

ARCHAEOLOGY

Iron Age Village Built

► SOME 60 INTERNATIONAL volunteers, including six young Americans, have camped out in Lejre, Denmark, this summer while dressing timbers, laying stones, fashioning earthenware vessels, and weaving on an ancient loom for a planned prehistoric Iron Age village.

This is the first project of an "entirely new" independent research institute called the Historical Archaeological Experimental Center, believed to be without counterpart anywhere.

Twelve to 15 turf-roofed houses are to be erected in the next three years on part of 50 acres of tillable land, forest, bog and small lake leased in 1964 for 99 years under a grant from the Carlsberg Foundation.

Two of the dwellings later may be burned to the ground for comparison with an excavated Danish Iron Age site that had once been leveled by fire. In Denmark the Iron Age extended from 400 B.C. to 800 A.D.

Open to scientists from all nations and, in another year or so, to projects proposed by any museum or university, the new center "should be of greatest importance to historical research and our general understanding of the past," director Svend Niel-

sen, a National Museum archaeologist, told SCIENCE SERVICE.

Dr. Nielsen said excavated ards, plowshares and other tools will be tried out under primitive conditions. So will Viking ships and other boat types. Water mills, iron extracting and bronze founding may be studied, artifacts analyzed, Viking and medieval houses reconstructed.

The archaeologist said that in the few years before the institute was founded in 1964 several theories were "tried out" in six different prehistoric houses he and colleagues built, one of them on the Bognaes peninsula in Roskilde fjord not far from the present site. Two were purposely put to the torch; one accidentally caught fire.

A so-called domed smoke oven was made of clay in a house built in the style of the year zero. "This well-known type of primitive oven had previously been regarded as rather inefficient and very smoky—hence the name," he said.

"However," he added, "the experiment demonstrated that the oven gave out more heat and consumed less fuel than an open fire, and moreover when correctly stoked was practically smokeless and spark-safe."

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ARCHAEOLOGY

Ancient Skulls Found

► PREHISTORIC SKULLS from ancestors of the ancient Pharaohs have been discovered by Yale University archaeologists in the Kom Ombo area of southern Egypt.

Charles A. Reed, curator of mammals and reptiles, announced that completed radiocarbon dating of clamshells and charcoal found together with two skulls has established them as the oldest known human remains ever discovered in Egypt. He said the pair lived about 8,000 years before the first Egyptian dynasty or about 13,000 years ago.

According to the Yale University's Peabody Museum of Natural History scientists, the original owners of the skulls were people of the Upper Paleolithic (Upper Stone) Age.

Hundreds of blades, points and scrapers were found with them, but it is possible that some of the smaller points could have been set in rows on the end of a shaft to make a lance or javelin.

Also uncovered were grinding and hand stones that indicated that the prehistoric Egyptians may have prepared grains for eating.

They "definitely" used the stones for grinding pigments, since "many small balls of ochre were found, as if paint was important to them, and it (ochre) also appears on some of the grinding stones."

Mr. Reed, who led the expedition, speculated from the skull fragments and other data that these early people had medium-brown skin "and their cranial bones did not

resemble those of either today's African Negro or modern Mediterranean people."

He said they had bigger and coarser faces than do modern Egyptians.

"They had thick eyebrow ridges, just as you would find in some people today, thick skull bones, somewhat sloping foreheads and probably a broad nose."

In comparing his expedition's finds with those of Dr. Louis S. B. Leakey in Tanzania's Olduvai Gorge in southeast Africa, Mr. Reed said the Egyptian skulls were "Johnny-come-latelies." He also raised the possibility that two-million-year-old creatures such as those found by Dr. Leakey could also have roamed through Egypt.

The Kom Ombo area is about 40 miles north of Aswan, site of the hydroelectric dam, and about a half-mile from the Nile River.

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VETERINARY MEDICINE

Women Veterinarians Growing in Number

► MORE WOMEN are turning to careers in veterinary medicine than ever before.

Dr. Frankee Page Eliot, president of the Women's Veterinary Medical Association, told the association's annual meeting in Portland, Ore., that the number of women in the profession has grown from 50 in 1947 to more than 300 now.

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EDUCATION

Physics Course Planned For Non-College Students

► A COURSE in high school physics for those who have no plans for formal education beyond high school is advocated by Dr. J. W. Buchta, editor of *The Physics Teacher*.

The new course would supplement two other courses recently tailored for the secondary school curriculum.

The suggested "third" course would associate mechanics with rockets and satellites, waves and periodic motions with hi-fi apparatus, and use radio and TV to furnish examples of magnetic phenomena and the behavior of electrons. Such a course would frankly make applications its point of departure.

The revolution in physics teaching, intended to replace the older courses upon which most of the physicists of our nation have been raised, began with the Physical Science Study Committee effort originated by a group of professors at Massachusetts Institute of Technology and upon which well over five million dollars has been spent. This course is intended for those who have an interest in science or engineering and who may enroll in these fields when they enter college.

A "second" course, being developed by a group under Prof. Gerald Holton of Harvard, is designed for those who have little intention of making science their major interest and who desire to have a liberal education based in part on science.

The "third" course advocated by Dr. Buchta would, he suggested in an editorial in the *Physics Teacher* 3:169, 1965, be more closely allied to the earlier physics courses before the wave of course content curricula revisions began.

Dr. Buchta questions the idea that physics courses have to begin with quantum physics and relativity as a prelude or even a substitute for classical physics in introductory courses. He quoted Prof. Holton's opinion that this is pedagogically unsound for most students.

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GENERAL SCIENCE

British Establish Office To Pool Information

► A NEW OFFICE to deal with the problems of the international "information explosion" has been set up in Britain.

Purpose of the new office for scientific and technical information, established by the British department of education and science, is to cope with information explosion problems, most of which are internal in scope.

It will link, if possible, British work with similar research by other countries.

About one million scientific papers are published each year in over 30,000 journals.

In this present situation it is felt that it is almost impossible for individual scientists to keep up to date and find necessary information.

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