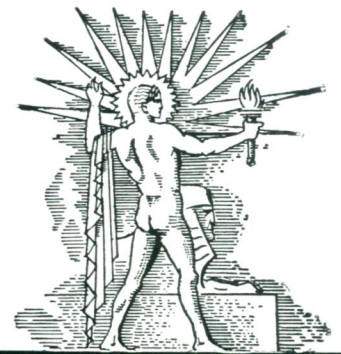
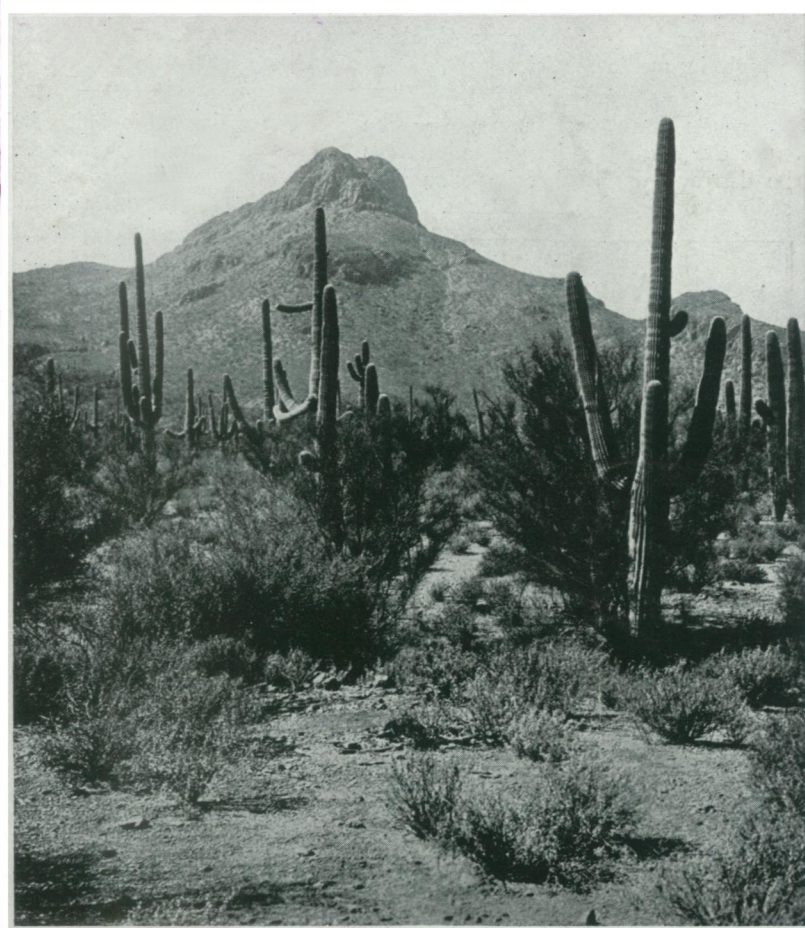


PRICE  
15¢

# SCIENCE NEWS LETTER

THE WEEKLY SUMMARY OF CURRENT SCIENCE ●



JULY 14, 1934

Defying Never-Ending Drought

See Page 22

A

SCIENCE SERVICE PUBLICATION

# SCIENCE NEWS LETTER

VOL. XXVI

No. 692

The Weekly  Current  
Summary of Science

Published by

## SCIENCE SERVICE

The Institution for the Popularization of Science organized under the auspices of the National Academy of Sciences, the National Research Council and the American Association for the Advancement of Science.

Edited by WATSON DAVIS

Subscription rates—\$5.00 a year postpaid; two years \$7.00; 15 cents a copy. Ten or more copies to same address, 5 cents a copy. Back numbers more than six months old, 25 cents.

Canadian and Foreign subscribers please add \$1 a year to regular subscription rates to cover postage.

In requesting change of address, please give your old address as well as the new one in notification to Circulation Department, SCIENCE NEWS LETTER, 21st and Constitution Ave., Washington, D. C., at least two weeks before change is to become effective.

Advertising rates furnished on application.

### Board of Trustees of Science Service

*Honorary President*, William E. Ritter, University of California. Representing the American Association for the Advancement of Science, J. McKeen Cattell, *President*, Editor, Science, Garrison, N. Y.; Burton E. Livingston, Johns Hopkins University, Baltimore, Md.; Raymond Pearl, *Director*, Institute for Biological Research, Johns Hopkins University, Baltimore, Md. Representing the National Academy of Sciences, W. H. Howell, *Vice-President and Chairman of Executive Committee*, Johns Hopkins University, Baltimore, Md.; R. A. Millikan, *Director*, Norman Bridge Laboratory of Physics, California Institute of Technology, Pasadena, Calif.; David White, *Senior Geologist*, U. S. Geological Survey. Representing National Research Council, Vernon Kellogg, *Secretary Emeritus*, National Research Council, Washington, D. C.; C. G. Abbot, *Secretary*, Smithsonian Institution, Washington, D. C.; Harrison E. Howe, *Editor of Industrial and Engineering Chemistry*. Representing Journalistic Profession, John H. Finley, *Associate Editor*, New York Times; Mark Sullivan, *Writer*, Washington, D. C.; Marlen E. Pew, *Editor of Editor and Publisher*, New York City. Representing E. W. Scripps Estate, Harry L. Smithton, *Treasurer*, Cincinnati, Ohio; Robert P. Scripps, *Howard Newspapers*, West Chester, Ohio; Thomas L. Sidlo, *Cleveland, Ohio*.

*Director*, Watson Davis; *Staff writers*: Frank Thone, Emily C. Davis, Jane Stafford, Marjorie Van de Water, Robert Potter, H. C. Rowland, Jr.; *Librarian*, Minna Gill; *Sales and Advertising Manager*, Hallie Jenkins.

Copyright, 1934, by Science Service, Inc. Reproduction of any portion of the SCIENCE NEWS LETTER is strictly prohibited since it is distributed for personal, school, club or library use only. Newspapers, magazines and other publications are invited to avail themselves of the numerous syndicate services listed by Science Service, details and samples of which will gladly be sent on request.

Members of the American Association for the Advancement of Science have the privilege of subscribing to the SCIENCE NEWS LETTER at the reduced price of \$3 per year. Application for this privilege should be accompanied by privilege card obtained from the Permanent Secretary, A. A. S., Smithsonian Institution Building, Washington, D. C.

Publication Office, 1930 Clifton Ave., Baltimore, Md., Editorial and Executive Office, Constitution Ave. at 21st St., N. W., Washington, D. C.

Address all communications to Washington, D. C. Cable address: Scienserv, Washington.

Entered as second class matter October 1, 1926, at the post-office at Baltimore, Md., under the act of March 3, 1879. Established in mimeographed form March 13, 1922. Title registered as trade-mark, U. S. and Canadian Patent Offices.

## DO YOU KNOW?

Worms are the favorite food of the burrowing mole.

Snakes have no ears, but they receive sound vibrations through their tongues.

There are more thunderstorms in July than in June, because the lower air is hotter.

Government chemists are now experimenting with the production of vinegar from honey.

A stone sarcophagus made for an Egyptian woman's burial about 600 B.C. came to be used as a drinking trough in medieval Cairo.

Locusts must face a new weapon since the discovery that the adults can be destroyed by discharging clouds of sodium arsenite from airplanes.

Polished mahogany is likely to fade in strong sunlight.

Ancient writers mention quintuplet births in Egypt, Greece and Rome.

The water ouzel is the only song bird that has learned to dive into the water for its food.

A new method of recording the color of hair with scientific precision has been developed.

The first full-blood Indian woman to become a public health nurse has begun her work among her own people on the Navajo reservation.

The main cotton belt of the United States is the only important cotton-growing area in the world not generally infested with the pink bollworm.

## WITH THE SCIENCES THIS WEEK

### AGRICULTURE

Why is it difficult to remove poison spray from some apples? p. 25.

### BOTANY

What shape is the stem of mint? p. 31.

### CHEMISTRY

How do you pronounce iodine? p. 25.

How much radium is contained in ocean mud? p. 29.

### ECOLOGY

Why do desert plants grow far apart? p. 22.

*Cactus—Laura A. Armer—Stokes, 1934, \$1.50.*

### ENTOMOLOGY

How many parasites has the corn borer? p. 24.

### ETHNOLOGY

How is the Indian sign language being recorded? p. 29.

In what way was the California Indian's god like our Christ? p. 20.

### GENERAL SCIENCE

What is the true meaning of "physics"? p. 29.

### GEOLOGY

Who is the first American scientist honored by the Boverton Redwood medal? p. 23.

### MEDICINE

How do the body tissues repel invaders? p. 20. *Asthma, Hay Fever and Related Disorders—Samuel M. Feinberg—Lea and Febiger, 1934, \$1.50.*

How were 65 soldiers cured of epilepsy? p. 22. What accounts for the beneficial effect of paraffin on arthritis? p. 24.

What effect has the removal of tonsils on susceptibility to rheumatic fever? p. 25.

What is the relation between influenza and distemper? p. 28.

Who identified the carrier of typhus fever? p. 26.

### METEOROLOGY

What three measurements does the meteorologist make for weather predictions? p. 21.

### NUTRITION

How do vitamin discoveries aid the farmer? p. 31.

How long does it take the human stomach to digest a meal of hamburger and mashed potato? p. 25.

How much nourishment does the average man need? p. 30.

### ORNITHOLOGY-PUBLIC SAFETY

How can birds set fires? p. 24.

### PHYSICS

How can the infrared light distinguish between the works of different painters? p. 28.

What effect does extreme cold have on the electric conductivity of lead? p. 24.

What is a neutrino? p. 30.

What precautions are now taken to protect against radium? p. 19. *Pierre Curie—Marie Curie—Macmillan, 1932, \$5.*

### PHYSICS-BIOLOGY

How are plant tissues protected against the heat of the electron microscope? p. 22.

### PHYSIOLOGY

Why do physicians need a substitute for the usual metabolism test? p. 24.

### POLITICAL SCIENCE

Who do Stanford students consider was the least effective of our recent Presidents? p. 21.

### PSYCHIATRY

What trait is believed characteristic of the epileptic? p. 20. *Treatment of Epilepsy—Fritz B. Talbot—Macmillan, 1930, \$4.*

### RADIO

How are radio messages "scrambled"? p. 30. What may be the cause of long delayed echoes of radio signals? p. 23.

### SEISMOLOGY

How do scientists time earthquakes? p. 28.

### ZOOLOGY

What are mouflon? p. 25.

*These curiosity-arousing questions show at a glance the wide field of scientific activity from which this week's news comes. Book references in italic type are not sources of information for the article, but the references for further reading. Books cited can be supplied by Book Department, Science News Letter, at publishers' prices, prepaid in the United States.*