

OF THE WEEK

high-protein sorghum	212
atmosphere on ganymede	212
six radio stars found	213
oldest sedimentary rocks	213
electron micrographs	213
mission of soyuz 12	214
skylab astronauts readapt	214
weakening of u.s. science	214
drug-regulation study	215

RESEARCH NOTES

astronomy	216
earth sciences	216
ecology	217
behavioral sciences	217

ARTICLES

memory and biology	218
space flight to mercury	220

DEPARTMENTS

films	210
letters	211
off the beat	222
books	224

COVER: Mercury has yielded few of its secrets to anxious astronomers through the years. All that can be seen of its surface are nebulous dark markings, sketched meticulously to get a clue of what's there. On Nov. 3 the United States will launch the first spacecraft to Mercury. By the end of March, Mercury should be known. See p. 220. (Photo: C. F. Knuckles, New Mexico State University Observatory)

Publisher	E. G. Sherburne Jr.
Editor	Kendrick Frazier
Aerospace	Everly Driscoll
Behavioral Sciences	Robert J. Trotter
Medical Sciences	Joan Arehart-Treichel
Natural Sciences	Jonathan Eberhart
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. Dieffenback Sales Director

Copyright © 1973 by Science Service, Inc., 1719 N St., N.W., Washington, D.C. 20036. Republication 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.

to the editor

Attitudes toward science

The survey of public attitudes toward science and technology as conducted by the Opinion Research Corporation and reported in SCIENCE NEWS (9/8/73, p. 151) raises a question. The data as presented indicate that the general public feels that science has changed the quality of life. The question is: Does the public really have this opinion, or were they led to it through the questions in the poll? This is important because it is not the function of science to change the quality of life, but solely to discover and explain. It is society's task to take the discoveries and explanations of science, and use them to change the quality of life; hopefully to the mutual benefit of all species residing on spaceship earth. It appears that society does not yet understand its purpose. Neither should it place the burden of blame for its shortcomings on science. Science is nothing more than the servant of society.

To one trained in physics, but forsaking it due to the cutback in the sciences, your magazine is a fun way to keep up with the latest. Your good work is not being wasted. Keep it up.

Richard W. Lasher
Lake Park, Fla.

The tenuous lunar 'atmosphere'

I note in the Aug. 11 SCIENCE NEWS that several of you have "sentenced" Thomsen to read some science fiction selections. Now that the gate is open I am proposing a blanket sentence for a crowded docket of offenders, including many top names in science. My authority is a recent (though now I can't find it) article in SCIENCE NEWS itself which shows beyond question that the moon has *some* atmosphere. Just how much is completely beside my point. But during many, many years these people have been offending me no end by repeating blandly the obvious nonsense that the moon has "no" atmosphere. No qualification, period. I therefore propose fifty lashes all around, and let the guilty ones worry about with what.

R. S. Underwood,
Lubbock, Texas.

(True enough, but readers shouldn't get the impression that the moon's "atmosphere" measures up in any way to what we normally consider an atmosphere. At its peak concentration, during lunar midday, there are about 2 million molecules

per cubic centimeter in the moon's "atmosphere." This may sound like a lot, but it compares with 10 quintillion (10^{19}) molecules per cubic centimeter in earth's. Thus earth's atmosphere is roughly 5 trillion times as dense as the moon's.—Ed.)

Intelligent intervention?

For many years I have been a reader of SCIENCE NEWS. The recent special issue on astronomy was to me the most enjoyable ever.

Certain observations were impressed vividly on my mind as I read this issue, and I would like to comment now on them.

As true of science in general, every major discovery in astronomy raises more questions than it answers, but I am awed by what appears to be either total failure to think of a most logical explanation for certain observed peculiarities, or a widespread fear to bring up and discuss certain proposals, or a silent conspiracy to hide an "unthinkable" theory in explanation of these phenomena.

I refer, of course, to the possibility that some, if not many, of the phenomena which seem to violate physical laws may be, in fact, due to intelligent intervention.

In failing to even take such a possibility into consideration, scientists put themselves in the very unscientific posture of rejecting a valid hypothesis without so much as a word of argument or discussion on the pro's and cons.

Clarence G. Zike
Midwest Electronic Sales
Indianapolis, Ind.

A third theory

I sent a copy of Thomsen's "Extra-terrestrial life and us" (SN: 7/14/73, p. 29) to the California Board of Education. The proposal that life may have come to earth from some other part of space, contained therein, may enable them to include three possible theories of origin in their textbooks instead of just one. Only two might be too contentious.

David Livingston McCallum
Pico Rivera, Calif.

Name game

Your name game is too much to resist. Mr. M. Turnipseed is an assistant in our college's Department of Vegetable Crops.

Anne Moffat
New York State College
of Agriculture and Life Sciences
Cornell University
Ithaca, N.Y.

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: Athelstan Spilhaus, Woodrow Wilson International Center for Scholars; Deborah Partridge Wolfe, Queens College of City University of New York; Bowen C. Dees, The Franklin Institute, Nominated by the NATIONAL ACADEMY OF SCIENCES: Frederick Seitz, Rockefeller University; Gerald F. Tape, Associated Universities; Allen W. Astin, National Academy of Sciences, Nominated by the NATIONAL RESEARCH COUNCIL: Glenn T. Seaborg (President), University of California, Berkeley; Gerald Holton, Harvard University; Joseph W. Berg Jr., National Research Council, Nominated by the JOURNALISTIC PROFESSION: O. W. Riegel (Secretary), Washington and Lee University; Norman Cousins, "World"; Julius Duscha, Washington Journalism Center, Nominated by the E. W. SCRIPPS TRUST: John Troan, Pittsburgh Press; Milton Harris (Treasurer), Washington, D.C.; Edward W. Scripps II (Vice President and Chairman of the Executive Committee), Edward W. Scripps Trust.

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