

## ANTHROPOLOGY

# Andean People Studied

➤ AN ISOLATED GROUP of from 1,700 to 1,800 dwarfed people living on a subsistence basis in an "area God forgot" high in the Peruvian Andes has been visited and studied by a party of American and Peruvian scientists.

The Indians, whose language is the ancient Quechua, were found to be loaded with parasites and plagued with nutritional deficiencies. They live mostly on corn and potatoes, and have practically no fats.

The potatoes are stunted, the largest being barely as large as a golf ball. The corn is stunted. And the people are stunted.

The average adult man is less than five feet, one inch in height and he weighs only 114 pounds.

Nevertheless, the people have adapted well to the altitude of 10,000 to 11,000 feet. They have tremendous chests that allow them to take in enough oxygen for the heavy work they do.

They customarily trot along the difficult mountain trails carrying heavy burdens and, occasionally, for sport, stage "potato races" in which the big-chested little fellows run down a trail, each with a 150-pound sack of potatoes on his back, trying to see which man will reach the goal first.

The Indians live on a huge hacienda, or farm, of 36,000 acres belonging to the Peruvian Government, rented by Cornell University for research and technical assistance. Part of the area is above the tree line. The soil is poor and often thin where erosion has washed it away.

The people struggle under a 16th century feudalism originally imposed upon them by the Spanish Conquistadores. The scientists found evidence indicating the people, even in prehistoric times, were living on a subsistence level.

The work of the scientists has been coordinated by Dr. Marshall T. Newman, associate curator of physical anthropology at the Smithsonian Institution.

Accompanying him on the expedition were Dr. Carlos Collazos, head of the department of nutrition of Peru's Ministry of Public Health; Dr. Ramon Vallenias, sub-director of the Peruvian Department of Industrial Hygiene; Dr. Fred H. Allen Jr., associate director of the Blood Grouping Laboratory, Boston; Srta. Carmen Caceres, a dietician; Dr. William C. Blanchard, field director of the project, and his staff from Cornell University, and Sr. Hector Martinez of the University of San Marcos.

Science News Letter, September 22, 1956

## ASTRONOMY

# Plan Observing Satellite

➤ A DRESS REHEARSAL for amateur astronomers observing the earth-circling satellites during the International Geophysical Year will be held in the United States within the next three months.

Plans for the dry-run practice tracking of moonlets sometime in the very near future were announced in Barcelona, Spain, by Dr. Fred L. Whipple, Harvard University astronomer and director of Smithsonian Astrophysical Observatory, which is in charge of visual observations of the satellites. This program is called Moonwatch.

The "invaluable" practice Moonwatch will also provide the "first, large-scale" search for any possible undiscovered natural earth satellites, Dr. Whipple told the international meeting of about 300 scientists, gathered in Barcelona to make final plans for the International Geophysical Year.

IGY, in which about 50 nations will participate, is a world-wide study of the earth, its seas and its atmosphere.

Dr. Whipple also issued an invitation to astronomers of all countries, including Russia, to cooperate in the optical tracking program.

This, he said, was divided into three phases:

1. A photographic program involving the use of especially designed, wide-eyed Schmidt cameras placed at 12 or more stations around the world.

2. A visual observation program, involving volunteer groups of observers over the world, using simple optical aids to locate each satellite launched, of particular value in the beginning and final stages of any satellite's life.

3. A professional astronomers' program, using special equipment in observatories.

A central computing bureau is being set up in Cambridge, Mass., Dr. Whipple said, to provide immediate analysis of both precision photographic and approximate visual observations from which will be made predictions of the paths to be taken by the satellites. The high-speed electronic computer will also be used to analyze the combined observations for geophysical and astronomical results.

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## GEOPHYSICS

## Very Large Sunspot Bursts Forth on Sun

➤ THE BIGGEST SUNSPOT to burst forth on the solar surface in several years was recently followed with interest by scientists around the world.

The gigantic whirlpool of extremely hot gases appeared black only by contrast with its fiery surroundings. The sunspot was "by far" the largest to appear during the

current sunspot cycle, which started a swing toward peak activity three years ago.

Several planets the size of earth could easily be contained within the spot.

National Bureau of Standards experts, who use sunspot activity in making day-by-day predictions of shortwave radio reception, reported the spot was at the sun's center on Sept. 12.

The sun is now heading into a high point in its approximately 11-year cycle of activity. The International Geophysical Year, which starts next July 1, was timed to coincide with this sunspot maximum, if possible.

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