

Note-- An interesting feature relative to raising livestock is found in the fact that while cattle and horses do very well within the city limits of Elizabethville, they die if taken a few miles beyond, even if returned immediately, because of the tsetse fly, which retires somewhat from the regions cleared and settled.

January 5, 1920. The day previous was spent largely collecting grasses, of which there are a great many here, since they are a very important element in the vegetation, but only relatively few now in bloom.

The following photographs were taken very early in the morning:



A -1 Beautiful white-flowered woody vine. Looks like myrtle. See Herb. 518. This vine is abundant. Found on practically every anthill.



A -2. Shows native planting corn and beans mixed. This photograph is typical of the small patches cultivated by the natives. It is also typical in that it represents excellent growth of these crops.



A -3. Termite hills of grey or slate colored clay, occurring on a patch of low land covered only with grass between high land that is forest covered. This gives some idea of the number of anthills.



A -4. Hills similar to the photograph just shown, but the hills here are apparently lower and have become more compound. In fact there seems to be a tendency for a crop of new hills to form around the old one, reminding one somewhat of the suckering of plants.

A -5. S.P.I.  
50066, Rhus,  
see Herb. 520.  
A detail photo  
graph of a br-  
branch of this  
tree. This  
Rhus has rela-  
tively small  
branches and the  
wood is appar-  
ently of good  
quality. The  
branches are  
spiny. It is a  
very desirable  
ornamental tree.





A -6. A field of peanuts and corn, or as they are known by the natives, monkey nuts and mealies.



A -7. Peanuts in the foreground, sweet potatoes and corn in the background, also native village.



A -8. One of the agriculturists. <sup>corn</sup> ~~Woman~~-at the side. The woman is carrying four gallons of water on her head in an old petrol can and about 1 gallon in an oil can. This water was taken from an open pool and is muddy and dirty..



A -9. Similar to A -8.

A -10. Similar to A -8 and 9



A -11. Corn and pumpkin at the left. At the right a portion of the native village. One of the cottages at the right had a sign over the door in English, "Photographic supplies".



A -12. View of native village. Crops are grown in close proximity to the huts, as shown at the right.



B -1. A mortar, <sup>le</sup>pestil, and sifting basket. These are used in pounding corn or mealies into cornmeal. Water is added to the corn and it is pounded lightly until the pericarp is loosened, when it is winnowed and again pounded into a meal. Pestil, mortar and basket are of native construction.



B -2. A native garden, shows beans, corn and pumpkins, with hut in the background.



B -3. A general view of the natural vegetation at Elizabethville. Pteris and Afrimonum.



B -4. Looking down the main street in Elizabethville. The trees are largely the remnant of old forest trees. Bananas are planted here and there are many smaller ornamental trees put in. At the extreme right is shown the remnant of an anthill, the sides having been cut down perpendicularly. Our hotel is shown on the right in the background.

Note. The natives when taken into the compounds by the white man and fed regularly, take on about 16 pounds in weight during the first 6 months. Under the native conditions they live largely on mealie meal, but in the compound they are given a diet consisting at Johannesburg of the following:

Meat	3 pounds	per week	
Monkey nuts	2 "	" "	
Mealies	3 "	" "	day (or occasionally this is reduced to $1\frac{1}{2}$ perda
Soup	$1/2$ gal.	" "	
Coffee or			
Cocoa	1 pint	" "	
Bread	$1/2$ pound	" "	
Manioc flour	1 quart	" "	
Kaffir beer	2 gallons	" "	week

Kaffir beer is made in the following way: Kaffir corn is matted between grain bags and saturated with water, placed in cool shade for 3-4 days and

allowed to just start germination. Then it is spread out on canvas and allowed to dry. It is then pounded into a flour and 15 pounds added to 40 gallons of water and boiled down from 4-5 hours. Then it is taken out into a big vat and later put in casks for 48 hours. It is then dipped out into pots and more water added and the liquid separated. The malt is used for cattle. This liquid contains a little less alcohol than beer. Usually 8 natives will consume 4 gallons of beer and occasionally two will consume 4 gallons between Wednesday and Sunday morning. They are thus able to get drunk on it. Twice a day they are usually given this. Once as they come out of the mine. It is a sour, good food, and relatively non-intoxicating.

The women of Nyasaland are unusually strong. A woman will carry her child and 40-60 pounds of luggage on her head for an average march of 25 miles a day. The men loaf a great deal and are showing the result of it.

In the market at Elizabeth the following vegetables were noted:

In the native market.

- Green corn
- Cassava--leaves to be used as spinach
- Cassava root
- Sweet potatoes, white and red
- Dry fish
- Pumpkin leaves to be used as spinach
- Beans
- A light green melon that looks something like cucumber, but much thicker.
- Cucumber
- Green pumpkin
- Very small red egg plant.

In the market where produce is sold for white consumption.

Tomatoes, celery, lettuce, cabbage, stringbeans, leeks, Swiss chard, cucumber, corn, eggplant, peppers, radishes, chicken. The large mushrooms 16 inches in diameter previously photographed at Kafue.

The market is fenced off and the purchasers keep outside this fence. It opens at a definite hour and if you arrive before this hour you can make