

The Weekly Newsmagazine of Science

Science Service Publication Volume 149, No. 21, May 25, 1996

Donald R. Harless Julie Ann Miller Blair Burns Potter Dan Skripkar

Publisher Editor Managing Editor

Astronomy

Production/Design Director David Lindley Associate Editor Senior Editor Environment/Policy Janet Raloff

Ron Cowen **Bruce Bower** Richard Lipkin

Richard Monastersky John Travis Kathleen Fackelmann,

Steve Sternberg Tina Adler Ivars Peterson

Damaris Christensen Cait Anthony

Life Sciences Mathematics/Physics **Editorial Assistant** Books/Advertising

Behavioral Sciences

Chemistry/ Materials Science

Earth Science Biology Biomedicine

SCIENCE NEWS (ISSN 0036-8423) is published weekly on Saturday, except the last week in December, for \$49.50 for 1 year or \$88.00 for 2 years (foreign postage \$6.00 additional per year) by Science Service, Inc., 1719 N Street, N.W., Washington, D.C. 20036. Second-class postage paid at Washington, D.C., and additional mailing office. POSTMASTER: Send address changes to SCIENCE NEWS, P.O. Box 1925, Marion, Ohio 43305. Change of address: Four to six weeks' notice is required - old and new addresses, including zip codes, must be provided. Copyright © 1996 by Science Service, Inc. Title registered as trademark U.S. and Canadian Patent Offices. Printed in U.S.A. on recycled paper. Republication of any portion of SCIENCE News without written permission of the publisher is prohibited.

Editorial and Business Offices: 1719 N St. N.W., Washington, D.C. 20036 202-785-2255; scinews@scisvc.org

# Advertising Representative:

Lewis Edge & Associates, Inc. 366 Wall St., Princeton, N.J. 08540 609-683-7900

## Subscription Department:

P.O. Box 1925, Marion, Ohio 43305 For new subscriptions only, call 1-800-247-2160. For customer service, call 1-800-347-6969.

# **This Week**

324 High Insulin in Blood Ups Heart Risk 324 DNA diversifies domestication's roots 325 Mapping out a leaf's mountains and valleys 325 Schrödinger's cat: Two atoms in one? 326 Tracking and tackling foodborne germs 326 Oxygen starvation decimated Permian oceans 327 Viewing, jiggling a novel state of matter 327 It takes nerve to make muscles bond

# **Research Notes**

Science & Society

335 Biology

335 Paleontology

## **Articles**

328 Whale Chatter

> Cover: Whales perform an elaborate arrangement of clicks and calls to communicate with each other and navigate the vast oceans. Researchers are trying to understand these mysterious noises, in part to determine how underwater human activities might interfere with them. Shown here, a female killer whale breaching in Johnstone Strait, British Columbia. (Photo: Lance Barrett-Lennard)

332 Growing Up in Harm's Way

# **Departments**

322 **Books** Letters 323

Science Service, which publishes Science News, is a nonprofit corporation founded in 1921 to increase the public understanding of science. Through its youth programs, it administers the International Science and Engineering Fair and the Science Talent Search for the Westinghouse science scholarships.

Board of Trustees — Chairman, Dudley Herschbach; Vice Chairman, Gerald F. Tape; Secretary, David A. Goslin; Treasurer, Willis Harlow Shapley; Joseph W. Berg Jr.; Robert W. Fri; J. David Hann; Shirley M. Malcom; C. Bradley Moore; Elena O. Nightingale; Ben Patrusky; H. Guyford Stever; Sanford J. Ungar; Deborah P. Wolfe.

Honorary Trustees -- Chairman Emeritus, Glenn T. Seaborg; Edward Bliss Jr.; Bowen C. Dees; O.W. Riegel; John Troan.

# Letters

# Pesticide protests

You did a disservice to those of us concerned with environmental issues when you presented us with a cover showing an albatross chick with a severely deformed lower mandible that "may trace" to pollutants ("The Pesticide Shuffle," SN: 3/16/96, p. 174). This deformity could easily have been a mutation totally unrelated to pesticides or an injury received in a predatory attack.

There is enough environmental hysteria out here without your adding to it.

Jess E. Moore Midland, Texas

Is it really suitable for a nation whose major food-related problem is obesity to sit in judgment on the crop protection practices of a nation whose main food-related prob-lems are malnutrition and starvation? Will a worldwide ban on all non-U.S.-registered pesticides reduce world misery or increase it? Is it fair to ban a material protecting a population from diseases simply because we in the United States do not suffer from those same diseases?

Allen C. Scoggan Aurora, Colo.

You fully document all the pesticides escaping the United States but totally fail to mention the benefits of these pesticides around the world.

When DDT was being widely used throughout the world in the early 1970s, malaria was brought under control. Today, despite DDT's never having been proven to be a human carcinogen, its absence on the world market has allowed malaria to claim millions of lives each year for the past decade.

Jay Lehr Senior Scientist Environmental Education Enterprises Columbus, Ohio

Auto companies took lead in tests

Virtual crash-test dummy" (SN: 3/2/96, p. 138) implies that technologists at Los Alamos invented the idea of using a computer system to simulate crash tests. Computer crashworthiness simulations have been done for more than 10 years by automobile companies around the world.

Many commercial companies have also been developing and using humanlike models. I am glad that Los Alamos is joining this worthy endeavor, but please give some credit to the private sector for being there first.

Stephen R. Behling Cray Research Eagan, Minn.

Limitations of UV light

Regarding "Safer water for poorer nations" (SN: 3/2/96, p. 138), ultraviolet light is a wellknown purifier of water. However, the ability

Letters continued on p.331

MAY 25, 1996 SCIENCE NEWS, VOL. 149 323