

Temperatures Cast Week in Advance

Study of Sun Makes Forecast Possible.

Washington.—The heat of the sun has a proven relation not only to changes in the earth's temperature, but to the variations in weather conditions in general. Smithsonian Institution scientists have decided after experiments covering a long period. To increase the dependability of their observations, the experts hope to establish within a few years stations in various parts of the world where data can be gathered.

Through a series of papers dealing with experiments of its astrophysical observatory, the institution says "researches give clear proof of a connection between solar variations and weather changes, but show that the relation is a complex one."

Whether recent abnormal aspects of world-wide weather have been caused by solar conditions cannot be determined, because extended records of the past history of solar radiation are lacking.

Basis for Predictions.

Dr. C. G. Abbot, assistant secretary of the institution and the director of the astrophysical observatory, says that not only does the heat received by the earth from the sun appear variable, but that the changes can be predicted nearly a week in advance by looking at the sun through a telescope.

H. H. Clayton, who for several years was official forecaster of Argentina and recently has been collaborating with Doctor Abbot through study of the sun, has predicted, with what the institution asserts is very fair accuracy the actual daily temperatures of New York city nearly a week in advance for more than a year.

For several years the work has been conducted from two observatories, one at Mount Harqua Hala, Ariz., and the other near Calama, in the nitrate desert of Chile. Both are in high, arid locations. To increase the accuracy of the observations improvements are being planned for the Chile station, while the Arizona observatory is to be moved to a higher location on Table mountain, California, near Los Angeles.

Stations in the Eastern hemisphere are needed and Dr. Abbot will go to Asia this fall and, with funds supplied by the National Geographic society, seek a desirable location for an observatory, with Beluchistan as his first objective. Later he will go to southwest Africa, in search of a probable site for an observatory there.

Effect on Barometer.

Since 1922 researches have been conducted under the most unusual solar conditions known to modern science through a marked long-continued low period in the amount of heat thrown out by the sun. Whereas the normal has been established as 1.94 calories per square centimeter per minute, this value, known as the solar constant, since 1922 has been as low as 1.90, or 2 per cent below normal. At present it is 1.93 and showing a tendency to rise. The phenomenal drop was first announced by Doctor Abbot in April, 1923, and he then pronounced that departures of some sort from normal weather conditions might be expected.

Mr. Clayton says that changes in the sun's heat almost immediately affect the barometer and the thermometer in western Canada and western United States, perhaps as a reaction from the tropical atmosphere, traveling with the velocity of sound. The atmospheric waves thus set up drift slowly south and east, and three days

Men, Your Garb Must Be of Rainbow Hues

London.—Suits in subdued rainbow hues, backless waistcoats and pale-gray or fawn-colored derbies are among the hot-weather novelties for men in the brighter clothes movement. A new Irish tweed, so lightly spun that it is nearly transparent, comes in dust color and also what is called French gray, with a thin stripe of pale blue and green. This material is much in demand for the flappy "elephant-leg" trousers now affected by young men.

The backless waistcoat is double breasted and is held in place by braces across the back. It is worn with an unlined loosely-fitting jacket.

For shirts "ice-colored" silk is the latest. The material is exceptionally thin, of a bluish gray, and expensive.

Plan to Revive Old-Time German Military Bands

Berlin.—Efforts are being made to revive the old-time military bands which formerly were a popular part of every-day German life. In recent years they have given way to string orchestras and jazz bands. In the movement to bring the military bands back to their own, a monster concert was organized recently at the Stadion, when 20 bands played simultaneously under the direction of Prof. Oscar Hackenberger. More than 20,000 persons attended.

Electric Energy Is Sent By Wireless

Makes Possible Operation of Vessels From Land.

Washington.—Electrical energy has been successfully transmitted by wireless through the use of inventions by the Italian engineer, Midali, according to reports received here from Turin through official channels.

According to these reports, the possibilities of this method of power transmission are boundless. In an interview published in Turin, Midali described the results of his five years of study in part as follows:

"The result obtained is that of transmitting electric energy in the form of alternating current, without excessive losses, but in reality the electric energy is not transmitted as such. The system transforms the electric energy emanating from any source in the form of alternating current, at frequency and tension generally employed in industry, into very short electro-magnetic waves of about one millionth of a centimeter. These waves must be of about the size of light waves, and have nothing in common with the Hertzian waves used for radio communications.

California High School Girl Wins Meat Contest

Chicago.—From a field of approximately 13,500 contestants coming from high schools throughout the United States, Miss Frances Erdman, Turlock, Cal., has been chosen national champion in the second national meat story contest. This announcement is made by the National Live Stock and Meat Board, which conducted the contest in co-operation with high school home



Miss Frances Erdman.

economic instructors. The honor attained by Miss Erdman carries with it a cash award of \$300.

Selection of the national champion and other winners was made by a committee of prominent home economics women.

The contest was sponsored by the board as an aid to the study of meat in high school home economics classes, according to a statement accompanying the announcement of winners. Contestants were required to write a story or theme upon some phase of the meat subject and send in with this three original and practical meat recipes.

Practical Work in Kentucky Schools



Each schoolroom in the grammar grades of the Lexington (Ky.) schools is equipped with a miniature grocery store, and while one pupil acts as the storekeeper, other pupils are given facsimiles of currency, and they trade. This method is considered excellent practice.

Mexico's Two Rich Peninsula States

Furnish Most of the World's Sisal Hemp.

Washington.—"Clashes between Indian tribes along the border between the Mexican states of Campeche and Yucatan recently threw into the spotlight of the day's news two of the potentially richest of the commonwealths comprising the Mexican republic," says a bulletin from the Washington (D. C.) headquarters of the National Geographic society.

"Campeche and Yucatan together with the territory of Quintana Roo embrace the entire peninsula of Yucatan, except a small portion of the east coast within the boundaries of British Honduras and a section of the heavily wooded interior where an arm of Guatemala runs up from the south. From the two peninsula states comes most of the world's production of sisal hemp, which is next to manilla hemp in durability and strength. The region also furnishes valuable timber, agricultural products, and live stock.

Home of Sisal Hemp.

"Although the greater part of the area of the peninsula is one vast plain at a small elevation, the two states are strikingly different in many respects. Campeche has fairly abundant rainfall, dense forests, and a number of minerals throughout its 18,000 square miles. Yucatan, on the other hand, presents a dreary aspect, unwatered by rivers or streams, with little agriculture and no minerals. Yet this arid region affords the chief source of wealth, henequen or sisal hemp. Yucatan, with Quintana Roo is about twice as large as its neighboring state, yet, with 315,000 people, it has almost four times as large a population.

"Despite the sparseness of its rainfall, Yucatan is not totally arid. Water can be found in any section of the state not far beneath the surface. Although there are no rivers of importance, the limestone formations underground are honeycombed with water

caves—termed locally 'cenotes'—and subterranean streams. The Indians knew of these caves and rivers ages ago and marked their courses on the surface with heaps of stones, never building their cities except along the flow of an underground stream. Every pueblo and ranch has its well and a constant supply of fresh cold water for drinking and irrigation purposes.

"The fertility of the soil increases in the northeast and southern portions of the state, where there are thick dye and cabinet-wood forests. This is also the home of the beautiful Yucatan turkey and the venerated quetzal, the Mexican bird of paradise, sacred to some of the Indian tribes.

"With a coast line of 600 miles Yucatan has only two harbors, Progreso, the principal port, on the northern coast of the peninsula, and an old abandoned one at Sisal, a few miles farther west. Sisal, however, is the better harbor of the two, for Progreso is no more than an open roadstead, without shelter. Merida, the capital, a thriving city of 50,000, is on the site of the ancient Maya metropolis of Tihoo.

"Yucatan is of especial interest to archeologists on account of the remarkable ruins of the Maya civilization found there and throughout the peninsula. In the culture scale these Indians stood at the head of the American tribes. The remains of their prehistoric temples and cities are of most interest and beauty.

"Better favored with natural resources, Campeche is handicapped by lack of labor and adequate means of communication. Great tracts of virgin forests and unutilized wealth and advantages await the stimulus of foreign capital and initiative. The seat of government, of the same name as the state, is connected by railway with Merida, the Yucatan capital, and some of the plantations have light railways.

Logwood Valuable Export.

"One of the principal products of the province is logwood, a heavy red timber, which contains a crystalline

Rename Car in Honor of Porter Wreck Hero

Chicago.—When the pullman car hitherto called the Strocce emerges from the repair shops it will bear the name Daniels. It is to be the rolling monument to Oscar J. Daniels, 4402 South Wabash avenue, porter, who lost his life in the recent wreck near Rockport, N. J., in an effort to save passengers. Daniels was alive when rescuers found him in the wreckage, but refused first aid until a seven-year-old girl had been given medical attention. He was dead when the searchers returned to him.

yellow substance called hematopylin

—used extensively in dyeing and in coloring wines. The annual export of this product alone in 1923 was valued at more than a million pesos. Campeche stands second only to Yucatan in the production of henequen, or sisal hemp, as well as the usual tropical products such as sugar cane, rice, tobacco, indigo, cotton, etc. Many of the natives make a good livelihood manufacturing the so-called Panama hats.

"Campeche, the capital, is a quaint old city of 18,000 inhabitants. Founded in 1540 by Francisco Montejo, it is, therefore, one of the oldest cities in America. During the adventurous buccaneer days of the Spanish main it was sacked repeatedly by pirates until its bastioned and fortified walls, segments of which are still standing, were hastily erected.

"The town is over a system of immense subterranean caverns, excavated by the early Mayas and used by them as catacombs. The moist sea air imparts a venerable look to the port buildings, all of which seem hoary with age.

"Both states are paradises for the hunter or naturalist and abound with game, fish and gorgeously colored birds and flowers. In the forests panthers and boa constrictors lurk, while in the more open country there are wild boars, deer, the tapir and bright-plumaged birds. Shark fishing is one of the exciting sports along the coasts, where an endless and holy war is waged against them."

DETROIT SKYSCRAPER



Photographic copy of the architect's drawing of the tower office building in Detroit, for which ground has already been broken. It will be forty stories high and will be the central feature of a project that is to include three theaters, two hotels, a medical building, a recreation building and a retail shopping district, in addition to the office structure shown above.

GUARD 687,000 GAME ANIMALS IN THE NATIONAL FORESTS

Forest Service Workers Report Increase in Number.

Washington.—More than 687,000 head of big game animals make their home in Uncle Sam's 159 national forests, announces the forest service of the United States Department of Agriculture, which has just completed the compilation of a count made in 1924.

Compared with the previous year the 1924 figures represent an increase of about 44,000 head after due allowance is made for 44,300 head of bear which were not included in estimates of former years.

Forest service officials explain that this increase may be caused by the fact that 1924 was a very dry year, resulting in an unusual concentration of animals around watering places which enabled the forest rangers to

make closer estimates. Only animals using national forest ranges are included, no account being taken of animals which graze on adjacent federal lands or on privately owned areas.

Deer represent the vast bulk of the game animals with a total of 550,000 compared with 511,200 in 1923.

The five states credited with the largest number of deer are, in order: California, Oregon, Montana, Idaho and Arizona. Alaska is credited with about the same number—50,000 head—as the last two.

In the 1924 estimates bears were included as game rather than as predatory animals, the figures showing 44,200 head. Of this total 38,700 were of the black and brown varieties, 5,500 being grizzlies. Nearly all grizzlies listed were found in Alaska. Montana is the only state in which the forest rangers were able to find more than a scattering few of this bear.

Elk have increased, more than 52,000 head being listed for 1924 compared with 49,500 in 1923. In the Teton National forest bordering the Yellowstone park the elk herd has shown a notable increase.

The number of moose in 1924 shows a loss, only 5,100 head being shown compared with 8,000 in 1923. It is explained this difference may be attributed in large part to more accurate estimates. The number of mountain goats is given as 12,400 and 17,200, respectively, a slight increase of buffaloes are to be found only in protected herds.

Antelope, or pronghorns, are still in a very unsatisfactory condition. The 1924 count shows only a few more than 5,000 of these animals, most of which are in Arizona and Idaho.

Opening Fall River Scenic Road



This looks like a midwinter scene, but it was made at the official opening of the Fall River Scenic road in Rocky Mountain National park, Colorado, two miles above sea level.

Norse Whalers Lead World in 1925 Catch

Oslo.—The whaling season in the Antarctic waters around South Shetland and South Georgia has been very successful as far as the Norwegians are concerned.

The whalers secured 166,000 barrels of whale oil from South Georgia and 106,880 barrels from South Shetland, this being an increase in the amount obtained last year of 50,000 barrels.

At South Orkney, 54,000 barrels were obtained, while off the Mexican coast Norwegian whalers got 22,000 barrels. The total for the Norwegian companies this year has been 410,000 barrels, while other nations have produced 257,000 barrels.

The Norwegian whaling fleet consists of first-class vessels equipped with radio, and newly built tankers with cookeries. It sails practically over the whole globe, and it has about 4,000 Norse sailors engaged in the trade as whalers.

Thousands Homeless

Warsaw, Poland.—Heavy floods have left thousands of persons homeless in central and western Galicia, according to dispatches from Cracow.