layer Chromatography. Nelu Grinberg, Ed. Dekker, New York, 1990. xiv, 490 pp., illus. \$99.75. Chromatographic Science Series, vol. 52.

Molecular Aspects of Hormonal Regulation of Plant Development. Milan Kuraček, Malcolm C. Eliott, and Ivana Macháčková, Eds. SPB Academic, The Hague, 1990. viii, 253 pp., illus. Paper, \$39. From a symposium, Prague, July 1988.

New Problems, Methods and Techniques in Quantum Field Theory and Statistical Mechanics. Mario G. Rasetti, Ed. World Scientific, Teaneck, NJ, 1990. viii, 222 pp., illus. \$48. Series on Advances in Statistical Mechanics, vol. 6.

Non-destructive Ion Beam Analysis of Surfaces. F. F. Komarov, M. A. Kumakhov, and I. S. Tashlykov. Gordon and Breach, New York, 1990. xiv, 231 pp., illus. \$140. Translated from the Russian edition (Minsk, 1987).

Physical Chemistry from Ostwald to Pauling. The Making of Science in America. John W. Servos. Princeton University Press, Princeton, NJ, 1990. xxiv, 402 pp., illus. \$49.95.

Phytoarchaeology. Robert R. Brooks and Dieter Johannes. Dioscorides, Portland, OR, 1990. 224 pp., illus., + plates. \$39.95. Historical, Ethno- and Economic Botany Series, vol. 3.

Population Matters. People, Resources, Environment, and Immigration. Julian L. Simon. Transaction, New Brunswick, NJ, 1989. xiv, 577 pp., illus. \$34.95.

Principles of Test Theories. Hoi K. Suen. Erlbaum, Hillsdale, NJ, 1990. viii, 236 pp., illus. \$39.95; paper, \$22.50.

Progress in Biomedical Polymers. Charles G. Gebelein and Richard L. Dunn, Eds. Plenum, New York, 1990. xii, 406 pp., illus. \$89.50. From a symposium, Los Angeles, CA, Sept. 1988.

Quark-Gluon Plasma. Rudolph C. Hwa, Ed. World Scientific, Teaneck, NJ, 1990. viii, 712 pp., illus. \$86; paper, \$48. Advanced Series on Directions in High Energy Physics, vol. 6.

Speculations. The Reality Club. John Brockman, Ed. Prentice Hall, New York, 1990. x, 269 pp. \$10.95. Reality Club Series, 1.