

# SCIENCE NEWS®

The Weekly Newsmagazine of Science

Science Service Publication  
Volume 148, No. 18, October 28, 1995

Alfred Scott McLaren	Publisher
Blair Burns Potter	Interim Editor
Dan Skripkar	Production/Design Director
David Lindley	Associate Editor
Janet Raloff	Senior Editor Environment/Policy
Ron Cowen	Astronomy
Bruce Bower	Behavioral Sciences
Richard Lipkin	Chemistry/ Materials Science
Richard Monastersky	Earth Sciences
John Travis	Biology
Kathleen Fackelmann, Lisa Seachrist	Biomedicine
Tina Adler	Life Sciences
Ivars Peterson	Mathematics/Physics
Damaris Christensen	Editorial Assistant
Marjorie Centofanti	Science Writer Intern
Cait Anthony	Books/Resource Manager
Donald R. Harless	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, 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 © 1995 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)

**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

- 276 Mummified HIV: It's Still Dangerous
- 276 Viruses reveal the brain's fright circuits
- 277 The bird calls that filled Jurassic Park
- 277 Obsessive-compulsive risks for teens
- 278 Ulysses pictures the sun's magnetic field
- 278 Methyl bromide doesn't stick around
- 279 A new formula for picking off pieces of pi
- 279 Estrogen linked to adult asthma risk

## Research Notes

- 283 Astronomy
- 283 Behavior
- 284 Biology

## Articles

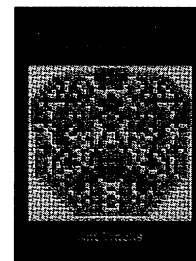
### 280 Travels of an Ant

Cover: A set of simple rules activates a virtual ant. Wandering across an infinite checkerboard, this cybercritter leaves intriguing patterns in its wake, providing food for thought for mathematicians and others interested in the behavior of cellular automata. (Illustration: Scott Sutherland/State University of New York at Stony Brook)

### 286 Assessing OTA's Legacy

## Departments

- 275 Letters
- 282 Books



Science Service, which publishes SCIENCE NEWS, is a nonprofit corporation founded in 1921. It 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 Programs 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 Precollege Students*.

**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; Peter H. Raven; 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.

*President*: Alfred Scott McLaren; *Vice President and Business Manager*: Donald R. Harless.

## Letters

### Wetlands: Science vs. politics?

The battle of wetland delineation is more a result of heavy-handed federal regulation than good science ("Two Views of a Swamp," SN: 7/22/95, p.56).

Congress is reacting to the plight of private landowners who have had all or portions of their property "taken," in most cases without compensation. Whereas the general public strongly favors the environment over the economy, it also clearly believes landowners should be compensated when their property is controlled for the public's welfare.

Craig Earnest  
Cleveland, Tenn.

The concept that the environment was pure and pristine "in colonial times" seems to be a general and pervasive affliction.

One can reasonably doubt that current def-

initions of wetlands prevailed in colonial times, and one can produce neither land surveys nor satellite photos to substantiate the wild claim that "in colonial times, wetlands covered 221 million of the United States' 2.3 billion acres."

Claims of this nature are political and do not belong in a science publication.

As to the pristine environment, one can only imagine the massive amounts of crude oil oozing from natural seeps—perhaps billions of gallons each day! The Red River was most certainly receiving its current 4,000 tons per day of salt from natural salt deposits along its tributaries. And one can only imagine how polluted the rivers became with mil-

lions of buffalo defecating and urinating as they drank.

John E. Rhoads  
Wichita Falls, Texas

After reading "Two Views of a Swamp," it became obvious to me that the legislators' problem in defining wetlands is the name "wetland" itself. They get lost in the question of how wet instead of how valuable.

Let's call such areas Biologically Valuable Zones—and then watch with satisfaction as they slowly get it through their heads that the entire planet could be so labeled.

Eric R. Krueger  
Eagle, Idaho

I believe the importance of wetlands in contributing free oxygen to the atmosphere is largely overlooked.

Letters continued on p.282

## CORRECTION

The photograph of *AfterShock* ("Hybrid Cars," SN: 10/7/95, p.232) was taken by Andrew A. Frank of the University of California, Davis.