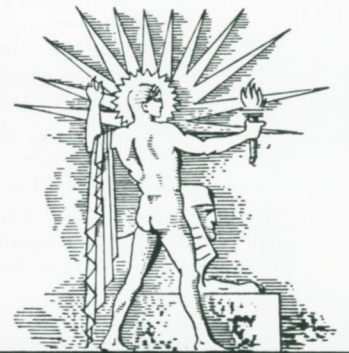


PRICE
15¢

SCIENCE NEWS LETTER

THE WEEKLY SUMMARY OF CURRENT SCIENCE ●



November 25, 1939

Rare Creatures of the Night

See Page 345

A S C I E N C E S E R V I C E P U B L I C A T I O N

Do You Know?

Newly-hatched quail are scarcely more than an inch long.

Conies that live in the High Sierras have been called excellent ventriloquists.

Peru has no rush marketing season for cotton, because cotton is being picked in some part of Peru at almost any time of the year.

A Russian scientist found that when people in speech experiments were asked not to make gestures they spoke less clearly and fluently.

Night driving is not recommended in many parts of Africa because wild animals congregate on the roads and it is hard to shoo them off.

Many a cancer death is really suicide, says a physician, pointing out that patients may die needlessly by following ignorant or quack treatment.

Invited by the Chinese government, three U. S. Public Health Service scientists have gone to study disease control problems near the Burma border.

The biggest North American bird, the California condor, is about 5,000 times as large in bulk as the calliope hummingbird, which is America's smallest.

The Great Wall of China, built in the third century B.C., was equipped with a crude forerunner of telephone communication, in the form of brass tubes between guard stations.

QUESTIONS DISCUSSED IN THIS ISSUE

Most articles which appear in SCIENCE NEWS LETTER are based on communications to Science Service, or on papers before meetings. Where published-sources are used they are referred to in the article.

ASTRONOMY

What was the "Star of Bethlehem"? p. 346.

BACTERIOLOGY

How can babies in a hospital be kept safe from infection? p. 348.

CHEMISTRY

What nation is best able to produce explosives? p. 341.

CHEMISTRY—AERONAUTICS

What discovery made possible the large-scale production of super aviation gasoline? p. 342.

GENERAL SCIENCE

How does metrazol perform its mental healing? p. 339.

What is the difference between a horse and a whale? p. 340.

What plan have scientists made for a post-war world? p. 350.

What sort of problems will British scientists be asked to solve? p. 351.

Why did the war gas arsine cause anemia? p. 339.

GEOLOGY

What happened to Poland's oil fields? p. 344.

MEDICINE

How is radium protected against air raids in London? p. 344.

PHYSIOLOGY

How is a rabbit's ear aiding the study of silicosis? p. 343.

PSYCHIATRY

What city has an adult guidance clinic? p. 345.

PSYCHOLOGY—MILITARY SCIENCE

How did America distribute propaganda in Germany during the World War? p. 340.

RADIO

How can an airplane military observer deliver his map to headquarters without landing? p. 341.

Physicians can draw on 100,000 drugs in compounding prescriptions.

A recently found manual of arithmetic by a seventh century Armenian scientist contains an appendix of riddles.

Britain's war emergency farm program calls for cultivating an additional 2,000,000 acres of farmland before the end of 1939.

The forest area of Sweden is about the size of that in Wisconsin, Michigan, and Minnesota; but Swedish timber stands are almost twice as thick.

There are about as many calories in an orange as in a cantaloupe—100 in each.

European chemists have evolved several chemical methods of treating fabrics in the quest for an ideal means of making goods crease-resistant.

Methods developed at a New York State Agricultural Experiment Station have enabled ice cream manufacturers to use visible pieces of fruit in ice cream without danger of the fruit freezing hard: soaking the sliced fruit in sugar before freezing does it.

SCIENCE NEWS LETTER

Vol. 36 NOVEMBER 25, 1939 No. 22

The Weekly Summary of Current Science, published every Saturday by SCIENCE SERVICE, Inc., 2101 Constitution Avenue, Washington, D. C. Edited by WATSON DAVIS.

Subscriptions—\$5.00 a year; 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.

In requesting change of address, please give your old address as well as the new one, at least two weeks before change is to become effective.

Copyright, 1939, by Science Service, Inc. Reproduction of any portion of SCIENCE NEWS LETTER is strictly prohibited. Newspapers, magazines and other publications are invited to avail themselves of the numerous syndicate services issued by Science Service.

Cable address: Scienservc, Washington.

Entered as second class matter at the post-

office at Washington, D. C., under the Act of March 3, 1879. Established in mimeographed form March 18, 1922. Title registered as trademark, U. S. and Canadian Patent Offices. Indexed in Readers' Guide to Periodical Literature, Abridged Guide, and in the Engineering Index.

Members of the American Association for the Advancement of Science have privilege of subscribing to SCIENCE NEWS LETTER at \$3 a year.

The New York Museum of Science and Industry has elected SCIENCE NEWS LETTER as its official publication to be received by its members.

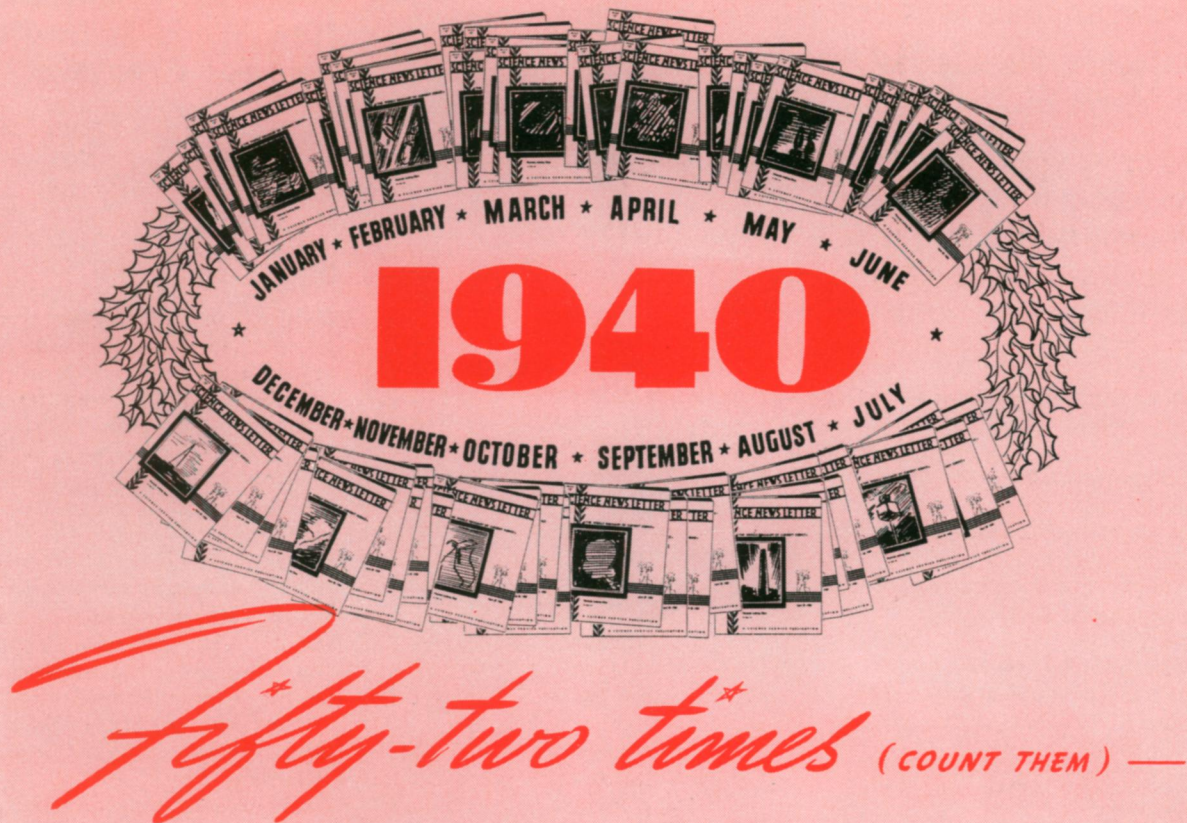
Advertising rates on application. Member Audit Bureau of Circulation.

SCIENCE SERVICE is the Institution for the Popularization of Science organized 1921 as a non-profit corporation, with trustees nominated by the National Academy of Sciences, the National Research Council, the American Association for the Advancement of Science, the E. W. Scripps Estate and Journalistic profession.

Board of Trustees—*Honorary President*: William E. Ritter, University of California. Representing the American Association for the Advancement of Science; J. McKeen Cattell, Edi-

tor, Science; Henry B. Ward, University of Illinois; Edwin G. Conklin, *President*, American Philosophical Society. Representing the National Academy of Sciences: W. H. Howell, *Vice-President and Chairman of Executive Committee*, Johns Hopkins University; R. A. Millikan, California Institute of Technology; Harlow Shapley, Harvard College Observatory. Representing National Research Council: C. G. Abbot, Secretary, Smithsonian Institution; Harrison E. Howe, Editor, Industrial and Engineering Chemistry; Ross G. Harrison, Yale University. Representing Journalistic Profession: John H. Finley, Editor, New York Times; J. Edwin Murphy, Managing Editor, Baltimore Evening Sun; O. W. Riegel, Washington and Lee School of Journalism. Representing E. W. Scripps Estate: Harry L. Smithton, *Treasurer*, Cincinnati, Ohio; Warren S. Thompson, Miami University, Oxford, Ohio; W. W. Hawkins, Scripps Howard Newspapers.

Staff—Director, Watson Davis; Writers, Frank Thone, Emily C. Davis, Jane Stafford, Marjorie Van de Water, Robert Potter; Correspondents in principal cities and centers of research. Photography: Fremont Davis; Librarian: Minna Gill; Sales and Advertising: Hallie Jenkins, Austin Winant, Howard Bandy.



ONCE EVERY WEEK DURING 1940

YOUR GIFT CAN COME to the Friends and Relatives of your choice

EVERY CHRISTMAS since 1922, more of our subscribers have presented *Science News Letter* subscriptions as Christmas Gifts. You as a subscriber know the kind of magazine it is. You as a subscriber know therefore just which friends and relatives it will appeal to.

From what is told us, we learn that *business men and women* read *Science News Letter* for ideas that may some day affect their progress—they want to know about NEW things ahead of the crowd! *Teachers* read it for new things to tell their students. *Parents* read it to get ahead of their children at least once in a while! *Club members*

read it for source material. *Engineers* read it because as precisionists they know that its articles are accurate. *Scientists and professional men and women* read it because it brings them a weekly view of other fields of science than their own.

To whom would you like to give *Science News Letter*, this Christmas? The Special Christmas Gift Rates are: ONE 1-year subscription, \$5—TWO 1-year subscriptions, one of which may be your own renewal, \$3.50 each. ADDITIONAL subscriptions above two, \$3.50 each.

No extra charge for postage to anywhere in the world.

Please use the form on the other side of this page in sending your Gift Subscription order to Science Service at Washington, D. C.