

SCIENCE NEWS®

The Weekly Newsmagazine of Science

Science Service Publication
Volume 151, No. 7, February 15, 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 Online Editor
Bruce Bower	Mathematics/Physics Behavioral Sciences
Richard Monastersky	Internship Coordinator Earth Science
Kathleen Fackelmann, Steve Sternberg	Biomedicine
Ron Cowen	Astronomy
Tina Adler, Christine Mlot	Life Sciences
John Travis	Biology
Corinna Wu	Chemistry/ Materials Science
Paul Smaglik	Science Writer Intern
Meghan Mitchell	Editorial Assistant
Cait Anthony	Books/Advertising
Donald R. Hartless	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@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 1-800-552-4412.

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

This Week

- 100 Tallying Nitrogen's Increasing Impact
- 100 Car phones jack up risk of collisions
- 101 Younger stars and an older, bigger cosmos
- 101 Fish oil gets a garlic chaser for the heart
- 102 Combat vets show shifting trauma memories
- 102 New gene clearly resolves an eye debate
- 103 Science funding slips in 1998 budget

Research Notes

- 111 Chemistry
- 111 Earth Science

Articles

- 106 Jomon Genes
Cover: Even as growing crowds threaten to overwhelm the streets of Tokyo and the rest of Japan, researchers delve into mysteries surrounding the Jomon, the first people to live on the Japanese archipelago. By examining the Y chromosomes of Asian populations, the scientists hope to discern where the Jomon originated and the extent to which their genes persist among modern Japanese. (Photo: Charlie Westerman/Gamma Liaison International)
- 108 The Birth of a Breast Cancer

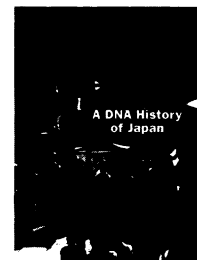
Departments

- 98 Books
- 99 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. Hartless.



Letters

Sea turtle chanties

My immediate reaction upon seeing the headline "Do sea turtles stop and ask for directions?" (SN: 11/30/96, p. 342) was, only if they're female. When I read the article, I realized that the turtles in question were indeed female.

Tell me, was this intentional or fortuitous?

Arnold Di Giulio
Encino, Calif.

I remember a story, its source long forgotten, about a seaman on board a ship en route from the Panama Canal to Japan. At the end of his shift, he would take a stroll around the deck to stretch his legs before retiring.

One night, he didn't show up for his watch. The duty log was consulted, and the navigator calculated the ship's position at the estimated time the man would have fallen overboard. The captain ordered the ship to turn around and head toward its estimated position when the seaman disappeared.

Sure enough, a day or so later they found the lucky man clinging to a sea turtle that had graciously delayed its migration.

Michael J. Bihn
Freedom, Calif.

I am not an animal rights fanatic, but when the target of study is an endangered species like the leatherback, can the biologists responsible for the research assure us that the tagging or tracking methods used have no effect on the reproductive success of the animal? Perhaps they just have to know where the last one went, embarrassed and rejected.

Does endangered species legislation include provisions to require something like a "species impact statement" to address this problem? Do university biology departments have policies along these lines?

Bill McIntosh
Santa Fe, N.M.

The transmitters used for studying sea turtles

are designed to have negligible effects on the animals, says Stephen Morreale of Cornell University. The picture of the leatherback turtle in the story shows a sonic transmitter that is kept on the animal for up to 3 days, after which biologists retrieve it. The small satellite transmitters mentioned are attached to the turtles by a short tether and are designed to break away after a year.

Because this study was conducted in Costa Rica, Morreale and his colleagues obtained permits from that nation's government. In the United States, most states require permits, as does the federal government. In his work for Cornell, Morreale must also get clearance from the university's school of veterinary medicine.

— R. Monastersky

CORRECTION

The report on penguin huddling ("Space jam: Energetics of a penguin huddle," SN: 1/25/97, p. 52) should have referred to Yvon Maho and his, not her, colleagues. We regret la gaffe.