THE RECENT DUST CLOUDS

By Henry W. Nichols
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The haze of dust which was present in the air in and around Chicago during many days of the late spring and early summer was a minor demonstration of a phenomenon which, when present on a larger scale, is of geological importance. The wind-blown clays and soils exhibited in Hall 36 of the Museum are examples of the effects of such dust clouds.

In some parts of the world such dusts raised by the wind settle to the ground and form thick deposits called loess. In parts of the central United States the loess deposit is more than 100 feet thick, and there are places in China where its thickness exceeds 1,000 feet. The dust has often been transported for long distances and the great thickness is the result of a slow accumulation over long periods of time.

Loess is much like a slightly coherent clay or silt deposit of uniform texture and of a light buff or yellowish color. Its most noticeable feature is its ability, when cut by streams or other means, to stand with vertical walls.

There is another kind of loess, often indistinguishable from the wind-blown kind, which is the consequence of the settling of silt from muddy water.

EXPEDITION TO THE SOUTHWEST WILL RESUME OPERATIONS

For a brief season of four or five weeks, Field Museum will continue its archaeological excavations at the Lowry ruin in southwestern Colorado. This is the fourth season of the expedition. Dr. Paul S. Martin, Assistant Curator of North American Archaeology, leader in previous years, will again be in charge. He will leave Chicago by motor about June 18.

During the previous seasons of work, many important discoveries were made, including mural decorations in the ceremonial chambers, a type of masonry hitherto unknown in that part of the Southwest, significant mixtures of pottery types, and evidences of at least five different occupations of this particular location.

It will be impossible to excavate many new rooms this summer because of a shortage of funds, but it is hoped that light will be shed on some of the more puzzling features which remain to be explained about this prehistoric site and its early inhabitants.

GUARANA

By B. E. Dahlgren
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One of the many interesting minor forest products of the Amazon is guaraná, a tropical climber long known to the South American Indians as the source of a pleasant beverage with the mildly stimulant properties of coffee. The plant is native in the forest of Amazonas especially between the rivers Tapajos and Madeira where it is also cultivated in various localities.

The accompanying illustration of a part of a guaraná vine, as reproduced for the Hall of Plant Life (Hall 29) of the Museum, serves to show the general appearance of the plant, its ribbed stems, large pinnate leaves, tendrils and bunches of bright red fruit. The plant (*Paullinia cupana*) belongs to the Sapindaceae or soap berries, a large tropical family abundantly represented on the American continent and—as a glance at the fruits would suggest, especially when they open, displaying their glossy black seeds—not very remote from the horse chestnuts.

It is the hard smooth seeds, purplish or brownish black, the size of a hazelnut kernel, which are utilized. Gathered before they are completely ripe, they are freed by washing from their adherent pulpy white aril, dried and slightly roasted over a fire. They are then pulverized in a mortar and by the addition of some water made into a paste which is sufficiently plastic to be molded. Usually it is formed into the shape of sticks, the size of thick sticks of licorice and weighing half a pound, but the dried guaraná is also offered for sale shaped into the form of fruits, miniature animals or other familiar objects of the region. The dried paste becomes very hard and keeps well even in a moist climate. When wanted for use a small portion is scraped off. A natural grater commonly employed for the purpose is a rasp-like bone from the mouth of the pirarucú, the large red food fish of the Amazon.

Aside from its local use in Amazonas, guaraná, like kola, because of its caffeine content, which is greater than that of coffee,

Branch of Guarana

From the seeds of this plant a stimulating beverage is made. This reproduction is exhibited in the Hall of Plant Life.

serves for the production of a non-alcoholic carbonated drink, much esteemed in Brazil. Guaraná is little known in the United States, except in pharmacy for its stimulant, diuretic and alterative properties, but, like many other vegetable products listed in the Pharmacopoeia, it is rarely used. All of the relatively small crop, seldom exceeding a hundred thousand pounds, finds a ready sale, though only a fifth of it is exported.

The material for the reproduction of a guaraná vine in Hall 29, and related objects, including a pirarucú rasp, shown with the exhibit of beverage plants in Hall 25, were obtained by the Marshall Field Botanical Expedition to the Amazon in 1929.

Marble from Poland

Six polished marbles from Poland have been added to the marble collection in Frederick J. V. Skiff Hall (Hall 37).

Skeletons of man, gorilla, chimpanzee and orang are arranged for comparative study in the Department of Zoology.

MANDEL GUATEMALA EXPEDITION ACHIEVES NOTABLE SUCCESS

With the return late in April of Karl P. Schmidt, F. J. W. Schmidt, and Daniel Clark from Guatemala, it is gratifying to report the notable success of several of the projects of the Leon Mandel Guatemala Expedition. Emmet R. Blake, ornithologist of the expedition, was to remain in the field until June 1 to conclude studies on the distribution of Guatemalan birds.

The expedition obtained specimens and accessory material for exhibition groups of three of the most characteristic and interesting of Central American birds—the toucans, the giant oriole, and the quetzal. Two species of toucans, with their brilliant colors and grotesquely enlarged beaks, were found feeding in great flocks on fruit trees in the forest. The giant orioles drape whole trees with their woven hanging nests which are from three to six feet in length. Their colonies are a remarkable feature of the tropical landscape, and specimens of the nests as well as the birds were collected. Special permission was granted by President Jorge Ubico, of Guatemala, to collect the quetzal, which enjoys special protection as the national bird of Guatemala. This most brilliant of all the brilliant trogons was formerly so persecuted for its plumes that it has become one of the rarest of birds. Specimens were found in the cloud forest on the slopes of the Volcano Tajumulco in western Guatemala, and a small series was collected for the Museum's exhibit of this bird planned for the proposed Hall of Foreign Birds.

The scientific results of the expedition in the accumulation of representative collections from this rich territory are as valuable as the materials obtained for the exhibition halls. The collection of reptiles and amphibians will enable Assistant Curator Karl P. Schmidt to conclude his project for a comprehensive list of the Central American forms undertaken under the joint auspices of Field Museum and the John Simon Guggenheim Foundation.

Specialization on certain groups of small mammals, and the employment of a wide variety of methods of collecting, produced notable results, especially with bats and certain rodents. The collections of these mammals obtained by Mr. F. J. W. Schmidt include some of the rarest of Central American species as well as several forms hitherto unknown.

Guatemala is the meeting ground of the animal life of tropical America with that of temperate North America, which reaches the Guatemalan plateau. The zoological problems in the Guatemalan fauna are especially attractive on account of the wide variety of climatic conditions in that country, which include tropical rain forests, inland deserts, temperate plateaus covered with oak and pine forests, and mountain peaks which rise above timber line. Previous expeditions to Guatemala for Field Museum worked in limited areas. The larger personnel of the present expedition has made possible more comprehensive work in this exceptionally interesting territory.

Giant Fossil Sponges

Giant sponges, as much as three feet in length, may be seen in Ernest R. Graham Hall (Hall 38). In fossilizing they have turned to flint, but they are still recognizable as sponges.

Mexican archaeology is illustrated by a large collection in Hall 8.