SENCE NEWS® The Weekly Newsmagazing of Science

A Science Service Publication Volume 127, No. 26, June 29, 1985

E.G. Sherburne Jr.
Joel Greenberg
Dietrick E. Thomsen
Senior Editor/
Physical Sciences

Laurie Jackson Phillips Managing Editor
Wendy McCarren Production/Design
Director

Bruce Bower
Joanne Silberner
Stefi Weisburd
Julie Ann Miller
Janet Raloff,
Ivars Peterson

Behavioral Sciences
Biomedicine
Earth Sciences
Life Sciences
Policy/Technology

Jonathan Eberhart Space Sciences
Susan Welch Gilday Assistant to the Editor
Jennie Dusheck, Science Writer Interns

Jennie Dusheck, Judith Mathewson Jane M. Livermore

Books

Donald R. Harless Business Manager

Scherago Associates Advertising Fred Dieffenbach, Sales Director 1515 Broadway, New York, N.Y. 10036

Copyright * 1985 by Science Service, Inc., Editorial and Business Offices, 1719 N St., N.W., Washington, D. C. 20036. Republication of any portion of SCIENCE NEWS without written permission of the publisher is prohibited.

Subscription Department 231 West Center Street, Marion, Ohio 43305

Subscription rate: 1 yr., \$27.50; 2 yrs., \$47.50; 3 yrs., \$67.00. (Foreign postage \$5.00 additional per year.) Change of address: Four to six weeks' notice is required. Please state exactly how magazine is to be addressed. Include zip code. For new subscriptions only call (1) 800-247-2160. Printed in U.S.A. Second class postage paid at Washington, D.C. Title registered as trademark U.S. and Canadian Patent Offices. Published every Saturday by SCIENCE SERVICE, Inc. 1719 N St., N.W., Washington, D.C. 20036. (202-785-2255) ISSN 0036-8423

This Week

404 A Statue of a Different Color Chinese salted fish linked to cancer 404 405 Shuttle: 4 for 4 and SDI too 405 Pigs, sheep, rabbits with a human gene 406 Ion channels: Touch at the molecular level 406 Incineration on the high seas 406 Mt. St. Helens is calm 407 Pulsar clock to set cosmology by 407 Quasar found in galaxy cluster 407 Army aerosol laboratory

Research Notes

410 Biology

Articles

407

408 Radiation Therapy: Beyond X-Rays

Chem-weapons ban ends

Cover: A beam of ions coming from the left is used to treat tumors in experimental work at the Lawrence Berkeley Laboratory in Berkeley, Calif. The patient's head is held steady in a special plastic mask, and a plastic "compensator" modulates the intensity and energy of the beam before it reaches him. (Photo: LBL)



Departments

402 Science on the Air

403 Letters

411 Semi-Annual Index

Science Service Institution for the public understanding of science founded 1921; a nonprofit corporation. Board of Trustees—President, Glenn T. Seaborg; Vice President, Gerald F. Tape; Treasurer, Willis Harlow Shapley; Secretary, Julius Duscha; Joseph W. Berg Jr.; Edward Bliss Jr.; Bowen C. Dees; David A. Goslin; Milton Harris; Hilleary F. Hoskinson; O. W. Riegel; H. Guyford Stever; John Troan; Deborah P. Wolfe. Director: E. G. Sherburne Jr.; Assistant Director: Dorothy Schriver; Business Manager: Donald R. Harless.

Letters

Famished farmers

Regarding state control of farming and the African drought ("Africa's Famine: The Human Dimension," SN: 5/11/85, p. 299): Whatever the mechanics of the governmental system, it is important to remember that in third world countries the peasants who live on and work the land rarely control the land. If they did, they would most likely grow crops for themselves and the surplus for sale or trade. With state- or family-controlled land, the resident farmers grow rubber trees, sugar, cocoa and other crops for international export and somebody else's profit.

The nations of Africa and South America have never had the opportunity to use their resources for their own development; after hundreds of years of colonial misdevelopment, they are dependent on the use they've been put to. Their populations have been kept artificially high because of the misdevelopment. The resources are used by the developed nations for internal consumption; any money that enters the country soon leaves, either to pay off the international debt or because the rich have no way to spend it at home.

Luke McGuff Minneapolis, Minn.

Freedom of movement is essential in critical situations created by natural events. What makes the African drought very serious are the artificial borders that have been imposed on the movement of the people. People never die so easily unless they are prevented from coping with a situation that threatens their survival.

This is especially true for people who are constantly on the move, such as the people of the Sahel and the Bedouins of the Arabian Peninsula, who harvested for thousands of years a desert land where the annual precipitation was only a few inches. In the past when drought occurred people moved to areas to look for better grazing conditions or in the worst case to sell their flocks or herds in a wider market. At present this opportunity is severely limited because of a political pattern based on a European model which has proved catastrophic in more than one instance.

Turgut Dincer Consultant hydrologist Chicago, Ill.

Address communications to Editor, Science News, 1719 N Street, N.W. Washington, D. C. 20036 Please limit letters to 250 words.

JUNE 29, 1985 403