

## The Phelps

A new "Lost World" is found on an isolated tableland in the least known section of South America

THE DOTTED LINE on this map was drawn in 1931 as a proposed route to an unknown section of Venezuela. Where it ends it was thought there might be a mountainous "isolation zone" similar to Mt. Roraima and Mt. Duida previously explored. Recent aerial exploration reveals the existence of just such a tableland on almost the exact spot proposed several years ago as a base camp

THE expedition, which is now en route to Mt. Auyantepuy, Venezuela, promises to form a fitting climax to our memorable and successful explorations of Mt. Roraima and Mt. Duida.

Mt. Roraima lies at the junction of Venezuela, British Guiana and Brazil. It has a table-top about 25 square miles in extent, precipitous sides and an average elevation of about 8500 feet. Many new species of plants and birds have been described from Mt. Roraima and the commonly held belief that they were confined chiefly to its almost inaccessible top gave to the mountain a romantic distinction. Many people will recognize it as the original of Conan Doyle's "Lost World."

Mt. Duida is situated on the upper Orinoco, about 400 miles from Mt. Roraima. In July, 1928, G. H. H. Tate accompanied by Mr. Sidney F. Tyler, Jr., who financed the undertaking, led a Museum expedition to explore this mountain. At this time both the mountain and its life were wholly unknown and when Tyler and Tate ascended it they were not only the first naturalists, but probably the first human beings, to behold the basin-like tableland of approximately 250 square

miles that at an average altitude of 4500 feet form its summit. They had indeed discovered a new world.

The success attending the expeditions to these two interesting mountains and the discovery of the before unexpected faunal relationships of Roraima and Duida, aroused a strong desire to explore the region lying between these two mountains. It was our belief that we would find there other mountains, remains of the great tableland that once covered this region. In which event they would be inhabited by species related to those we had already found on Roraima and Duida.

But it was not without reason that this territory still remained the least known part of South America. On the north it was protected by trackless forest and unnavigable streams; on the south by vast areas of still unexplored territory in Brazil. By airplane alone could we hope to penetrate it. But although this was not more than seven years ago, exploration by airplane had not yet reached a stage where one could enter a region lacking sufficiently large bodies of water to assure alighting places.

An attractive prospectus, illustrated

with maps and photographs, of a proposed expedition into the unknown region was issued, but it failed to arouse sufficient support to enable us to carry out our plans and for the time they were reluctantly abandoned.

Meanwhile, the growth of Venezuela's oil industry and the development of the airplane as a dependable transport over unknown regions greatly increased our knowledge of before unvisited parts of South America. That portion of Venezuela in which we were interested could now be reached from the Orinoco in two hours instead of two months, if at all. Hence it happened that a prospector by air in this region discovered an uncharted mountain estimated to be twenty miles long and not less than 8000 feet high.

Knowledge of this discovery reached William H. Phelps of Caracas. Long a student of birds and a friend of the Museum he realized its significance and wrote us a leter such as curators may dream of but few have ever received. In brief he described the general character of the new-found mountain in sufficient detail to indicate that it was a large scale Roraima and added an offer to sponsor a Museum expedition to explore in

## Venezuela Expedition

provided due permission was given by the Venezeula Government.

If, under the influence of special inspiration, I had written a letter to myself I could not have produced one which would have been received with greater enthusiasm. The prospectus of the abandoned expedition was reëxamined and it was found that the newly discovered Mt. Auyantepuy is almost exactly on the site of our "proposed camp" (see map). Here, indeed, was a tribute to the accuracy of

our prognostications!

The significance of the Phelps Venezuela Expedition must be considered in the light of the previous discoveries made on the two other mountains. The American Museum expedition to Mt. Roraima in July, 1927, which was led by G. H. H. Tate, assisted by T. D. Carter, under the auspices of Mr. Lee Garnett Day, secured collections which gave us a far truer picture of the mountain's life than had existed before. The summit is devoid of forest and only two species of birds were found there. One, MacConnell's Sparrow (Zonotrichia brachyspiza macconelli), is represented by a close ally at a distance of only 1400 feet in the growth on the talus which surrounds the mountain. While the two forms are prevented from meeting by the sheer cliff that separates their homes, it is the difference between the climate of their respective haunts that more effectively keeps them apart. The race from the top of the mountain, reflecting the colder, moister nature of its habitat, is larger and darker than the race that occupies the warmer, less humid area below. Here, indeed, is a convincing demonstration of the development of an upper zonal form from an ancestor still existing in the immediately preceding

Unlike Roraima, the summit of Duida proved to be forested. Many new plants and birds were collected there but, so far as the latter are concerned, the fauna of Duida proved to be closely related to that of Roraima. The facts are presented in an article on the birds of both mountains in the American Museum Bulletin for 1931 (Vol. LXIII, pp. 1-135). They are summarized in the following statement: Common to both mountains, as identi-

 cal forms
 34

 Common to both mountains, as representative forms
 28

 Found on Roraima only
 17

 Found on Duida only
 7

The greatest interest is attached to the

prospect of further discoveries which may be made on the isolated summit of the third intermediate mountain

third, intermediate mountain.

The five months that have elapsed since this mountain became our objective have been fully occupied in preparations. Fortunately, Mr. Tate (who meanwhile has become Doctor Tate) returned from his work with Mr. Archbold in New Guinea in time to take the leadership of this new expedition. With ascents of both Roraima and Duida, and incidentally Turumiquire in northeastern Venezuela, to his credit Tate is especially qualified to direct this undertaking. He will have as his assistants Mr. W. F. Coultas, for years in charge of the Whitney Expedition in the Pacific, E. Thomas Gilliard, and James A. Dillon of the Museum staff. Mr.

Phelps, who has recently renewed his interest in ornithology, will also join the expedition.

The expedition assembles at Ciudad Bolívar, on the Orinoco November 27 and thence, as soon as may be, takes flight for Auyantepuy.

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BARRIER CLIFFS of Mt. Roraima, the probable original of Conan Doyle's "Lost World": a biologically isolated zone, which may be duplicated on the newly discovered Mt. Auyantepuy

