Science

Science Service Publication 105/June 8, 1974/No. 23 orporating Science News Letter

Of the Week

Versatile satellites in orbit	364
The evolution of cells	365
American Indian calendar	366
Thymus and sexual maturation	366
Restoring surface-mined land	367
Computer brain stimulator	367

Articles

North American endangered wildlife 368 Conservationists shift strategy

Departments

Letters	363
Books	373

COVER: These black-footed ferrets live in the company of prairie dogs, which provide them with natural prey and den sites. Prairie dog poisoning campaigns have made the ferret perhaps the rarest mammal in the United States. No less than 108 other wildlife species are threatened with extinction. Conservationists' strategy to wildlife preservation is currently shifting from a "save the tiger" approach to "save the habitat." See pages 368 and 371. (Photo: U.S. Fish and Wildlife Service)

Publisher

Editor

E. G. Sherburne Jr. Kendrick Frazier

Senior Editor and

Physical Sciences Dietrick E. Thomsen

Senior Editor and

Robert J. Trotter **Behavioral Sciences** Biological Sciences Joan Archart-Treichel Science and Society John H. Douglas Space Sciences Jonathan Eberhart Writer/Copy Editor Lisa J. Shawver Art Director Dale Appleman Assistant to the Editor Esther Gilgoff

Books

Margit Friedrich

Advertising

Scherago Associates, Inc. 11 W. 42nd St. New York, N.Y. 10036 Fred W. Dieffenbach Sales Director

Copyright © 1974 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 Cana-Title registered as dian Patent Offices.

Published every Saturday by SCIENCE SER-VICE, Inc., 1719 N St., N.W., Washington, D.C. 20036. (202-785-2255). Cable SCIENSERV.

Wildlife preservation: Cold facts, hard realities

In this issue we present a special two-article report on wildlife preservation. First, staff writer Lisa J. Shawver chronicles the status of endangered species in North America, where industrialization, population growth and urbanization have hastened the demise of scores of animal species. Then Science-and-Society Editor John H. Douglas takes a purposely nonsentimental look at recent trends and cold realities of the conservation movement, including the shift from a narrow, species-by-species approach to a broader, habitat-preservation strategy. Without attempting an answer, he raises hard questions: "Which is more important, try to save a handful of birds or use the land for growing food or providing recreation for humans, while saving the money to help our wretched cities." Throughout it all, as exemplified by the words of a tropical ecologist who says, "The tropics are very close to being a tragedy on a global scale," is the realization that, as Douglas puts it, "Conservation is a global affair, no longer just a matter of saving a few animals for the aesthetic enjoyment of a few well-off people."

Kendrick Frazier

To the Editor

Out of swirling controversy

I must congratulate the writer of your sickle-cell-anemia story, Joan Arehart-Treichel, who managed to reduce a swirling and inchoate controversy to six rational and accurate columns (SN: 2/16/74, p. 104). Most science writers tend to be overwhelmed by the complexity and the controversy of this particular scientific issue.

It may actually interest you to know that there are more papers in the world literature from more countries in the world which support effective results with urea therapy than there are reporting failures. I am pleased that the point was made in the story that the established protocol was not followed.

The objections by Alfred Kraus to the central venous catheter in column three of the story are sheer nonsense. Ask the next surgeon you meet or internist whether it "costs hundreds of dollars" to

insert a central venous catheter.

With an eye toward future stories on sickle-cell disease, you should be aware of at least two recent reports in the literature which suggest that cyanate may have some harmful effects. A paper by Kinoshita and Marola shows that cataracts can be the consequence of cyanate therapy at least in guinea pig lenses. The second paper of importance is that by Gillette, Lu and Peterson. This team from the Rockefeller University, with great integrity, has reported the development of weight loss, peripheral neuropathy including loss of hearing, and deafness as a consequence of cyanate therapy.

Again I wish to congratulate the writer of this sickle-cell story because I can well imagine the variety of bewildering and contentious opinions she had to through to get to the truth, which she did so well.

Robert M. Nalbandian, M.D. Associate Pathologist Blodgett Memorial Hospital Grand Rapids, Mich.

Frictionless physics

Thank you for publishing that much-needed piece by Dietrick Thomsen on the unrealities found in modern physics textbooks (SN: 5/11/74, p. 308). This, by the way, is not just at the sophomore level, but increases exponentially as one advances into graduate school. And Thomsen's type of critique is one which the physics hierarchy is unable to conduct, since to do so would undermine their elite position.

H. C. Dudley Professor of Radiation Physics University of Illinois Medical Center Chicago, Ill.

Of DOGS and CATS

Re: "The Low, Low Voice of CAT [clear air turbulence]" (SN: 5/18/74, p. 320): Solution prescribed . . . if meteorologists would concentrate on developing a DOG "diametrically opposed gyration" this could enable them to better detect "acoustically" CAT.

Freddy Conboy Sawyer Houston, 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: Deborah P. Wolfe, Queens College of City University of New York; Bowen C. Dees, The Franklin Institute; Athelstan Spilhaus, National Oceanic and Atmospheric Administration. Nominated by the NATIONAL ACADEMY OF SCIENCES: Gerald F. Tape, Associated Universities, Allen V. Astin, National Academy of Sciences; Glenn T. Seaborg (President), University of California, Berkeley, Nominated by the NATIONAL RESEARCH COUNCIL: Gerald Holton, Harvard University; Joseph W. Berg Jr., National Research Council; Aaron Rosenthal, National Academy of Sciences. Nominated by the JOURNALISTIC PROFESSION: Norman Cousins, "World"; Julius Duscha, Washington Journalism Center; O. W. Riegel (Secretary), Washington and Lee University. Nominated by 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.

June 8, 1974 363