News of Science

Beycesultan and the Arzawan Culture

Excavations at Beycesultan, Anatolian Turkey, by members of the British Institute of Archeology at Ankara have brought to light further information about the Arzawas, a people who apparently occupied a belt of country extending about 175 mi from north to south and 75 mi from east to west between the Hittites and Greeks [*Science* **120,** 692 (1954)].

An Arzawan palace that lies amid the charred ruins of an unnamed 3000-year-old city beneath a mound at Beycesultan is now being explored, mapped, and photgraphed. Beycesultan is 150 mi up the Meander River, which flows into the Aegean Sea near Miletus.

According to a *London Times* dispatch printed in the *New York Times,* structural similarities between the newly unearthed palace and the court room of King Minos at Knossus in Crete have been noted. Excavations have revealed the citadel or private "sarai" of an unknown ruler. They have also disclosed two broad streets paved with gravel, as well as residential buildings, servants' quarters, a grain store, and elaborate stables.

On the basis of ceramic evidence, the date of the cultural level just above the palace is believed to be about 1230 B.C., the period directly before and during the Trojan War. The great palace is earlier. The archeologists believe that several cities are buried at Beycesultan.

Antirabies Vaccine

A clinical trial of a new antirabies vaccine is reported in the May number of the *Journal of Laboratory and Clinical Medicine* by F. B. Peck, H. M. Powell, and C. G. Culbertson. This vaccine, previously described, is prepared from fixed rabies virus of high titers grown in embryonated duck eggs, and is claimed by the authors to be almost devoid of the encephalomyelitis-producing qualities that occasionally occur with the use of rabies vaccine prepared from rabbit brain. The new vaccine is claimed to have caused no severe systemic reactions in 20 human subjects who had sustained minor bites from dogs, squirrels, cats, rats, mice, or monkeys. Virus-neutralizing antibodies were demonstrated in 12 of 13 patients tested 14 days after the vaccine was administered. The authors note that none of the 20 patients who received vaccine developed clinical symptoms of rabies.

The actual prevention of the development of rabies cannot be assessed in this trial, since examination for rabies of the animals involved was apparently not made, and since it would appear unlikely that a number of the animals (if any) were rabid. However, the antibody responses found in the patients and in the experimental animals tested suggest that this vaccine may prove useful in the treatment of actual infections with the rabies virus, as a replacement for vaccines containing brain material.
—E.M.L.

Health Physics Society

Formation of a new national scientific organization for health physicists was announced 14 June during the 3-day Health Physics Conference at Ohio State University, Columbus. The "Health Physics Society" was the name tentatively selected for the organization, which elected Karl Z. Morgan of the Health Physics Division of Oak Ridge National Laboratory as its interim president. Other interim officers are Fred Cowen, Brookhaven National Laboratory, Upton, N.Y., vice president, and Elda E. Anderson, director of the education and training department of the Health Physics Division, Oak Ridge National Laboratory, secretary-treasurer. Plans for establishment of the society had been discussed over a period of several years. The health physicists voted to form an independent organization rather than to affiliate with any existing group. The constitution, organizational structure, membership policies, and other matters have not yet been settled.

Directors of the Health Physics Society include: Herbert Mermagen, University of Rochester, Rochester, N.Y.; E. C. Barnes, manager of industrial hygiene, Westinghouse Atomic Power Division, Bettis Field, Pittsburgh, Pa.; J. Healy, General Electric Co., Hanford, Wash.; William T. Ham, professor of biophysics, Medical College of Virginia, Richmond; C. M. Patterson, DuPont Atomic Energy Plant, Aiken, S.C.; G. W. C. Tait, Health Physics Branch, Atomic Energy Co. of Canada, Ltd., Chalk River, Ont.; Francis J. Bradley, superintendent of radiation safety at Ohio State University and organizer of the first Health Physics Conference; William Nolan, Radiation Laboratory, University of California, Berkeley; Walter D. Claus, biophysics branch, Division of Biology and Medicine, U.S. Atomic Energy Commission, Washington, D. C.; and John E. Pickering, department of radiobiology, School of Aviation Medicine, Randolph Air Force Base, Tex.

■ The 8th expedition of the Juneau Ice Field Research Project of the American Geographical Society is making detailed studies of Lemon Creek Glacier, as well as spot observations of nearby glaciers in southeastern Alaska, in an effort to add to the knowledge of the relationship between glacial behavior and weather. More snow has accumulated this year than in 1954, and more glacial activity has been reported than in previous years.

The expedition will seek to determine whether the greater accumulation of snow will cause any of the glaciers that have been receding to advance. First seismic soundings of Lemon Creek will be taken this season. Lemon Creek Glacier, which is about 4 mi long and 1 mi wide, has been proposed as the site of one of the U.S. stations for glaciological observations to be made during the International Geophysical Year, 1957–58.

The expedition will continue its studies of heat exchange between the glacier and the air above it, the state of its nourishment, and geobotanical evidence to determine the variations of the glacier in the past, to establish when it attained its maximum size. Calvin J. Heusser, geobotanist, is project officer of the Juneau Ice Field Research Project; Edward R. LaChappelle, glaciologist, is field leader.

■ The desirability in medical research of securing new laboratory animals that resemble man both anatomically and physiologically is obvious. England, Winters, and Carpenter [*Growth* **18,** 207 (Dec. 1954)] note that, except for size, the pig meets these requirements remarkably well. They report the results of a program to develop miniature swine that was initiated at the Hormel Institute in 1949. In the crossbreeds, average 154-day weights have declined to considerably less than half. General improvement was noted in the number born alive and in age at first farrow. Surplus pigs are being used for various medical purposes in a number of laboratories.
—W.L.S., JR.