



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

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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.

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

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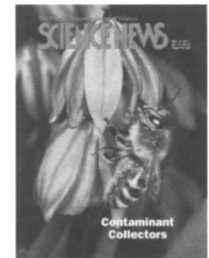
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Cover: A honeybee gathers blue pollen, visible on a sac on her hind leg, from a spring beauty flower. By examining the substances the bee and thousands of its fellow workers carry back to the hive, scientists can determine the degree of environmental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



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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

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