

15¢



SCIENCE NEWS LETTER

THE WEEKLY SUMMARY OF CURRENT SCIENCE • FEBRUARY 27, 1943



For Protection

See Page 143

A SCIENCE SERVICE PUBLICATION

Do You Know?

The world knows only one species of *tiger*.

The most concentrated form in which *food* can be supplied is in seeds; in seeds it is much more concentrated than in dehydrated foods.

The outside leaves of cabbage and lettuce, usually discarded, are richer in *vitamin A*, calcium and iron than the blanched inside leaves.

"*Army spread*" is a combination of creamery butter, fresh cheese curd, and skim-milk powder, with a butter-fat content of not less than 56%.

The capacity for *synthetic nitrogen* manufacture in the United States after the war will be more than twice as great as the consumption for all purposes before the war.

Kangaroo rats, strange desert animals, to all appearances require no moisture from without, subsisting, some scientists explain, on the moisture of their own metabolism.

There were over 900,000 board feet of *lumber* in the first huge raft of Alaska airplane spruce logs floated recently from southeastern Alaska 900 miles to mills in the state of Washington.

A pound of well softened *butter* into which is thoroughly mixed a cup of milk and a cup of water, makes an "extended" butter satisfactory to the taste, but of less nutritional value.

Question Box

Page numbers of Questions discussed in this issue:

ASTRONOMY

How can old sunspots be distinguished from spots in a new cycle? p. 134.

What is the brightest planet in the sky during March? p. 136.

BIOLOGY

What new weapon for fighting disease germs has been discovered in a mold? p. 131.

BOTANY

What flower appears to follow the phases of the moon in its blossom periods? p. 141.

ENGINEERING

How long did it take to build the Alcan Highway? p. 142.

What new device has been developed for the Chemical Warfare Service? p. 143.

Why do Germans have asbestos soles? p. 134.

GENERAL SCIENCE

What is Dr. Conant's five-point plan for future research? p. 131.

What use is now being made of helpful ideas from soldiers in the ranks? p. 140.

INVENTION

What invention makes it possible for upper berth passengers in planes to sit up longer than the occupants of the berths below them? p. 134.

MEDICINE

Of what use are blood cells salvaged from the preparation of blood plasma? p. 138.

How does rationing affect the diabetic patient? p. 131.

What can be done for "pernicious inertia"? p. 134.

What does the presence of cold agglutinins in the blood indicate? p. 141.

What rare metal is being used to patch skulls? p. 143.

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.

What study is being conducted to find the constitutional factors contributing to tuberculosis? p. 133.

METEOROLOGY

To what extent do sunspots affect the earth's weather? p. 135.

NUTRITION

Are sugars and starches necessary in the diet? p. 135.

How does brown sugar differ from white nutritionally? p. 135.

What role will nutrition play in post-war reconstruction? p. 143.

Why do Army specialists need special diets? p. 138.

PALEONTOLOGY

How big is America's largest trilobite? p. 132.

PHYSICS

Which is harder to weigh accurately, an electron or a battleship? p. 132.

PHYSIOLOGY

What effects do cigarettes made from low-nicotine tobacco have on the body? p. 134.

PSYCHIATRY

What must be used as the building stones of a lasting peace? p. 132.

PSYCHOLOGY

How can you tell what baby's cry means? p. 140.

WILDLIFE

What effect has war had on the market for fish? p. 137.

What three products are obtained from muskrats? p. 137.

Why is it a mistaken kindness to feed hay to hungry deer? p. 139.

The *bush fowl* of Guadalcanal lays its eggs in a bed of hot sand or scrapes together a pile of leaves that ferment and produce enough heat to incubate the eggs—and when hatched the birds fly away without ever knowing their parents.

The United States is known to have a natural gas reserve of 86 trillion cubic feet.

Birds weighing as much as 15 pounds have been encountered by airplanes at heights up to 8,000 feet.

SCIENCE NEWS LETTER

Vol. 43 FEBRUARY 27, 1943 No. 9

The Weekly Summary of Current Science, published every Saturday by SCIENCE SERVICE, Inc., 1719 N. St., N. W., Washington, D. C. North 2255. 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, 1943, 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. New York office: 310 Fifth Avenue, CHickering 4-4565.

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.

The Science Observer, established by the American Institute of the City of New York, is now included in the SCIENCE NEWS LETTER.

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

Member Audit Bureau of Circulation. Advertising Representatives: Howland and Howland, Inc., 393 7th Ave., N. Y. C., Pennsylvania 6-5566; and 360 N. Michigan Ave., Chicago, STate 4439.

SCIENCE SERVICE is the Institution for the Popularization of Science organized 1921 as a non-profit corporation.

Board of Trustees—Nominated by the American Association for the Advancement of Science: Henry B. Ward, University of Illinois; Edwin G. Conklin, American Philosophical Society; J. McKeen Cattell, Editor, Science. Nominated by the National Academy of Sciences: R. A. Millikan, California Institute of Technology;

Harlow Shapley, Harvard College Observatory; W. H. Lewis, Wistar Institute. Nominated by the National Research Council: Ross G. Harrison, Yale University; C. G. Abbot, Secretary, Smithsonian Institution. Nominated by the Journalistic Profession: O. W. Riegel, Washington and Lee School of Journalism; A. H. Kirchhofer, Buffalo Evening News; Neil H. Swanson, Executive Editor, Sun Papers. Nominated by the E. W. Scripps Estate: Frank R. Ford, Evansville Press; Warren S. Thompson, Miami University, Oxford, Ohio; Harry L. Smithton, Cincinnati, Ohio.

Officers—Honorary President: William E. Ritter, President; Edwin G. Conklin, Vice-President and Chairman of Executive Committee; Harlow Shapley, Treasurer; O. W. Riegel, Secretary; Watson Davis.

Staff—Director: Watson Davis. Writers: Frank Thone, Jane Stafford, Marjorie Van de Water, Morton Mott-Smith, Glenn Sonnedecker. Science Clubs of America: Joseph H. Kraus, Margaret E. Patterson. Photography: Fremont Davis. Librarian: Page Secret. Sales and Advertising: Hallie Jenkins. Correspondents in principal cities and centers of research.