

# SCIENCE NEWS®

The Weekly Newsmagazine of Science

A Science Service Publication  
Volume 127, No. 24, June 15, 1985

E. G. Sherburne Jr. Publisher  
Joel Greenberg Editor  
Dietrick E. Thomsen Senior Editor/  
Physical Sciences  
Laurie Jackson Phillips Managing Editor  
Wendy McCarren Production/Design  
Director  
Bruce Bower Behavioral Sciences  
Joanne Silberger Biomedicine  
Stefi Weisburd Earth Sciences  
Julie Ann Miller Life Sciences  
Janet Raloff, Policy/Technology  
Ivars Peterson  
Jonathan Eberhart Space Sciences  
Susan Welch Gilday Assistant to  
the Editor  
Science Writer Interns  
Jennie Dusheck,  
Judith Mathewson  
Jane M. Livermore Books  
Donald R. Harless Business Manager  
Scherago Associates Advertising  
Fred Dieffenbach, Sales Director  
1515 Broadway, New York, N.Y. 10036

Copyright © 1985 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 43305

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.

**Astronomy: A Step-by-Step Guide to the Night  
Sky** — Storm Dunlop. There is always some-  
thing to see in the skies, from meteors, auroras,  
planets and stars out to the distant galaxies.  
Everyone interested in astronomical observing  
must start out by learning to find their way  
around the sky. This book is designed to lead  
the beginner to discover the fascination of as-  
tronomy. Discusses the many things that can  
be observed with the naked eye and with  
binoculars. Describes various telescopes and  
making observations, drawings and photo-  
graphs. A separate section covers the celestial  
objects one can view. Macmillan, 1985, 192 p.,  
color/b&w illus., paper, \$8.95.

## This Week

- 372 Waiting for the Word from Uranus
- 372 Effective therapists foster 'alliances'
- 373 Birthday booms at Mt. St. Helens
- 373 Hunger pangs eased for some
- 374 Common ground for X, Y chromosomes
- 374 Hybrid grass roots out soil salinity
- 375 Cutting back on uranium enrichment
- 375 Eye surgery unpredictable
- 375 Cyclamate: A reappraisal
- 375 TMI-1 restart halted

## Research Notes

- 376 AAAS
- 377 Biomedicine
- 377 Space Sciences

## Articles

- 378 **Winners and Losers**  
Cover: It now takes a lot more than glass pipettes and other simple  
laboratory equipment to bring a product like a new drug to market.  
Six major engineering research centers have recently been  
established so that university researchers can help manufacturers  
solve the problems they encounter in coming up with new products.  
(Photo: Carol A. Foote)
- 379 **A Vaccine for All Seasons**



## Departments

### 371 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 Duschka; Joseph W. Berg Jr.; Edward Bliss Jr.; Bowen C. Dees; David A. Goslin;  
Milton Harris; Hilleary F. Hoskinson; 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.

**Birds of North America/Eastern Region: A  
Quick Identification Guide to Common Birds** —  
John Bull et al. Groups birds according to  
species, pattern and color, allowing quick  
identification. Contains color illustrations along  
with descriptions of the birds, information on  
habitats, geographical range and seasons of  
the year the birds appear. Macmillan, 1985,  
157 p., color/b&w illus., \$16.95, paper, \$9.95.

**In One Day: The Things Americans Do in a Day**  
— Tom Parker. Many fascinating statistics to  
peruse. For instance, Americans publish 125  
new books each day—15 on science and tech-  
nology—and they buy almost 5 million books.  
Americans use 450 billion gallons of water a day  
— enough to cover Manhattan to a depth of 96  
feet. Americans eat more than 400,000 bushels  
of bananas a day; the daily banana would  
measure 192 feet long and 43 feet in diameter.  
Americans daily discover at least one new  
species of insect and they jog 28 million miles—  
enough to travel every road in the U.S. seven  
times over. HM, 1984, 94 p., illus., paper, \$7.95.

**Insects and Flowers: The Biology of a Partner-  
ship** — Friedrich G. Barth, translated by M. A.  
Biederman-Thorson. The interaction between  
flowers and insects is the result of long co-  
evolution. This intimate partnership has altered  
both the flowers and the insects in many ways.  
The emphasis here is on the insects and how  
their relationship with flowers has affected not  
only the structure and function of their collect-  
ing organs but also their sensory faculties,  
their behavior and even such complex abilities  
as learning. Beautifully illustrated with black-  
and-white drawings and color plates. Prince-  
ton U Pr, 1985, 297 p., color/b&w illus., \$35.

**Rocks & Minerals** — Pat Bell and David Wright.  
This beautifully illustrated field guide is in-  
tended to aid in the collection and identifica-  
tion of rocks and minerals, and also help the  
user understand the landscape in order to re-  
late the underlying rocks to the landforms.  
Macmillan, 1985, 192 p., color/b&w illus., pa-  
per, \$8.95.

JUNE 15, 1985

371