

The Weekly Newsmagazine of Science

A Science Service Publication Volume 127, No. 15, April 13, 1985

E.G. Sherburne Jr. Joel Greenberg Dietrick E. Thomsen

Laurie Jackson Phillips

Wendy McCarren

Publisher Editor Senior Editor/ Physical Sciences Managing Editor Production/Design

Bruce Bower Joanne Silberner Stefi Weisburd Julie Ann Miller Janet Raloff, Ivars Peterson Jonathan Eberhart

Susan Welch

Behavioral Sciences Biomedicine Earth Sciences Life Sciences Policy/Technology

Space Sciences Assistant to the Editor Science Writer Intern

Dawn D. Bennett Jane M. Livermore

Books Business Manager

Donald R. Harless Advertising Scherago Associates 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) ISN 0036-8423

This Week

228 Killing with Kindness: Trees and Excess Nitrogen

228 Parkfield quake prediction certified 229 Cancer phototherapy: Illuminating blood 229 Twenty-five years of weather satellites

229 Kudos for clot buster 229 **IUD-infertility link**

Star Wars: Lasers can guide electrons 230

230 As the world turns, time flies

231 Encouraging efforts to kick cocaine

231 PAHlution in interstellar space

231 Mysteries surround infant brain damage

Research Notes

237 Biomedicine 237 Paleontology

Articles

232 A Celebration of Bones

Cover: A new museum exhibit has opened in New York to commemorate S. Harmsted Chubb, who introduced anatomical accuracy into the preparation of museum skeletons. Chubb went to great lengths to determine posture in moseum sciences. Tubb went the century, he dangles precariously from the roof of the American Museum of Natural History to photograph a racehorse speeding below. (Photo courtesy of the American Museum of Natural History)

234 Self-Reversing Minerals Make a Comeback



Departments

227 Letters 236 **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; 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.

Letters

Depression, immunity and cancer

Steven J. Schleifer asks whether depression leads to changes in immunity or altered immunity is a trait of depressives ("Severe Depression Depresses Immunity," SN: 2/16/85, p. 100). When my father became ill with cancer for the second time in August 1982, and it became clear he would die, my mother became severely depressed; by June 1983 she was dead of cancer also. To me this was particularly significant because she had had a double radical mastectomy in 1976, and had been clear of cancer since that date, two years in excess of the five-year milestone. She could not see any reason to live without my Dad, and by November 1982, three months after Dad's diagnosis, her breast cancer had already reappeared.

Long before reading B. Bower's article, I had concluded that her immune system had kept the disease in check without treatment for seven years, but that her depression broke down her immunities, resulting in her death. Edmund T. Anderson IV Midland, Tex.

Fat findings no surprise

The idea that a high-fat diet causes obesity faster than a low-fat diet with the same caloric content ("Fat rats have rich diet to blame," SN: 3/9/85, p. 153) is not surprising to anyone who has tried to lose weight. Nor should it be surprising from an evolutionary viewpoint. Mammals first began to appear when reptiles had already filled most of the ecological niches available. Food was scarce, or at least the object of strong competition, for those first mammals. It would be a great advantage if fat could be stored more efficiently for warmth and energy when it was plentiful. This would sustain these creatures through the "lean" times when fat was available.

> Wayne Wyrick Oklahoma City, Okla.

What price success?

M.D. Conley's assertion that "the future for nuclear power clearly lies in the hands of waste disposal researchers" (Letters, SN: 3/9/85, p. 147) cannot go unchallenged. It is not enough that this method of power generation may someday have a proven way to dispose of its garbage. It must also be economically viable.

As energy expert Amory Lovins and others have often pointed out, new power plants of various types must economically compete with efficiency improvements, not just with each other. Energy users simply will not buy more electricity from any source than they can afford to, and as power costs keep escalating, efficiency improvements will become better and better buys.

Perhaps nuclear power will succeed someday - at bringing us abundant power we will not need, at prices we will not pay. What then?

David Spicer Canton, N.C.

227 **APRIL 13, 1985**