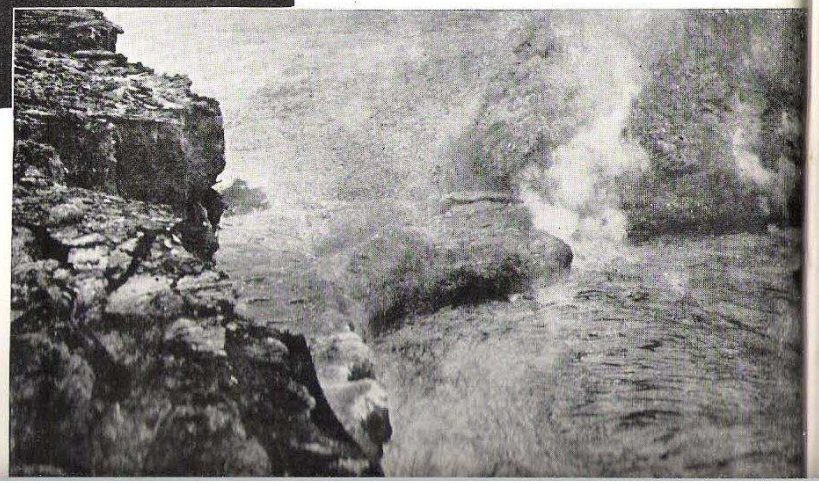
below the surface the soil gives place to layers of hard lava through which no roots can penetrate.

The hold of the roots of the trees in this forest being thus very weak, the trees often fall, as a result of high winds and tornadoes or the passage of the herds of elephants which roam these woods.

There are heath-trees to be found higher up on Nyamuragira, these are shorter than those on Mikeno ; and there are also lobelias, immortelles, and hypericum.

Nyiragongo, although only a little higher, is much more picturesque and closely resembles, in its flora, the volcanoes of the eastern chain. Of special interest is a crater known as Shaheru, where bamboo and

15. Nyamuragira.
The crater, by night, before the eruption of 1938
(Photo J.-P. Harroy).



16. Nyamuragira.
The new crater, eruption of January 1938.
(Photo R. Hoier).

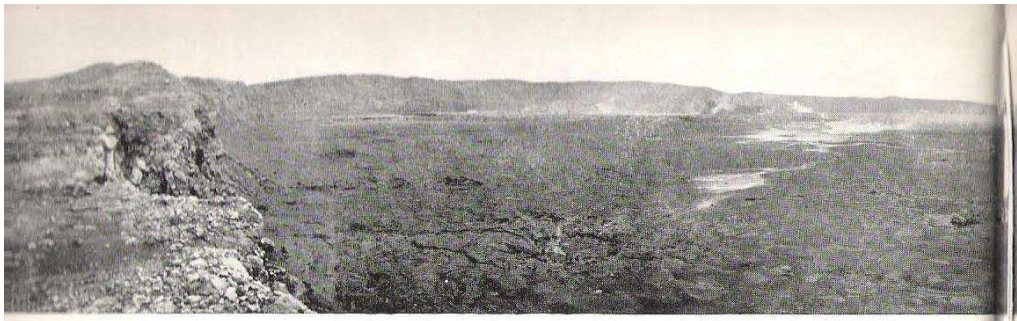
17. Sake straits.
Lava from Rumoka volcano (eruption 1912) on the shore of Lake Kivu.
(Photo G.-F. de Witte).

18. Biliba (Eastern slope of Nyamuragira).
Vegetation on lava plain.
(Photo J.-P. Harroy).

hagenia flourish, and on the botton[m] of the crater, hypericum, senecio, lobelias and carex, thus reproducing[s] at 2.800 m. (appr. 9.200 f.) the general aspect of Rukumi (Karisimbi[)], situated 1.000 m. (appr. 3.300 f.) higher.

The bottom of the crater of Nyi[ragongo] is difficult of access. With sides almost as steep and vertical as [a] chimney's, it measures 2 kilometres (appr. 1. 1/3 mile) across and is 250 m. (appr. 800 f.) deep *(photo 20)*, and in the horizontal platform at th[e] bottom of this crater there is another chimney, quite vertical and seve[ral] hunderd yards in diameter, going down into the bowels of the earth a[nd] still in activity.

The climb up the volcano via th[e] Shaheru crater is very picturesque



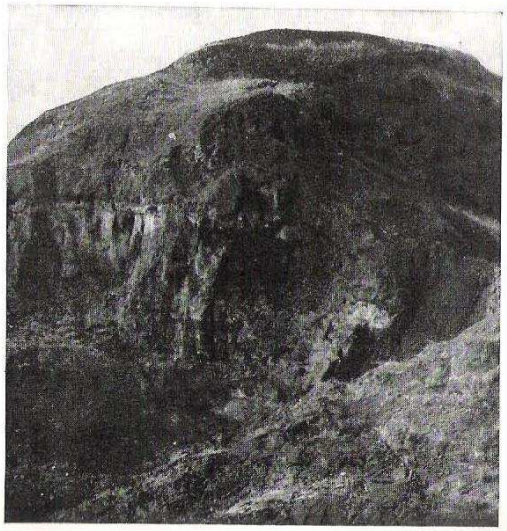
19. Nyamuragira. - *Panorama of crater.* - (Photo E.-J.-B. Verleyen).

indeed, and the edge of the great crater can be reached, without undue fatigue, in two days. The fumes and the constant variations in the direction of the winds unfortunately often spoil the view.

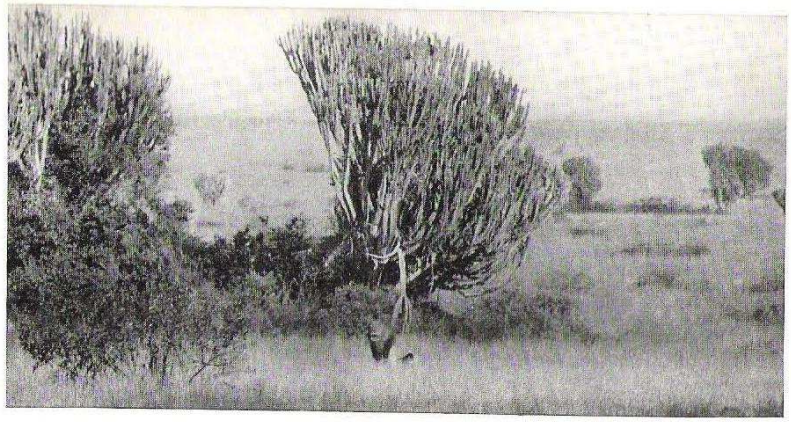
Early in 1938, the crater of Nyamuragira *(photo 19)* was still an exceptionally attractive spot for tourists. Huts have been built for the benefit of climbers at Mushumangabo, on the eastern side of the mountain, and in the crater itself. It is easy to penetrate down into the crater; and there was no risk whatever in approaching the active area where open chimneys and holes presented, especially in the evening, a real picture of inferno *(photo 15)*.

20. Nyiragongo.
Crater.
(Photo J.-P. Harroy).

At the end of January 1938 (the crater having for months given evidence of increasing activity) a further eruption opened a new outlet on the southwestern slope, outside the crater proper. A large stream of lava spread towards the south *(photo 16)*, threatening to cut off the Goma-Sake road. The opening of this new outlet, however, brought to a stop the usual activity of the central crater; and at the time of writing, a specialist sent out by the « Institut des Parcs Nationaux du Congo Belge » to study the phases of this eruption states that he cannot yet decide whether the shifting of the centre of activity is permanent or not.

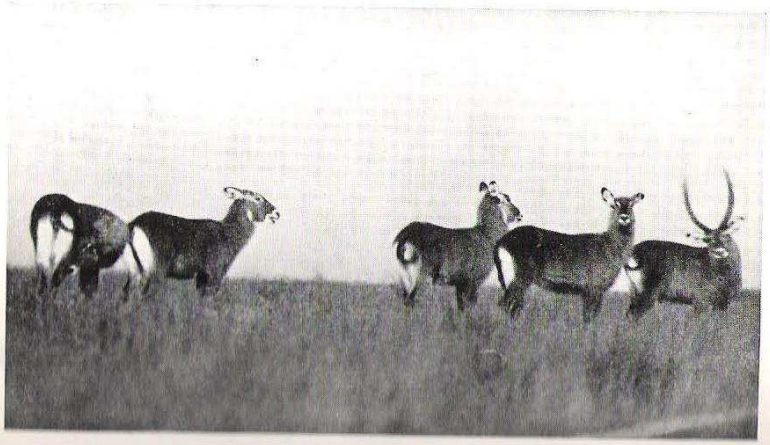


21. Rumoka.
Inside of the second crater.
(Photo G.-F. de Witte).



22. Rwindi-Rutshuru plain. - *Euphorbia, Lion.* - (Photo L. Lippens).

23. Rwindi-Rutshuru plain. *Camping by night.* (Photo J.-P. Harroy).



25. The hot springs of May-ya-Moto. (Photo J.-P. Harroy).

c. THE RWINDI-RUTSHURU SECTION.

This section, commonly known as « The Plain », stretches to the east up to the frontier of Uganda, and to the west rises to a mountainous wall with altitudes reaching 2.000 metres (appr. 6.500 feet).

Certain volcanic features resemble those of the previous section. 50 kilometres (appr. 30 miles) to the north of Rutshuru and very close to the main road toward Beni, the series of seven hot springs at May-ya-Moto *(photo 25)*, most of which are actually boiling, are such an extraordinary sight that they well merit the little extra time required for a visit *(photo 26)*.

This section is partially open to tourists and is particularly noteworthy for the abundance of animal life. Large herds of antelope and

26. May-ya-Moto. - *Rutshuru River and swamps near the hot springs. Mount Kasali.* (Photo G.-F. de Witte).

buffalo *(photo 27)*, also elephants and carnivorous animals are to be found amidst the growth of euphorbia *(photo 22)* and thorn-bush.

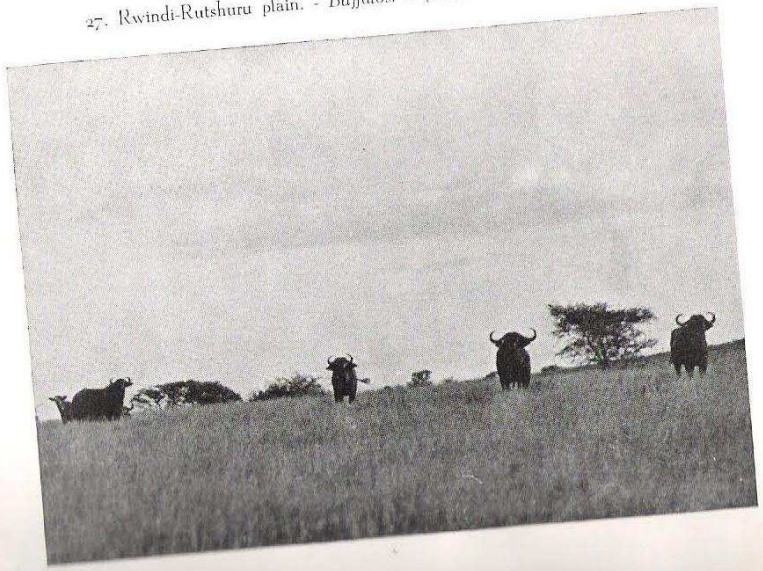
The recent alluvial formation of this plain explains the intensive evolution of the vegetation, which is actually passing from open grassland to dense bush and savanna *(photo 31)*. This change in vegetation is rendering the district less and less suitable as a natural abode for antelope, making difficult their escape from their carnivorous enemies, so they are gradually decreasing in number.

The elephants and buffalo, for which a more wooded habitat *(photo 30)* is quite suitable, are multiplying greatly. And the carnivorous animals, lions, leopards, jackals, hunting dogs, are not failing to take advantage of this change and are fast increasing in numbers at the expense of the antelope, cobs and topi.

The policy of the Institute, forbidding bush fires systematically lighted by man, has been blamed as the cause of this decrease in the herds of antelope. Recent research has, however, proved that the suppression of man-made fires does not prevent the bush being burnt at least once every three years by natural fires, usually started by lightning. It has further been shown that these fires do little to prevent or hinder the evolution of the vegetation on this plain.

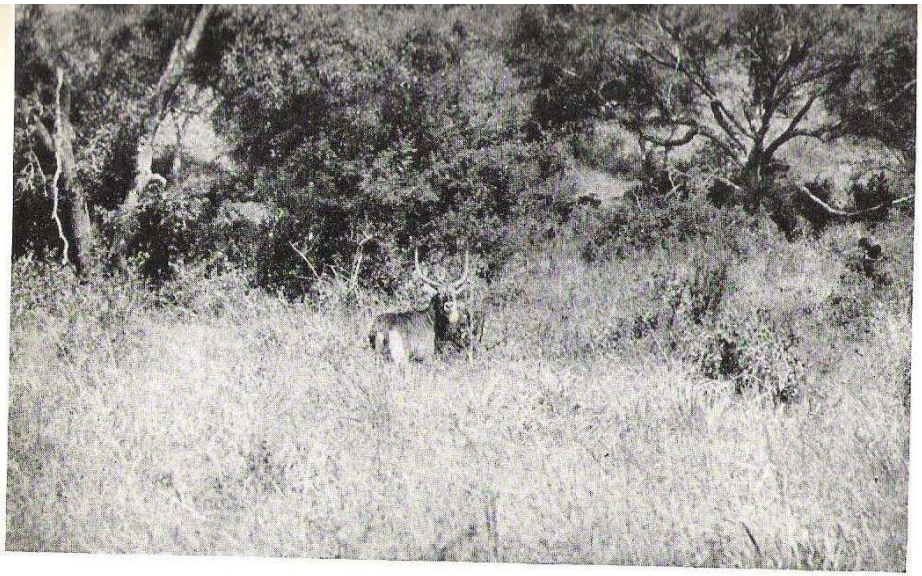
In these circumstances the decrease in the number of antelope, to the benefit of other species, must be regarded as a natural phenomenon, and even the renewal of bush fires would be incapable of arresting its evolution.

27. Rwindi-Rutshuru plain. - *Buffalos.* - (Photo L. Lippens).



28. Ishasha plain (on the Uganda border). - *« Elands horn » euphorbia.* (Photo R. Hoier).

29. Rwindi-Rutshuru plain. - *Hippos in the Rutshuru river.* - (Photo E. Hubert).



30. Kamande. - *Thorny bush. Waterbuck.* - (Photo L. Lippens).

31. Rwindi-Rutshuru plain. - *On the left, open plain inhabited by antelopes. Cobs. On the right, thorny bush, one of the stages in evolution of the vegetation.* (Photo L. Lippens).

32. Bitshumbi (Lake Edward). *Bird colony* (Photo L. Lippens).

33. Kamande (Lake Edward) *Elephants bathing.* (Photo L. Lippens).

d. THE LAKE EDWARD SECTION.

This section comprises the Belgian waters of the lake and a narrow strip along the western banks.

Lake Edward, especially since it has been a reserve, shelters far more wild life than almost any water in the world *(photo 33)*. On its banks are thousands of hippopotami and the aquatic vegetation harbours innumerable colonies of the most varied species of birds *(photo 32)*. The waters of the lake are well stocked with a profusion of different varieties of fish. The shores, which were infected with sleeping sickness, were evacuated several years ago on medical advice.

This section includes, to the northwest of the lake, the Tshiaberimu range, with an altitude of over 3.000 m. (10.000 f.), which is covered with very varied types of vegetation and is the home of a race of gorillas probably unknown in the other forests of the « Parc National Albert ».