

science news[®] to the editor

A Science Service Publication
Vol. 103/March 3, 1973/No. 9
Incorporating Science News Letter

OF THE WEEK

swampy wildlife refuge	132
multiple sclerosis clue	133
saccharin under fire	133
theory of a cold big bang	134
martian magnetic field	134

NOTES

physical sciences	136
medical sciences	136
technology	139
environment	139

ARTICLES

mathematical beauty in physics	137
isolation and mental changes	140

DEPARTMENTS

books	130
letters	131
films	143

COVER: George Washington once owned a large portion of the Dismal Swamp turned over to the Federal Government last week for a wildlife refuge. The swamp is one of the East's last remaining wilderness areas. See p. 132. (Drawing: Bettmann Archive)

Publisher	E. G. Sherburne Jr.
Editor	Kendrick Frazier
Aerospace	Everly Driscoll
Behavioral Sciences	Robert J. Trotter
Medical Sciences	Joan Arehart-Treichel
Physical Sciences	Dietrick E. Thomsen
Science and Society	John H. Douglas
Copy Editor	Nadine Clement
Assistant to the Editor	Esther Gilgoff
Production Manager	Davida Daemon
Books	Margit Friedrich
Circulation Manager	Lawrence Cope
Advertising	Scherago Associates, Inc. 11 W. 42nd St., New York, N.Y. 10036 Fred W. Dieffenbach Sales Director

Copyright © 1973 by Science Service, Inc., 1719 N St., N.W., Washington, D.C. 20036. Reproduction of any portion of SCIENCE NEWS is strictly prohibited.

Subscription Department
231 West Center Street
Marion, Ohio 43302

Subscription rate: 1 yr., \$10; 2 yrs., \$18; 3 yrs., \$25. (Add \$2 a year for Canada and Mexico, \$3 for all other countries.) Change of address: Four to six weeks' notice is required. Please state exactly how magazine is to be addressed. Include zip code.

Printed in U.S.A. Second class postage paid at Washington, D.C. Established as Science News Letter® in mimeograph form March 13, 1922. 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). Cable SCIENSERV.

march 3, 1973

More on the 'mean' Qolla

A comment on "Aggression: A way of life for the Qolla" (SN: 2/3/73, p. 76). I noted that one of the habits of these "mean" Qolla was the chewing of cocoa leaves. These leaves yield the alkaloid cocaine. Cocaine will cause central nervous system stimulation (hyperirritability) and a loss of appetite. Could the Qolla's problem stem from the cocaine they take in which causes them to eat less and thereby have hypoglycemia, rather than the hypoglycemia itself. . . . I think so.

Robert Propoggio
Registered Pharmacist
Proper Pharmacy
Oak Park, Ill.

I believe the holier-than-thou attitude exemplified by our labeling the Qolla the meanest people in the world has led us into the stupid adventures abroad from which we are now struggling to extricate ourselves. It ill behooves a people who bomb so indiscriminately to call someone else "mean."

Jack Ragsdale
New York, N.Y.

Abortion vs. contraception

Your article on the Supreme Court decision allowing abortion was excellent (SN: 1/27/73, p. 54). However, I take issue with your statements regarding the "dangers" of abortion replacing contraception.

The death rate for abortions in New York is given as 3 deaths per 100,000 abortions. The death rate for the pill is given as 3 deaths per 100,000 women per year. If a woman uses no contraception at all, she would, statistically speaking, become pregnant on the average of once a year. If she chooses an abortion, her chances are *no worse* than if she had used the pill for a year.

There is a new technique called menstrual extraction which can evacuate the contents of the uterus without dilation and scraping before a woman's period is more than 10 days late. If the death rate for menstrual extraction is *less* than 3 per 100,000, as I suspect it is, then menstrual extraction may be *safer* than the pill.

There is some logic to support this concept. It is probably safer to apply a gentle vacuum to the uterus for 5 minutes once a year than to take a pill during the entire year. Likewise for the IUD, a 5-minute

menstrual extraction is probably better than a foreign body present the entire year. For women who cannot use either the pill or the IUD, menstrual extraction may be the only answer.

Anita Murray
Coordinator, Reproduction and
its Control Committee
National Organization of Women
New York Chapter
New York, N.Y.

Challenge of the sun

Congratulations on the very accurate and provocative account of "Solar Study: The Year of the Sun" (SN: 1/27/73, p. 60). It reminds us that some of the most challenging problems in astronomy today concern events close at hand in our own solar system. Here at Goddard, we are planning the OSO-1 (eye) launch for 1974, in hopes that this largest and most capable of the Orbiting Solar Observatories will answer many of these questions.

George F. Pieper
Director of Space
and Earth Sciences
NASA Goddard Space Flight Center
Greenbelt, Md.

I was reading Everly Driscoll's article entitled "Solar Study: The Year of the Sun" and was greatly impressed by its succinct, knowledgeable, widely alluded, *exciting* form; as I am impressed with the layout and pictorialization of the story (including the magnificent color reproduction on the cover of the issue).

But this particular article is just a small example of the fine layouts, erudite reporting, social interest and responsibility, and over-all format of a successful weekly newsletter which reaches through specialized articles to educate and inform an extremely varied populace.

Sandy Adams
Virginia Commonwealth University
Richmond, Va.

Soft water and illness

"Heart attacks and soft water" (SN: 2/10/73, p. 89) has been studied for 15 years. It long has been known that lead, as from lead pipes, dissolves more in soft than in hard water. Possibly this holds true also in the case of other materials, such as cadmium as a trace impurity in galvanized pipes and some unhealthful minerals in the ground.

Edward A. Prill
Fredericksburg, Tex.

SCIENCE SERVICE

Institution for the Popularization of Science founded 1921; a nonprofit corporation

Board of Trustees—Nominated by the AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE: Bowen C. Dees, The Franklin Institute; Athelstan Spiilhaus, Woodrow Wilson International Center for Scholars; Deborah Partridge Wolfe, Queens College. Nominated by the NATIONAL ACADEMY OF SCIENCES: Gerald F. Tape, Associated Universities; Allen V. Astin, National Bureau of Standards; Frederick Seitz, Rockefeller University. Nominated by the NATIONAL RESEARCH COUNCIL: Gerald Holton, Harvard University; Jacob Rabinow, National Bureau of Standards; Glenn T. Seaborg (President), University of California at Berkeley. Nominated by the JOURNALISTIC PROFESSION: Norman Cousins, "World"; Julius Duschka, Washington Journalism Center; O. W. Riegel (Secretary), Washington and Lee University. Nominated by the E. W. SCRIPPS TRUST: Milton Harris (Treasurer), Washington, D.C.; Edward W. Scripps II (Vice President and Chairman of the Executive Committee), Edward W. Scripps Trust; John Troan, Pittsburgh Press.

Director: E. G. Sherburne Jr.; Assistant Director: Dorothy Schriver; Business Manager: Donald R. Harless; Things of Science: Ruby Yoshioka.

131