

original investigations reported upon, each chapter delves much more deeply into avian biology and provides a useful and often pace-setting synthesis of the field. The contributions to *Granivorous Birds* may be characterized as quantitative, multivariate, synthetic, and oriented toward systems and toward production (energetics).

Following a brief introduction to the project by Kendeigh and Pinowski, R. F. Johnston and W. J. Klitz summarize the evolution, genetics, and morphological variation of the house sparrow. Over its introduced range, the house sparrow exhibits considerable developmental and evolutionary plasticity. In chapter 3, M. I. Dyer, Pinowski, and B. Pinowska provide a detailed, well-structured analysis of geographic variation in the demography of the house and tree sparrows and several North American Icteridae (blackbirds and grackles). Here one begins to realize the extent of comparative data on these birds. Chapter 4, by Pinowski and A. Myrcha, summarizes data on the production of biomass, primarily egg production and growth of the young. Chapter 5, by Kendeigh, V. R. Dol'nik, and V. M. Gavrilov, thoroughly synthesizes much of avian energetics. The chapter is particularly useful because its viewpoint, that of production, complements other recent, lengthy reviews of the subject. In chapter 6, J. A. Wiens and Dyer combine the principles and findings of avian energetics with data on population dynamics and productivity. The result is a systems model of the seasonal energy demands, hence food consumption, of *Passer* in various localities. Chapter 7, by Dyer and P. Ward, addresses the problem of pest management. The authors properly place management in economic and environmental contexts and push for continued research of the sort reported in *Granivorous Birds*. Finally, in chapter 8, Wiens and Johnston search for a common thread of adaptation in the fabric of granivory and, failing to find one, conclude that "different species or species complexes have attained [pest status] in different ways, through different adaptive correlates of granivory." The book concludes with a brief epilogue by Kendeigh, Wiens, and Pinowski, several appendices of tabulated data on populations, breeding, and metabolism, 46 pages of references, and a good index.

Close examination of *Granivorous Birds* will reveal to every reader the shortcomings, omissions, and uncritically accepted and improperly or inadequately analyzed data that inevitably creep into such an ambitious, far-reach-

ing book. Nonetheless, *Granivorous Birds* offers information and ideas that will greatly reward anyone interested in population dynamics, energetics, production, and pest management.

ROBERT E. RICKLEFS

Department of Biology,
University of Pennsylvania,
Philadelphia 19104

Unicellular Eukaryotes

The Biology of Diatoms. DIETRICH WERNER, Ed. University of California Press, Berkeley, 1977. x, 498 pp., illus. \$32.50. Botanical Monographs, vol. 13.

The Biology of Diatoms follows the *Biology of Blue-Green Algae* (which was volume 9) in the series Botanical Monographs. The book deals with one of the most important groups of unicellular eukaryotic algae. It will inform researchers and advanced students of diatoms about work complementary to their own and may stimulate collaboration between workers in different fields. Several excellent contributions provide an exhaustive and critical review of current knowledge, often identifying unresolved problems. Most of the 12 contributions, particularly those with an ecological orientation, emphasize the importance of research at the species level and the great functional diversity diatoms exhibit. In contrast, the structural diversity of diatoms is inadequately represented. The book is also poorly and insufficiently illustrated. Numerous references (over 1600 in all) are listed with the corresponding chapters.

Werner introduces the book briefly and presents three alternative systematic outlines with no evaluation. The fine structure of diatom tests is illustrated by only a few photographs and hardly any text. The account of cellular fine structure by E. L. Duke and B. E. F. Reimann, though it lacks sufficient illustration, is comprehensive and well introduced and contains original and stimulating ideas. It should have been placed at the beginning of the book. R. W. Eppley compares various culturing methods, and Werner discusses various aspects of the metabolism and biochemistry of silica. Photosynthesis is treated briefly by E. G. Jørgensen, with discussion of pigments and temperature effects. J. A. Hellebust and J. Lewin deal comprehensively with diatom heterotrophy and discuss its ecological implications. The biochemical composition of diatoms is reviewed by W. M. Darley, their motility by M. A. Harper, and their

sexuality by G. Drebes. R. Patrick in the treatment of the ecology of freshwater diatoms emphasizes their diversity and their value as indicators in studies of water pollution. C. D. McIntire and W. W. Moore tabulate the literature on regional distribution of benthic marine diatoms and discuss the use of computer and multivariate analysis for diatom assemblages. The last contribution in the book, by R. R. L. Guillard and P. Kilham, is also the longest and most interesting. It raises and discusses many fundamental questions, relates plankton diatoms to the sediment record, and provides a comprehensive review of the distribution of planktonic diatoms in the world's oceans (citing over 400 references). Indexes of subjects and species are appended to the book.

STJEPKO GOLUBIC

Department of Biology,
Boston University,
Boston, Massachusetts 02215

Books Received and Book Order Service

Books Received and the Book Order Service will be combined in issues in which there is a Reader's Service Card. To order any of the Book Order Service books, circle the corresponding number on the Readers' Service Card (pages 118A and 214A); the participating publisher(s) will ship the title(s) ordered and send you a bill. Where no Reader's Service number is given, the publisher is not participating in the Book Order Service; send your order and check directly to the publisher.

Advances in Human Genetics. Vol. 8. Harry Harris and Kurt Hirschhorn, Eds. Plenum, New York, 1977. xiv, 446 pp., illus. \$35.

Alcohol and the Liver. Proceedings of a symposium, Toronto, May 1976. M. M. Fisher and J. G. Rankin, Eds. Plenum, New York, 1977. x, 406 pp., illus. \$39.50. Hepatology, vol. 3.

Algebraic Number Theory. Robert L. Long. Dekker, New York, 1977. xii, 192 pp. \$18.50. Pure and Applied Mathematics, 41.

Amorphous Magnetism II. Proceedings of a symposium, Troy, N.Y., Aug. 1976. R. A. Levy and R. Hasegawa, Eds. Plenum, New York, 1977. xii, 680 pp., illus. \$59.50.

Analytical and Quantitative Methods in Microscopy. Papers from a symposium. G. A. Meek and H. Y. Elder, Eds. Cambridge University Press, New York, 1977. viii, 276 pp., illus. Cloth, \$24.95; paper, \$8.50. Society for Experimental Biology Seminar Series, 3.

Annual Review of Anthropology. Vol. 6. Bernard J. Siegel, Alan R. Beals, and Stephen A. Tyler, Eds. Annual Reviews, Palo Alto, Calif., 1977. viii, 604 pp. \$17.

Anxiety, Learning, and Instruction. Joan E. Sieber, Harold F. O'Neil, Jr., and Sigmund Tobias. Erlbaum, Hillsdale, N.J., 1977 (distributor, Halsted [Wiley], New York). x, 262 pp. \$16.50.

(Continued on page 216)

Does your glassware washer leave hidden contamination ?

There are just two kinds of laboratory glassware washers.

Most makes are "dump and fill" like the home dishwasher. This means that the same plumbing is used for pre-wash, detergent and rinse cycles, with their inevitable residual contamination from one cycle to another.

The other kind of laboratory washer is the Heinicke. Dr. Kurt Heinicke knew that the exacting cleanliness requirements of the laboratory demanded a glassware washer that was free of this contaminant backwash from each preceding cycle.

He decided that the answer must lie in separate plumbing for each cycle. He invented and patented the famous Heinicke washer. Its

three separate plumbing systems eliminated cross contamination entirely. And to insure even distribution of the water over and inside every test tube, beaker and pipette from both top and bottom, he conceived the moving jet spray, with its three separate units for the pulsating wash, rinse and final rinse cycles.

Today Dr. Heinicke's washer still stands alone. No other washer meets the meticulous criteria of the lab like the Heinicke.

Find out about it for yourself. Call or write.



**Heinicke
Instruments
Company**

3000 Taft Street
Hollywood, Florida 33021
Phone 1-800-327-9783
or (305) 987-6101

If you should ever have an equipment breakdown...
**a Heinicke Minute Man will be on his
way to you in 48 hours!**

You'll seldom need the Minute Man service, because Heinicke and Napco instruments are built to work. But if you do, just dial toll-free 800-327-9783.

BOOKS RECEIVED AND

BOOK ORDER SERVICE

(Continued from page 196)

Applied Mineral Exploration with Special Reference to Uranium. Robert V. Bailey and Milton O. Childers. Westview Press, Boulder, 1977. xx, 542 pp., illus. \$65.

Biological Oceanographic Processes. Timothy R. Parsons, Masayuki Takahashi, and Barry Hargrave. Pergamon, New York, ed. 2, 1977. xii, 332 pp., illus. Paper, \$15.90. Pergamon International Library. *To order this book circle No. 376 on Readers' Service Card*

A Catalog of the Mosquitoes of the World. (Diptera: Culicidae). Kenneth L. Knight and Alan Stone. Entomological Society of America, College Park, Md., ed. 2, 1977. xii, 612 pp. \$12.50. Thomas Say Foundation, vol. 6.

Cells, Molecules and Temperature. Conformational Flexibility of Macromolecules and Ecological Adaptation. V. Ya. Alexandrov. Translated from the Russian by V. A. Bernstam. Springer-Verlag, New York, 1977. xii, 330 pp., illus. \$39.60. Ecological Studies, vol. 21. *To order this book circle No. 377 on Readers' Service Card*

A Change in the Weather. Fitzhugh Green. Norton, New York, 1977. 248 pp., illus. \$9.95.

Chemical and Engineering Thermodynamics. Stanley I. Sandler. Wiley, New York, 1977. xx, 588 pp., illus. \$21.

Chemical Engineering. J. M. Coulson and J. F. Richardson. Vol. 4, Solutions to the Problems in *Chemical Engineering, Volume 1*. J. R. Backhurst and J. H. Harker. Pergamon, New York, 1977. viii, 208 pp. \$15.50. *To order this book circle No. 378 on Readers' Service Card*

Cross-National Comparative Survey Research. Theory and Practice. Proceedings of a conference, Budapest, July 1972. Alexander Szalai and Riccardo Petrella, Eds. Pergamon, New York, 1977. xviii, 498 pp. \$28. *To order this book circle No. 379 on Readers' Service Card*

Deeper Pathways in High-Energy Physics. Proceedings of a meeting: Coral Gables, Fla., Jan. 1977. Arnold Perlmutter and Linda F. Scott, Eds. Plenum, New York, 1977. viii, 744 pp., illus. \$59.50. Studies in the Natural Sciences, vol. 12.

Dimensional Instability. An Introduction. Charles W. Marshall and Robert E. Maringer. Pergamon, New York, 1977. xviii, 324 pp., illus. \$25. Series on Materials Science and Technology, vol. 22. Pergamon International Library. *To order this book circle No. 381 on Readers' Service Card*

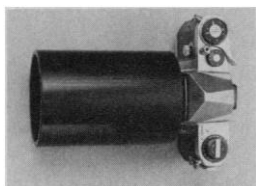
Dynamics of Rotors. Papers from a symposium, Varanasi, India, Dec. 1975. J. S. Rao, Ed. Pergamon, New York, 1977. vi + pp. 259-372, illus. Paper, \$15. *Mechanism and Machine Theory*, vol. 12, no. 4. *To order this book circle No. 380 on Readers' Service Card*

Dynamics of Solids and Liquids by Neutron Scattering. S. W. Lovesey and T. Springer, Eds. Springer-Verlag, New York, 1977. xii, 380 pp., illus. \$31.70. Topics in Current Physics, vol. 3. *To order this book circle No. 382 on Readers' Service Card*

Education for Traditional Food Procurement in the Orinoco Delta. Kenneth Ruddle and Ray Chesterfield. University of California Press, Berkeley, 1977. x, 172 pp. + plates. Paper, \$9.50. Ibero-Americana: 53.

Energy Conservation: A National Forum.

HIGH SPEED LENS EXTREME ULTRAVIOLET



THE LYMAN-ALPHA I LENS

Spectral Transmission: 1000 Å° to I.R.
(200 Å on special order)
200 mm F/2.8

Type: Computer Derived Reflective

Weight: 14 ounces **Length:** 5 inches

Focusing Range: 12 inches to infinity

Angular Field: 12° (linear 43 mm)

Resolution: @ 12 inches 60 L/mm
@ infinity 25 L/mm

Back Focus: 2 inches

Base Price: \$395.00

Adapters available for most 35 mm SLR cameras, 16 mm movie, TV cameras, image intensifiers, photo detectors etc.

Other Nye Optical lenses available—
from 60 mm to 1000 mm.
Catalog available upon request

NYE OPTICAL CO.

8781 Troy Street
Spring Valley, Calif. 92077
Phone 714/466-2200

Circle No. 267 on Readers' Service Card

Now Available:

the tool for
selecting all your
science books

Science Book List Supplement 1970-1977

Retail: \$16.50

AAAS Members: \$15.00

American Association for the
Advancement of Science



Dept. C-6
1515 Mass. Ave., N.W.
Washington, D.C. 20005

Proceedings of a symposium, Fort Lauderdale, Fla., Dec. 1975. T. Nejat Veziroğlu, Ed. University of Miami Clean Energy Research Institute, Miami, 1977 (distributor, Pergamon, New York). xii, 680 pp., illus. Paper, \$65. *To order this book circle No. 383 on Readers' Service Card*

Group Theory for Social Workers. An Introduction. Ken Heap. Translated from the Norwegian edition (Oslo). Pergamon, New York, 1977. xiv, 252 pp., illus. \$15. Social Work Series. Pergamon International Library. *To order this book circle No. 384 on Readers' Service Card*

Handbook of Dam Engineering. Alfred R. Golzé, Ed. Van Nostrand Reinhold, New York, 1977. xiv, 794 pp., illus. \$54.50. *To order this book circle No. 385 on Readers' Service Card*

Handbook of Solid Waste Management. David Gordon Wilson, Ed. Van Nostrand Reinhold, New York, 1977. x, 752 pp., illus. \$39.50. *To order this book circle No. 386 on Readers' Service Card*

International Symposium on Solid Ionic and Ionic-Electronic Conductors. Rome, Sept. 1976. R. D. Armstrong, Ed. Pergamon, New York, 1977. xii + pp. 677-810, illus. \$20. Also published as *Electrochimica Acta*, vol. 22, no. 7. *To order this book circle No. 387 on Readers' Service Card*

An Introduction to Chemical Engineering Kinetics and Reactor Design. Charles G. Hill, Jr. Wiley, New York, 1977. xiv, 594 pp., illus. \$22.95.

An Introduction to Organic Chemistry. William H. Reusch. Holden-Day, San Francisco, 1977. xxviii, 818 pp., illus. \$19.95.

Kreskin's Mind Power Book. Kreskin. McGraw-Hill, New York, 1977. xii, 212 pp. \$8.95.

Land Policy and Urban Growth. Haim Darin-Drabkin. Pergamon, New York, 1977. viii, 444 pp., illus. \$16.50. Urban and Regional Planning Series, vol. 16. *To order this book circle No. 388 on Readers' Service Card*

Large Engineering Systems. Proceedings of a symposium, Winnipeg, Canada, Aug. 1976. Alvin Wexler, Ed. Pergamon, New York, 1977. xii, 710 pp., illus. \$60. *To order this book circle No. 389 on Readers' Service Card*

Lectures on Selected Topics in Statistical Mechanics. D. ter Haar. Pergamon, New York, 1977. viii, 124 pp. \$15. International Series in Natural Philosophy, vol. 92. *To order this book circle No. 390 on Readers' Service Card*

Neurometrics. Clinical Applications of Quantitative Electrophysiology. E. Roy John. Erlbaum, Hillsdale, N.J., 1977 (distributor, Halsted [Wiley], New York). xxii, 292 pp., illus. \$19.95. Functional Neuroscience, vol. 2.

Neuropeptide Influences on the Brain and Behavior. Papers from a conference. Lyle H. Miller, Curt A. Sandman, and Abba J. Kastin, Eds. Raven, New York, 1977. xii, 298 pp., illus. \$25. Advances in Biochemical Psychopharmacology, vol. 17.

Neurophysics. Alwyn C. Scott. Wiley-Interscience, New York, 1977. xii, 340 pp., illus. \$24.95.

A New Era in Space Transportation. Proceedings of a congress, Anaheim, Calif., Oct. 1976. L. G. Napolitano, Ed. Pergamon, New York, 1977. viii, 452 pp., illus. \$50. *To order this book circle No. 391 on Readers' Service Card*

The Nonclassical Ion Problem. Herbert C. Brown with comments by Paul von R. Schleyer. Plenum, New York, 1977. xxii, 302 pp., illus. \$24.95.

Organophosphorus Pesticides. Criteria

(Dose/Effect Relationships) for Organophosphorus Pesticides. R. Derache. Published for the Commission of the European Communities by Pergamon, New York, 1977. xii, 200 pp., illus. Paper, \$19.50. *To order this book circle No. 401 on Readers' Service Card*

Pensions and Industrial Relations. A Practical Guide for All Involved in Pensions. Harry Lucas. Pergamon, New York, 1977. xiv, 192 pp. \$15. *To order this book circle No. 392 on Readers' Service Card*

Pesticide Handbook-Entoma. 1977-78. Robert L. Caswell, Ed. Entomological Society of America, College Park, Md., ed. 27, 1977. 248 pp. Cloth, \$9; paper, \$7.50.

Photosynthesis I. Photosynthetic Electron Transport and Photophosphorylation. A. Trebst and M. Avron, Eds. Springer-Verlag, New York, 1977. xxiv, 732 pp., illus. \$89.50. Encyclopedia of Plant Physiology, New Series, vol. 5. *To order this book circle No. 402 on Readers' Service Card*

Physiology of the Heart. Arnold M. Katz. Raven, New York, 1977. xiv, 450 pp., illus. \$24.50.

Point Mapping Stability. Jacques Bernussou with the collaboration of J. L. Abatut, J. P. Babary, A. Giraud, Liu Hsu, and F. Roubelat. Pergamon, New York, 1977. xii, 104 pp., illus. \$12.50. *To order this book circle No. 394 on Readers' Service Card*

The Politics of Policy Making in America. Five Case Studies. David A. Caputo, Ed. Freeman, San Francisco, 1977. xiv, 90 pp., illus. Cloth, \$11.95; paper, \$5.95.

Pollutant Effects on Marine Organisms. Proceedings of a workshop, College Station, Tex., May 1976. Lexington (Heath), Lexington, Mass., 1977. xii, 214 pp., illus. \$16.

Portrait of Nature. The World as Seen by Modern Science. Alan Cottrell. Scribner, New York, 1977. 236 pp., illus. Paper, \$4.95. Reprint of the 1975 edition.

Pottery and Early Commerce. Characterization and Trade in Roman and Later Ceramics. D. P. S. Peacock, Ed. Academic Press, New York, 1977. xvi, 340 pp., illus. \$25.

Problems in Metallurgical Thermodynamics and Kinetics. G. S. Upadhyaya and R. K. Dube. Pergamon, New York, 1977. xvi, 252 pp. Cloth, \$15; paper, \$7.50. Materials Science and Technology, vol. 25. *To order this book circle No. 393 on Readers' Service Card*

Progress in Ape Research. Proceedings of a conference, 1976. Geoffrey H. Bourne, Ed. Academic Press, New York, 1977. xiv, 300 pp., illus. \$16.

Protein Metabolism of the Brain. A. V. Paladini, Ya. V. Belik, and N. M. Polyakova. Translated from the Russian edition (Kiev, 1972) by Basil Haigh. Abel Lajtha, Transl. Ed. Consultants Bureau (Plenum), New York, 1977. xii, 336 pp., illus. \$35. Studies in Soviet Science.

Proteins of Iron Metabolism. Papers from a meeting, New York, Apr. 1977. Elmer B. Brown, Philip Aisen, Jack Fielding, and Robert R. Crichton, Eds. Grune and Stratton, New York, 1977. xxxiv, 444 pp., illus. \$35. *To order this book circle No. 405 on Readers' Service Card*

Psychology in Australia. Achievements and Prospects. Mary Nixon and Ronald Taft. Pergamon, New York, 1977. xii, 318 pp. \$16. *To order this book circle No. 395 on Readers' Service Card*

Psychology of Learning. Readings. William L. Mikulas, Ed. Nelson-Hall, Chicago, 1977. xvi, 592 pp., illus. \$19.95. *To order this book circle No. 396 on Readers' Service Card*

Pulmonary Function Testing. Reuben M.

Announcing the 3rd AAAS
Colloquium on

Research & Development in the Federal Budget and in Industry

June 20-21, 1978

The third annual AAAS report on R&D in the federal budget for FY 1979 and including a special section on R&D in industry and its impact on the economy will be the subject of an

**AAAS
Science & Public Policy
Colloquium
Washington, D.C.
June 20 and 21, 1978**

The AAAS R&D analysis project, sponsored by the AAAS Committee on Science and Public Policy and initiated in 1976, has resulted in two well-received books on research and development in the federal budgets for FY 1977 and FY 1978, and two highly successful colloquia in June of 1976 and 1977, attended by 200-250 AAAS members, government officials, and others. The June 20-21, 1978 colloquium will offer a forum for constructive discussion of current issues in federal and industry R&D with officials of the Executive and Legislative branches and from industry and universities. **Research & Development: AAAS Report III** by Willis H. Shapley and Don I. Phillips will be available in book form for the June 1978 colloquium.*

Specific topics this year will be the impact of the first complete Carter budget on R&D, trends and problems of R&D in industry, and the impact of R&D on the economy. For information and reservations, write to

**Ms. Patricia S. Curlin
AAAS Office of Public
Sector Programs
1776 Massachusetts Ave., N.W.
Washington, D.C. 20036**

*Research and Development in the Federal Budget: FY 1977 and Research and Development in the Federal Budget: FY 1978 (\$5.50 each; AAAS members, \$4.95) and the 1976 and 1977 Colloquium Proceedings (\$5.25 each; AAAS members, \$4.75) may be purchased from AAAS.

Cherniack. Saunders, Philadelphia, 1977. vi, 292 pp., illus. Spiral bound, \$8.50.

Pupillometry. The Psychology of the Pupillary Response. Michel Pierre Janisse. Hemisphere, Washington, D.C., and Halsted (Wiley), New York, 1977. xiv, 204 pp., illus. \$22.50. The Series in Clinical and Community Psychology.

Recent Advances in Cancer Treatment. Papers from a symposium, Brussels, Sept. 1976. Henri J. Tagnon and Maurice J. Staquet, Eds. Raven, New York, 1977. xvi, 360 pp., illus. \$26. Monograph Series of the European Organization for Research on Treatment of Cancer, vol. 3.

The Rise of American Philosophy. Cambridge, Massachusetts, 1860-1930. Bruce Kuklick. Yale University Press, New Haven, Conn., 1977. xxviii, 674 pp., illus. \$17.95.

The Science and Practice of Welding. A. C. Davies. Cambridge University Press, New York, ed. 7, 1977. xiv, 714 pp., illus. \$13.95.

Science with Young Children. Bess-Gene Holt. National Association for the Education of Young Children, Washington, D.C., 1977. viii, 136 pp., illus. Paper, \$3.25. To order this book circle No. 398 on Readers' Service Card

Sedimentary Petrology. W. v. Engelhardt, H. Füchtbauer, and G. Müller. Part 3, The Origin of Sediments and Sedimentary Rocks. Wolf v. Engelhardt. Translated from the German edition (Stuttgart, 1973) by William D. Johns. Schweizerbart'sche Verlagsbuchhandlung, Stuttgart, and Halsted (Wiley), New York, 1977. viii, 360 pp., illus. \$49.50.

Selective Heat Sensitivity of Cancer Cells. A. Rossi-Fanelli, R. Cavaliere, B. Mondovi, and G. Moricca, Eds. Springer-Verlag, New York, 1977. xii, 190 pp., illus. \$26.40. Recent Results in Cancer Research, vol. 59. To order this book circle No. 397 on Readers' Service Card

Shock. Pathology, Metabolism, Shock Cell, Treatment. Iuliu Şuteu, Traian Bândilă, Atanasie Căfriţă, Alexandru I. Bucur, and Vasile Cădea. Translation and revision of the Romanian edition (Bucharest, 1973). Abacus Press, Tunbridge Wells, Kent, England, 1976 (U.S. distributor, ISBS, Forest Grove, Ore.). xxiv, 448 pp., illus. + plates. \$49. To order this book circle No. 400 on Readers' Service Card

Social Policy and Its Administration. A Survey of the Australian Literature, 1950-1975. Joanna Monie and Adrienne Wise. Pergamon, New York, 1977. xvi, 594 pp. \$28.50. To order this book circle No. 403 on Readers' Service Card

The Solar Planets. V. A. Firsoff. David and Charles, Newton Abbot, England, and Crane, Russak, New York, 1977. 184 pp., illus. \$10.50.

Spatial Organization of Cerebral Processes. M. N. Livanov. Translated from the Russian edition (Moscow, 1973). Halsted (Wiley), New York, and Israel Program for Scientific Translations, Jerusalem, 1977. vi, 182 pp., illus. \$25.

The Thames Transformed. London's River and Its Waterfowl. Jeffrey Harrison and Peter Grant. Photographs by Pamela Harrison. Deutsch, London, 1976 (U.S. distributor, Transatlantic Arts, Levittown, N.Y.). 240 pp. + plates. \$15.

Two-Phase Flow and Heat Transfer Symposium-Workshop. Fort Lauderdale, Fla., Oct. 1976. T. Nejat Veziroğlu, Ed. Pergamon, New York, 1977. xii, 318 pp., illus. Paper, \$35. To order this book circle No. 399 on Readers' Service Card

Personnel Placement

Personnel advertising is accepted only with the understanding that the advertiser does not discriminate among applicants on the basis of race, sex, religion, age, color, national origin, or handicap.

Positions Wanted: 40¢ per word; \$4 extra for use of box number. \$10 minimum charge, per insertion. Prepayment required. This rate is available only to individuals; personnel agencies, companies, colleges, and universities take display rate for all advertising.

Display (Positions Open, Market Place, and so forth): \$5.80 per millimeter; \$145 minimum charge, per insertion (covers 25 millimeters on single column; 25 millimeters equals 10 lines of 50 spaces per line). No charge for use of box number. No agency commission for ads under 103 millimeters (4 inches). No cash discount. Prepayment required for foreign advertising. Purchase orders and billing information required for all other ads.

SCIENCE is published weekly, on Friday. Copy must be received in writing by Wednesday, 3½ weeks before Friday issue date required. Send copy for all positions wanted ads and display ads under 5 inches to:

**SCIENCE, Room 207
1515 Massachusetts Ave., NW
Washington, D.C. 20005
Telephone: 202-467-4456**

Send copy for display ads, 1/6 page and larger, to:

**Scherago Associates, Inc.
1515 Broadway
New York, N.Y. 10036
Telephone: 212-730-1050**

Blind ad replies should be addressed as follows:

**Box (give number)
SCIENCE
1515 Massachusetts Ave., NW
Washington, D.C. 20005**

POSITIONS WANTED

Chemist. M.S. Experience in analytical toxicology, marine and analytical chemistry. Broad background in AA, GC, GC/MS, and electrochemistry. Seeking challenging position in government, university, or private firm, anywhere. Box 126, SCIENCE. 4/14, 28

Earth Scientist. Employment interests, credentials, and ice-sheet-tectonics synthesis are detailed in SUBDUE THE EARTH (Delacorte). R. F. Walworth, P.O. Box 11711. St. Petersburg, Fla. 33733. Telephone: 813-360-4947. 4/14, 21, 28; 5/5, 12, 19, 26; 6/2

Electron Microscopist/Vision Researcher: Ph.D. 1971. Looking for permanent research-teaching position, fall 1978 or 1979. Broad scientific experience: SEM/TEM/LM, shared EM facility, biomedical laser, interdisciplinary collaboration, comparative anatomy, physiology. Publications. Budget and personnel management. Interested in regional city of 350,000 or fewer. Box 130, SCIENCE. 4/14, 21

Natural Resource Statistician. Ph.D. 1975. Strong background in sample design, survey methodology, and data analysis. Five years of experience in natural resource and agriculture surveys with federal government. Experienced teacher. Sound programmer experienced in statistical packages. Seeking responsible position in survey organization collecting natural resource or agriculture information. Box 110, SCIENCE. X

Neurochemist. Ph.D. 1972. Expertise in glycolipids, synaptosomes, and neurotransmitters. Experience includes TLC, GC, HPLC, electrophoresis, enzymology, organic synthesis, methods development, supervision in research, clinical chemistry, and teaching. Desires growth position in research or research/teaching. Availability flexible. Box 127, SCIENCE. X

Pharmacologist. Ph.D. Postdoctoral, teaching, and research experience. Strong background in gastrointestinal and hepatic pharmacology, biological transport, and drug toxicity studies. Publications. Seeks industrial, government, or academic position. Box 128, SCIENCE. 4/14, 28

Radiation Biologist/Cancer Biologist. Ph.D. 1970. Expertise in DNA repair and DNA replication in human cells in culture (as well as in *E. coli*). Current research: hyperthermia and DNA repair in human cells. Seeking stable research position. Box 129, SCIENCE. X