

Here in the spring wheat area of the United States summer fallow both stores water and accumulates nitrates. The stored nitrates are essential to satisfactory phosphate response on many soils.

### References

- <sup>1</sup>Hall, A. D. The Book of Rothamsted Experiments 1905.
- <sup>2</sup>Ibid—P XXIII "Biographical Introduction."
- <sup>3</sup>Gavin, Sir Wm. The Way to Higher Crop Yields: Agriculture: The Journal of the Ministry of Agriculture P106 58: 105-111. 1951.
- <sup>4</sup>Russell, E. J. and Watson, D. J. The Rothamsted Field Experiments on the Growth of Wheat. Tech. Communication No. 40, Imperial Bureau of Soil Science 1940.
- <sup>5</sup>Ibid P. 62 and 63.
- <sup>6</sup>Ibid P. 70.
- <sup>7</sup>Report of the Rothamsted Experimental Station for 1953—The Classical Experiments P. 138. Harpenden 1954.

### THIS IS THE JUNGLE PRIMEVAL

A six square mile tract of jungle in the Panama Canal Zone contains one of the world's most varied and most concentrated collections of tropical wild life.

This is Barro Colorado island, now administered for the benefit of the world's naturalists by the Smithsonian Institution. The island is an old hilltop, left above water when the Chagres river was dammed to create Gatun lake, an integral part of the Panama canal. Barro Colorado is covered by primeval jungle, much the same today as when Spaniards first crossed the isthmus. It is preserved intact entirely for scientific purposes, and it has been estimated that within half a century it may constitute the only unaltered jungle in that part of the world.

Barro Colorado remains unaltered so far as its living things, from pinhead sized red chiggers to boa constrictors, are concerned. All the ancient ways of jungle life go as they did 10,000 years ago without attempt by man to modify them. It remains natural jungle, ordered as little as possible for the benefit of scientists. There are miles of marked trails for the use of naturalists and native guides familiar with the haunts of most of the wild creatures. Only in one secluded corner is there a small, man made clearing for living, laboratory and library facilities.

The island still contains the mammals, birds, reptiles, amphibians and lower forms of life it had before the white man invaded Panama. To these a few may have been added—jungle creatures that have found a refuge here when life in their former habitats became difficult. Killing or capturing an animal, or even picking a plant, except for approved scientific purposes, is strictly forbidden.

Naturally, life may be somewhat more concentrated than it was in the original jungle. Creatures live at closer quarters to one another. They now have had a quarter of a century to adjust to this condition and appear to have done quite well. The waters of Gatun lake serve as a wall through which few of the land creatures can make their way easily.

Scientists have been exploring the life of Barro Colorado for the last 25 years, since the opportunely created island was first set aside as a preserve at the request of naturalists by order of an interested governor of the Canal Zone. Hundreds of hitherto unknown species have been found here and described to science, most of them, of course, smaller creatures such as insects and small amphibians and reptiles. Many more, it is probable, will be found in the future, as the investigators are far from having reached the ultimate depths of the infinitely varied and infinitely complicated jungle life.