

Science Service Publication Volume 143, No. 2, January 9, 1993

Alfred Scott McLaren Patrick Young Laurie Jackson Vaughan Janice Rickerich

Publisher Editor Managing Editor Production/Design

Blair Burns Potter Associate Editor Janet Raloff Ron Cowen

Senior Editor Environment/Policy Astronomy Behavioral Sciences

Richard Monastersky Carol Ezzell, Kathy A. Fackelmann Ivars Peterson Larry Norland Daniel Pendick Cait Anthony

Donald R. Harless

Bruce Bower

Elizabeth Pennisi

Chemistry/ Materials Science Earth Sciences Life Sciences/ Biomedicine Mathematics/Physics Editorial Assistant Science Writer Intern Books/Resource Manager Advertising/Business Manager

SCIENCE NEWS (ISSN 0036-8423) is published SCIENCE NEWS (ISSN 0036-8423) is published weekly on Saturday, except the last week in December, for \$39.50 for 1 year or \$68.00 for 2 years (foreign postage \$6.00 additional per year) by Science Service, Inc., 1719 N Street, N.W., Washington, DC 20036. Second-class postage paid at Washington, DC, and additional mailing office. POSTMASTER: Send address changes to Science News, PO. Box 1925, Marion, OH 43305. Change of address: Four to six weeks' notice is required — old and new addresses, including zip codes must be provided. including zip codes, must be provided.

Copyright © 1992 by Science Service, Inc. Title registered as trademark U.S. and Canadian Patent Offices. Printed in U.S.A.

Editorial and Business Offices: 1719 N St., N.W., Washington, DC 20036 (202-785-2255) Republication of any portion of SCIENCE News without written permission of the publisher is prohibited.

Subscription Department: PO. Box 1925, Marion, OH 43305 For new subscriptions only, call 1-800-247-2160. For customer service, call 1-800-347-6969.

This Week

20 ROSAT Data Hint at a Closed Universe 20 AIDS codiscoverer censured for misconduct

21 Preventing AIDS pneumonia

21 Cyclosporin-protein complex controls genes 22 Kinked cable crimps Dante's Erebus debut

22 Ancient figurine lifts horses' profile

23 Tunguska: The explosion of a stony asteroid 23 Dietary fat predicts breast cancer's course

Research Notes

27 Biology Behavior 28 28 Biomedicine 30 Biomedicine 31 **Physics**

31 Science & Society

Articles

24 Space '93

> Cover: Using a water tank to simulate weightlessness, astronauts practice maneuvers for repairing and replacing components on the Hubble Space Telescope. A December shuttle mission to fix Hubble's flawed optics promises to be the grand finale to a challenging year in space. (Photo: NASA, Terry Leibold)

Departments

18 Books 19 Letters



Science Service. a nonprofit corporation founded in 1921, gratefully accepts tax-deductible contributions and bequests to assist its efforts to increase the public understanding of science, with special emphasis on young people. More recently, it has included in its mission increasing scientific literacy among members of underrepresented groups. Through its Youth Program it administers the International Science and Engineering Fair, the Science Talent Search for the Westinghouse Science Scholarships, and publishes and distributes the *Directory of Student Science Training Programs for Precoilege Students*.

Board of Trustees — Chairman, Glenn T. Seaborg; Vice Chairman, Gerald F. Tape; Secretary, David A. Goslin; Treasurer, Willis Harlow Shapley; Joseph W. Berg Jr.; Robert W. Fri; J. David Hann; Dudley Herschbach; Shirley M. Malcom; Elena O. Nightingale; Ben Patrusky; H. Guyford Stever; Sanford J. Ungar; Deborah P. Wolfe. Honorary Trustees — Edward Bliss Jr.; Bowen C. Dees; O. W. Riegel; John Troan. President: Alfred Scott McLaren; Vice President and Business Manager: Donald R. Harless

Letters

Risks of "natural" additives

In regard to "Wheaty wastes fight rancidity" (SN: 10/17/92, p.270), it may be incorrect to assume that a "natural" chemical substitute for a suspect "artificial" chemical will present a reduced biological risk.

Just because a particular chemical appears in nature, even in an edible plant, does not mean that it is good for humans. The issue should be not the source of the chemical, but whether the human body is designed for regular exposure to it. With regard to the phenol-based BHA and BHT substitute being derived from wheat, many individuals have severe sensitivities to phenols. While clearly there are public health concerns with regard to rancid fat, one should be careful in adopting a new, "natural" additive not to pour the fat from the frying pan into the fire.

My personal vote is to avoid both fatty food and additives!

John P. Wikswo A.B. Learned Professor of Living State Physics Vanderbilt University Nashville, Tenn.

Out of sleep, out of mind

Since Avi Karni and colleagues in Rehovot, Israel, discovered that interruptions in REM sleep may prevent the permanent establishment of memory ("For a good memory, dream on," SN: 11/14/92, p.333), we can now understand why parents of night-awakening young children feel that they are losing their minds.

Tom Derderian Winthrop, Mass.

Going native

When you think about it, there really isn't anything native to Hawaii except lava ("Strangers in Paradise," SN: 11/7/92, p.314). The silversword, the fruit flies, the wolf spiders, and the native Hawaiians were all aliens. Over time, as each alien found its niche or ate all its competitors, it became native.

The introduction of alien species into the islands offers an opportunity to study the response of a natural system to such invasion. How the aliens got there is a matter for study, not condemnation. The Australian ant will surely change the islands' ecosystem, but perhaps no more nor less than those species that predated natural science and ecology. John Jacobs

Scottsboro, Alaska

Address communications to: **Editor, Science News** 1719 N Street, NW Washington, DC 20036 All letters subject to editing.

JANUARY 9, 1993 19