



SCIENCE NEWS®

The Weekly Newsmagazine of Science

Science Service Publication
Volume 151, No. 21, May 24, 1997

Thomas Peter Bennett	Publisher
Julie Ann Miller	Editor
Blair Burns Potter	Managing Editor
Dan Skripkar	Production/Design Director
David Lindley	Associate Editor
Janet Raloff	Senior Editor
Ivars Peterson	Environment/Policy
Bruce Bower	Online Editor
Richard Monastersky	Mathematics/Physics
Kathleen Fackelmann,	Behavioral Sciences
Nathan Seppa	Internship Coordinator
Ron Cowen	Earth Science
Tina Adler, Christine Mlot	Biomedicine
John Travis	Astronomy
Corinna Wu	Life Sciences
Meghan Mitchell	Biology
Cait Anthony	Chemistry/
Donald R. Harless	Materials Science
	Editorial Assistant
	Books/Advertising
	Business Manager

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, 1719 N Street, N.W., Washington, D.C. 20036. Preferred Periodicals 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 © 1997 by Science Service. Title registered as trademark U.S. and Canadian Patent Offices. Printed in U.S.A. on recycled paper. ♻️ Reproduction 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@sciserv.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 and customer service, call 1-800-552-4412.

SCIENCE NEWS ONLINE <http://www.sciencenews.org>

This Week

- 316 Pacific Warmth Augurs Weird Weather
- 316 Napless cats awaken interest in adenosine
- 317 *T. rex* bested by Argentinean beast
- 318 Risks for women: Passive smoke and obesity
- 318 Sound conveyor belt for delaying photons
- 319 Laurels and laureates at 48th science fair
- 319 How zeolites hold tight to metal ions

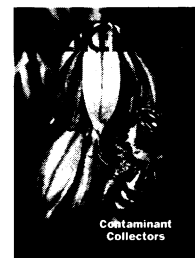
Research Notes

- 322 Anthropology
- 322 Biology
- 327 Earth Science
- 327 Food Science

Articles

- 320 Beyond Hot Air
- 324 Chemical Buzz

Cover: A honeybee gathers blue pollen, visible on a sac on her hind leg, from a spring beauty flower. By examining the substances the bee and thousands of its fellow workers carry back to the hive, scientists can determine the degree of environmental contamination in an area. (Photo: Gail Bromenshenk)



Departments

- 314 Books
- 315 Letters

Science Service is a nonprofit corporation founded in 1921 to increase the public understanding of science. It publishes SCIENCE NEWS and administers the International Science and Engineering Fair and the Science Talent Search.

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; Eve L. Menger; C. Bradley Moore; Ben Patrusky; H. Guyford Stever; Sanford J. Ungar; Deborah P. Wolfe; *Chairman Emeritus*, Glenn T. Seaborg; *Honorary Trustees*, Edward Bliss Jr.; Bowen C. Dees; Elena O. Nightingale; O.W. Riegel; John Troan.

Officers—*President*, Thomas Peter Bennett; *Vice President and Business Manager*, Donald R. Harless.

Letters

Fruits of cloning

"A Fantastical Experiment" (SN: 4/5/97, p. 214) taught me much about how cloning is done with higher animals. I was disturbed that there was nary a mention of plants, however.

People have been cloning plants for millennia, and botanists have long known that virtually all plant cells are totipotent. To suggest that "cloning is not really a scientific word" and that nuclear transplantation "is what most scientists refer to as cloning" is absurd. Zoologists may think that, provided they are ignorant of plant science, but botanists have long used the word in a perfectly scientific way and with no reference to nuclear transplantation.

The Random House dictionary defines a clone as "a population of [genetically] identical units, cells, or individuals that is derived from the same ancestral line" by asexual reproduction. A clone can consist of a single

individual, but populations are more common.

For example, all the navel orange trees in Southern California form a clone; they are derived from the parent navel orange tree still growing in Riverside. Identical twins are a clone formed from a single fertilized egg.

Frank B. Salisbury
Professor of Plant Physiology
Utah State University
Logan, Utah

Cellular rejuvenation will lead ultimately to the rejuvenation of specialized adult cells. Nearing age 50, I could use some totipotency.

David Govett
Davis, Calif.

Awash in suds?

In "The shell in the soap" (SN: 3/22/97, p. 181), Hap Wheeler is quoted as saying, "Hundreds of millions of tons of [nondegradable commercial polymers] find their way into

household products every year."

If that represents U.S. use, it requires a per capita consumption of about 1 ton of detergent. In my household, we use only 1.5 percent of that amount. If the figure represents worldwide household use, it implies that every person on the planet uses three times more detergent and cleaning products than we do.

David Thomas
Seattle, Wash.

Wheeler indeed said pounds, not tons, but points out that this global estimate is very conservative.

— C. Mlot

Send communications to:
Editor, Science News
1719 N Street, N.W.
Washington, D.C. 20036
or: scinews@sciserv.org
All letters subject to editing.

MAY 24, 1997

SCIENCE NEWS, VOL. 151

315

