

A Science Service Publication Volume 124, No. 6, August 6, 1983

E.G. Sherburne Jr.
Joel Greenberg Editor
Dietrick E. Thomsen Senior Editor/
Physical Sciences
Joanne Silberner Managing Editor
Judy Klein Production/Design
Director
Wray Herbert Behavioral Sciences

Joan Arehart-Treichel Biomedicine
Linda Garmon Chemistry
Cheryl Simon Earth Sciences
Julie Ann Miller Life Sciences
Janet Raloff, Vars Peterson
Jonathan Eberhart Space Sciences

Wendy McCarren
Assistant to the Editor

Penny D. Sackett Science Writer Interns Sarah Steinberg

Jane M. Livermore Books
Donald R. Harless Business Manager

Scherago Associates Advertising Fred Dieffenbach, Sales Director 1515 Broadway, New York, N.Y. 10036

Copyright \* 1983 by Science Service, Inc., Editorial and Business Offices, 1719 N St., N.W., Washington, D.C. 20036. Republication of any portion of SCIENCE NEWS without written permission of the publisher is prohibited.

Subscription Department 231 West Center Street, Marion, Ohio 43302

Subscription rate: 1 yr., \$27.50; 2 yrs., \$47.50; 3 yrs., \$67.00. (Foreign postage \$5.00 additional per year.) Change of address: Four to six weeks' notice is required. Please state exactly how magazine is to be addressed. Include zip code. For new subscriptions only call (1) 800-247-2160. Printed in U.S.A. Second class postage paid at Washington, D.C. Title registered as trademark U.S. and Canadian Patent Offices. Published every Saturday by SCIENCE SERVICE, Inc. 1719 N St., N.W., Washington, D.C. 20036. (202-785-2255) ISSN 0036-8423

# **Books**

**Books** is an editorial service for readers' information. To order any book listed or any U.S. book in print please remit retail price, plus \$1.00 handling charge for each book, to **Book Order Service**, Science News, 1719 N Street, N.W., Washington, D.C. 20036. All books sent postpaid. Domestic orders only.

Antarctic Wildlife — Photographs by Eric Hosking, text by Bryan Sage. A book of magnificent color photographs of the fauna of Antarctica together with text telling of the history, general topography and ecology of the region. Chapters are devoted to penguins, albatrosses, other birds, seals and wildlife photography in the Antarctic. Facts on File, 1982, 160 p., color illus., \$22.95.

Building Underground: The Design and Construction Handbook for Earth-Sheltered Houses — Herb Wade. Offers homeowners, do-it-yourselfers and builders a wide selection of possibilities for creating energy efficient, attractive and comfortable new houses built underground. Covers the major elements involved with the design and construction of earth-sheltered homes. Rodale Pr, 1983, 289 p., illus., \$19.95, paper, \$14.95.

### This Week

84	Depression: Too Much Vigilance?
84	Elaborating the stress response
85	Atomic evaporation in liquid helium
85	Vapor method yields elusive metallic glass
85	'Major milestone' in laser weapons tests
86	Ozone: Selective force in plant evolution?
06	Cay assistable ations stated by aire

86 Sex switch stimulated by size

87 A U.S. space station: Plus or minus for planetary exploration?

87 Satellite hit by its own rocket

### **Research Notes**

92	Biomedicine
92	Environment
93	Chemistry
Q3	Farth Science

### **Articles**

88 Plant Stones

Cover: A newly developed stain reveals a microscopic silica body embedded in the surface cell of a rice leaf. These silica bodies, or phytoliths, remain behind in the soil after organic matter decays and may be used to identify plant species at archeological sites. (Photo: P. Dayanandan, The University of Michigan, Ann Arbor)

90 Toward Gene Therapy: Lesch-Nyhan Syndrome

# SCOKENANS

## **Departments**

83 Books

Science Service Institution for the public understanding of science founded 1921; a nonprofit corporation. Board of Trustees — *President*, Glenn T. Seaborg; *Vice President*, Gerald F. Tape; *Treasurer*, Willis Harlow Shapley; *Secretary*, Julius Duscha; Joseph W. Berg Jr.; Edward Bliss Jr.; Bowen C. Dees; David A. Goslin; Milton Harris; Hilleary F. Hoskinson; Elizabeth F. Neufeld; O.W. Riegel; H. Guyford Stever; John Troan; Deborah P. Wolfe.

Director: E. G. Sherburne Jr.; Assistant Director: Dorothy Schriver; Business Manager: Donald R. Harless.

Dangerous Secrets: Maladaptive Responses to Stress — Michael P. Weissberg. Provides a framework for an understanding of why people do what they do to each other and to themselves. Stress is an essential part of life and we all respond to stress in diverse ways that are sometimes adaptive, sometimes not. Dangerous behaviors are ubiquitous and can affect everyone. Those most frequently encountered are child abuse, incest, spouse abuse, suicide and alcoholism. Norton, 1983, 266 p., \$16.50.

**Death and the Regeneration of Life** — Maurice Bloch and Jonathan Parry, Eds. Focuses on the significance of symbols of fertility and rebirth in funeral rituals in various cultures around the world. Cambridge U Pr, 1982, 236 p., \$29.50, paper, \$8.95.

A Handbook for Inventors: How to Protect, Patent, Finance, Develop, Manufacture, and Market Your Ideas — Calvin D. MacCracken. Gives the information needed to get your invention to the money-making stage. Shows you how to do it yourself, where to find others to do it for you and how to work with them. Scribner, 1983, 211 p., illus., \$14.95.

Psychology's Sanction for Selfishness: The Error of Egoism in Theory and Therapy — Michael A. Wallach and Lise Wallach. A book about selfishness and psychology's role in promoting it. Suggests that "turning outward" constitutes an important contribution to the wellbeing of both individual and group. WH Freeman, 1983, 307 p., \$20, paper, \$9.95.

Scientists Confront Creationism — Laurie R. Godfrey, Ed. "There is no escape from the fundamental contradiction between evolution and creationism," says Richard Lewontin in the introduction. "They are irreconcilable world views." This collection of essays by 15 notable scientists sets forth the science that supports evolution. Norton, 1983, 324 p., illus., \$19.50.

Thomas Alva Edison: An American Myth — Wyn Wachhorst. Not a biography, this book chronicles the stages in the evolution of a cultural hero, analyzing the factors in Edison's life and character which transformed the man into myth. Its final concern is with the myth rather than the man, the image rather than the reality. Originally published in hardback in 1981. MIT Pr, 1983, 328 p., illus., paper, \$8.95.

AUGUST 6, 1983 83