Exchanges of water and electrolytes are much harder to study in fishes, chiefly because surfaces of exchange are more difficult to isolate and because handling disturbs their functions. If investigators could agree on two or three species for study, more rapid progress might be made. Available experiments show, however, that neurohypophysis and thyroid gland govern processes of osmoregulation. A large thyroid aids in retention of chloride and the elimination of water and, thus, enables fishes such as trout to survive in hypotonic media. By comparison, terrestrial animals need less thyroid activity for osmoregulation and use their smaller thyroid secretions for other tar-

At present, endocrine glands and their products appear to be qualitatively the same in all vertebrates. But the targets upon which they expend themselves show great variety. Thus, neurohypophysial activity favors water retention, regardless of the tissues that accomplish the retention—skin, gills, mesonephros, metanephros. "The internal medium remains constant in the vertebrate body, and it may be that there is no change of the hormonal mechanisms which conserve it, only of the tissues which effect its conservation."

E. H. Adolph

Department of Physiology, University of Rochester

Books Reviewed in

The Scientific Monthly, July

Stratigraphic Geology, M. Gignoux (Freeman). Reviewed by H. R. Gault.

Races and People, W. C. Boyd and I. Asimov (Abelard-Schuman). Reviewed by G. Hardin.

The Windward Road, A. Carr (Knopf). Reviewed by N. J. Berrill.

Proceedings of the UNESCO Symposium on Typhoons, 9-12 November 1954, Tokyo (Japanese National Commission for UNESCO). Reviewed by C. A. Palmer, Jr.

La Prospection de l'Uranium, Commissariat à l'Energie Atomique (Masson). Reviewed by E. W. Berry.

You and the Atom, G. Wendt (White-side and Morrow). Reviewed by B. C. Hendricks.

Elements of Quantitative Analysis, H. H. Willard, N. Howell, C. E. Bricker (Van Nostrand). Reviewed by M. G. Mellon.

Atom Harvest, L. Bertin (Secker & Warburg). Reviewed by R. A. Charpie.

Men, Rockets and Space Rats, L. Mallan (Messner). Reviewed by S. F. Singer.

The Gardener's Bug Book, C. Westcott (American Garden Guild and Doubleday).

Famous Problems and Other Monographs, P. Klein, W. F. Sheppard, P. A. MacMahon, L. J. Mordell (Chelsea). Reviewed by A. Rosenthal.

New Books

An Illustrated Catalogue of the Rothschild Collection of Fleas (Siphonaptera) in the British Museum (Natural History). With keys and short descriptions for the identification of families, genera, species and subspecies of the order. vol. II, Coptopsyllidae, Vermipsyllidae, Stephanocricidae, Ischnopsyllidae, Hypsophthalmidae and Xiphiopsyllidae. G. H. E. Hopkins and Miriam Rothschild. British Museum (Natural History) London, 1956. 477 pp. £6 6s.

Acridines. R. M. Acheson and L. E. Orgel. Interscience, New York, 1956. 409 pp. \$12.50.

Comprehensive Inorganic Chemistry. vol. 5. M. Gannon Sneed and Robert C. Brasted, Eds. pt. I, Nitrogen, Phosphorus, Arsenic, Antimony, and Bismuth, Harry H. Sisler; pt. II, Nonaqueous Chemistry. Alfred R. Pray. Van Nostrand, Princeton, N.J., 1956. 214 pp. \$5.

Creatures of the Deep Sea. Klaus Gunther and Kurt Deckert. Translated by E. W. Dickes. Scribner's, New York, 1956. 222 pp. \$3.95.

Opinions and Personality. M. Brewster Smith, Jerome S. Bruner, Robert W. White. Wiley, New York; Chapman & Hall, London, 1956. 294 pp.

Toward a Unified Theory of Human Behavior. Roy R. Grinker, Ed. Basic Books, New York, 1956. 375 pp. \$6.50.

Uranium and Other Miracle Metals. Fred Reinfeld. Sterling, New York, 1956. 128 pp. \$3.50.

Topology. E. M. Patterson. Oliver and Boyd, London; Interscience, New York, 1956. 128 pp. \$1.55.

Mental Hygiene. A survey of personality disorders and mental health. D. B. Klein. Holt, New York, rev. ed., 1956. 654 pp. \$6.75.

Computers. Their operation and applications. Edmund Callis Berkeley and Lawrence Wainwright. Reinhold, New York; Chapman & Hall, London, 1956. 366 pp. \$8.

The Art of the Aqualung. Robert Gruss. Translated by Richard Garnett. Philosophical Library, New York, 1956. 66 pp. \$2.75

Advances in Enzymology and Related Subjects of Biochemistry. vol. XVII. F. F. Nord, Ed. Interscience, New York, 1956. 556 pp. \$11.

Homological Algebra. Princeton Mathematical Ser. No. 19. Henri Cartan and Samuel Eilenberg. Princeton University Press, Princeton, N.J., 1956. 390 pp. \$7.50.

Reactor Shielding Design Manual. Theodore Rockwell III, Ed. Van Nostrand, Princeton, N.J., 1956. 472 pp. \$6.

How Time Is Measured. Peter Hood. Oxford University Press, Geoffrey Cumberlege, London, 1955. 64 pp. \$2.75.

Geochemistry of Iodine. Iodine in rocks, minerals and soils. Annotated bibliography 1825–1954. With review and tables. Chilean Iodine Educational Bureau, London, 1956. 150 pp.

Handbook of Amphibians and Reptiles of Kansas. Misc. Publ. No. 9. Hobart M. Smith. University of Kansas Museum of Natural History, Lawrence, ed. 2, 1956. 356 pp. Cloth, \$4; paper, \$1.50.

Miscellaneous Publications

(Inquiry concerning these publications should be addressed, not to Science, but to the publisher or agency sponsoring the publication.)

A Revision of the Genus Pselaptrichus Brendel (Coleoptera: Pselaphidae). Publ. in Entomology, vol. 11, No. 2. University of California Press, Berkeley, 1956. 42 pp. \$1.

Wind Trajectory Studies of the Movement of Polluted Air in the Los Angeles Basin. Rept. No. 13. Morris Neiburger, Nicholas A. Renzetti, Rita Tice. Air Pollution Foundation, Los Angeles, 1956. 74 pp. \$4.

Growth and Development of Dental and Skeletal Tissue—Clinical and Biological Aspects. Report of the Seventeenth Ross Pediatric Research Conference. Ross Laboratories, Columbus, Ohio, 1956. 80 pp.

The Six-Inch Water Tunnel at the St. Anthony Falls Hydraulic Laboratory and Its Experimental Use in Cavitation Design Studies. Paper presented at the National Physical Laboratory Symposium on Cavitation in Hydrodynamics, Teddington, Middlesex, England, 14–17 Sept. 1955. Tech. Paper No. 16, Ser. B. Lorenz G. Straub, John F. Ripken, Reuben M. Olson. St. Anthony Falls Hydraulic Laboratory, University of Minnesota, Minneapolis, 1956. 22 pp.

The Bukidnon of Mindanao. Fieldiana: Anthropology, vol. 46. Fay-Cooper Cole. 140 pp. \$4. A New Species of the Fossorial Mammal Arctoryctes from the Oligocene of Colorado. Fieldiana: Geology, vol. 10, No. 24. Charles A. Reed. 7 pp. \$0.15. Chicago Natural History Museum, Chicago, Ill., 1956.

Mass Spectrometer Researches. G. P. Barnard. National Physical Laboratory, London, 1956. 62 pp. 3s. 6d.

International Scientific Radio Union, Proceedings of the XIth General Assembly. Held in The Hague from 23 Aug. to 2 Sept. 1954. vol. X, pt. 2, Commission II on Radio and Troposphere. Secretary General of U.R.S.I., 42, rue des Minimes, Brussels, Belgium, 1956. 91 pp. \$2.

Study of Plastic Pipe for Potable Water Supplies. National Sanitation Foundation, University of Michigan, Ann Arbor, 1955. 90 pp. \$1.

The Microstructure of Starch Grains. Edith A. Roberts. The author, 17 Dearborn St., Salem, Mass., 1956. 50 pp.

Educational Exchanges. Aspects of the American experience. Report of a conference sponsored by the Committee on International Exchange of Persons of the Conference Board of Associated Research Councils. Held at Princeton, N.J., 2–4 Dec. 1954. National Academy of Sciences—National Research Council, Washington, D.C., 1956. 74 pp.

Civil Liberties in the United States. A guide to current problems and experiences. Robert E. Cushman. Cornell University Press, Ithaca, N.Y., 1956. 248 pp.

The Geography, Birds, and Mammals of the Perry River Region. Special Publ. No. 3. Harold-C. Hanson, Paul Queneau, Peter Scott. Arctic Institute of North America, Montreal 2, Quebec, Canada, 1956. 96 pp. \$2.