

PUBLIC SAFETY

Rabies Danger in Wilds

► **THERE IS** a wild animal problem for campers whose pioneering spirit takes them into the wilds outside the protection of state parks, Public Health Service officials told *SCIENCE SERVICE*.

The danger lies, not in being torn limb from limb, but in an equally lethal attack of rabies. However, in state parks, officials are quick to spot diseased animals and get rid of them.

Usually rabies, or hydrophobia, is associated with the heat of summer and domestic animals, mainly dogs. But this is the urban type of the disease, and even it can strike at any time during the year.

In wildlife, the natural "sylvatic" type of rabies is found in the United States mainly in skunks and foxes. Only in the past few years have bats become a problem in this country.

Immunization against rabies, as opposed to the vaccine given following a bite, is rarely given except to persons working constantly with animals, Dr. Carl C. Dauer, medical adviser, National Center for Health Statistics, U.S. Public Health Service, said.

"The older vaccines sometimes caused a type of paralysis," Dr. Dauer said, "but the newer ones do not cause as many reactions, allergic and otherwise."

Dr. James H. Steele, chief of the Com-

municable Disease Center's veterinary section in Atlanta, Ga., said that campers and others should beware of sleeping out. Persons awake are usually safe enough, although two deaths have been reported from fatal fox bites—both in Kentucky.

An Idaho boy died from an unknown animal bite received while he was sleeping in his back yard.

The Communicable Disease Center is making persistent studies to eradicate rabies in wildlife, but Dr. Steele said rabies, like other diseases transmittable from animals to man, is difficult to stamp out.

Zoonosis, pronounced with the accent on the "on," is the word that describes animal diseases transmittable to man. There are at least 100 such diseases in all parts of the world, and rabies is one of the most serious.

Campers should be particularly wary around animals that approach them. Normally, wild animals avoid humans, and it is one of the symptoms of rabies that the fear of natural enemies has been lost.

Although skunks are usually avoided because of their odor, they are sold as pets when they have been deodorized. Some states require observation for six months after these pets are prepared for sale to insure that they are free of rabies.

• *Science News Letter*, 83:196 March 30, 1963

FORESTRY

Helicopters Fly Logs

► **TIMBER LOGS** can now be dragged through the air from inaccessible spots in deep forests.

Valuable timberlands are often bypassed by lumbermen because they are too difficult and expensive to log with conventional methods.

But now these lands are becoming too valuable to ignore, and the way to reach them is by helicopter. Dr. John E. O'Leary, director of the helicopter logging project under way at Oregon State University, Corvallis, explained that helicopters can be used when conventional logging methods become too difficult because of such factors as high road building costs, irregular topography or difficult soil conditions. The study is being made under contract with the U. S. Forest Service.

Logging by helicopter is feasible when quick action is needed to remove the timber before it is destroyed by insects or fire, or when the land is considered too beautiful to disturb by land-moving equipment.

Helicopters work best when temperatures and elevations are low. The weather must be fairly good because helicopters are grounded by dense fog, sleet and winds in excess of 34 miles an hour. Water, where the logs can be dumped, should be within a mile of the logging operations. Helicopter maintenance facilities should be nearby.

Speed and efficiency are needed to com-

pensate for the high cost of operation. Studies show that the average rental of a helicopter would be approximately \$300 per hour for a machine with a 5,000-pound lifting capacity. Machines with 10,000- and 20,000-pound lifting capacities, might be rented for about \$500 to \$800 per hour.

Helicopter logging will play an important part in the logging future of the Pacific Northwest and Alaska, Dr. O'Leary expects. In Alaska alone, there are approximately two million acres of valuable timberland that up to now have been considered inaccessible but which could be logged economically by helicopter.

• *Science News Letter*, 83:196 March 30, 1963

GEOGRAPHY

80,000 Square Miles of Far Antarctica Mapped

► **ACCURATE MAPS** of the earth's last frontier, Antarctica, are now possible because more than 80,000 square miles there have been charted by topographic engineers of the Department of Interior.

The four engineers were airlifted, by helicopter, to icy windswept mountain peaks as high as 13,000 feet to establish their ground control stations. They took many aerial photographs in the four months they worked on the project.

• *Science News Letter*, 83:196 March 30, 1963

Questions

ASTRONOMY—How does the center of a powerful radio galaxy act? p. 200.

BIOCHEMISTRY—What is the Calvin cycle? p. 203.

BIOLOGY—In the past, during what month was almost all cisco fishing done? p. 198.

COMMUNICATIONS—How will Oscar III be placed in orbit? p. 199.

MEDICINE—How many children in the U. S. have already received live weakened measles vaccine? p. 195.

TECHNOLOGY—What is the advantage of the optical transistor principle? p. 194.

SCIENCE NEWS LETTER

VOL. 83 MARCH 30, 1963 NO. 13

Edited by WATSON DAVIS

The Weekly Summary of Current Science, published every Saturday by *SCIENCE SERVICE, Inc.*, 1719 N. St., N.W., Washington 6, D. C., North 7-2255. Cable Address: *SCIENSERV.*

Subscription rates: 1 yr., \$5.50; 2 yrs., \$10.00; 3 yrs., \$14.50; ten or more copies in one package to one address, 7½ cents per copy per week; single copy, 15 cents, more than six months old, 25 cents. No charge for foreign postage. Change of address: Three weeks notice is required. Please state exactly how magazine is addressed. Include postal zone number.

Copyright © 1963 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 syndicated services issued by Science Service. Science Service also produces and distributes *THINGS of science* (monthly), produces and publishes books, and conducts the National Science Youth Program.

Printed in U.S.A. Second class postage paid at Washington, D. C. Established in mimeograph form March 13, 1922. Title registered as trademark, U.S. and Canadian Patent Offices. Indexed in Reader's Guide to Periodical Literature, Abridged Guide, and the Engineering Index. Member of Audit Bureau of Circulation.



SCIENCE SERVICE

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: William W. Rubey, University of California at Los Angeles; Wallace R. Brode, Washington, D. C. (Treasurer); Douglas Whitaker, Rockefeller Institute for Medical Research. Nominated by the National Academy of Sciences: Harlow Shapley, Harvard College Observatory; Philip Bard, Johns Hopkins University; Henry Allen Moe, John Simon Guggenheim Memorial Foundation. Nominated by the National Research Council: Leonard Carmichael, Smithsonian Institution (President); John R. Dunning, Columbia University; Benjamin H. Willier, Johns Hopkins University. Nominated by the Journalistic Profession: Michael J. Ogden, Providence Journal-Bulletin; O. W. Riegel, Washington and Lee University; Ralph B. Curry, Flint Journal. Nominated by the Scripps Estate: Edward J. Meeman, Memphis Press-Scimitar; Ludwell Denny, Washington, D. C.; Charles E. Scripps, Cincinnati, Ohio (Vice President and Chairman of Executive Committee).

Staff—Director: Watson Davis. Assistant Director: Dorothy Schriver. Writers: Ann Ewing, Faye Marley, Elizabeth Mirel, Barbara Tufty, Judith Viorst, Ruby Yoshioka. Science Youth Division: Joseph H. Kraus, Leslie V. Watkins, Forrest L. Snakenberg. Photography: Fremont Davis. Production: Priscilla Howe, Marcia Nelson. Conferences: Jane Marye. Librarian: Margit Friedrich. Interlingua Division in New York: Alexander Gode, 80 E. 11th St., GRamercy 3-5410. Advertising Manager: Fred A. Moulton, METropolitan 8-2562, Washington, D. C.