

BEE-KEEPING AND HONEY-PRODUCTION IN KONTAGORA EMIRATE¹

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The bee-keeping industry of Kontagora Emirate was explored and exploited as a minor contribution to the war against Hitler's Germany.

The area, its bee-keepers, and their industry

The Emirate's bee-keeping industry lies mainly in the area extending from the River Niger between Yelwa and Auna, south-eastwards to the Bida-Kusheriki Road between Kagara and Wushishi. This area, some 10,000 km² in extent, is sparsely populated, well covered with *Terminalia* bush, and has numerous streams and marshes, isolated hills and rocky outcrops.

A census, taken during the dry season of 1941/42, of the five main honey-producing districts, namely Auna, Ibelu, Kontagora, Kotonkoro, and Mashegu, revealed that 1,242 of the adult male population of 8,060 were keeping bees, and owning 9,160 skeps. Most keepers are of the Kamberi tribe, with their methods of honey-production ranging from merely seeking nests in hollow trees to maintaining a hundred or more well-made skeps.

There is said to have been a flourishing export trade in honey through Yelwa and Kutawengi to the Southern Provinces which has declined of recent years—many men claim to have given up bee-keeping as they had been unable to sell their produce satisfactorily. (Has the advent of cheap cane-sugar caused this decline in value?)

The bees

Two kinds of bees are recognised, the one producing plenty of honey, and the other, a smaller, fierce, hairy form, very little. These may be identified, perhaps, with the *faifai* and *bi-kara* of the bee-keepers of Zaria.

The skeps and their colonisation

Skeps are of two types, the one of clay and the other of basket-work. The clay form resembles the shell of a 15" naval gun in shape and size, has an open base, and a small hole at the apex for ventilation. Small holes low down on one side give access to the bees, and higher up on the opposite side a small door provides for removing honey-comb. Such skeps stand upright on a large flat stone lodged securely in the fork of a tree, and are covered with a conical thatch to

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protect them from sun and rain.

The basket-work skep is of much the same size as the clay form, and may be of the same shell-shape or cylindrical. If cylindrical, it is usually woven in ordinary basket-work but, if shell-shaped, the weaving is usually of the type seen in *zana* mats. Split bamboo and giwa-grass are commonly used for weaving, and the finished skep is plastered inside and out with cow-dung to seal the weave. Ends are closed with basket-work discs, pegged and plastered into place. Bee-entrances are pierced in one of the discs. Finished skeps are wrapped in a protective cover of thatching-grass, and placed horizontally in a suitable tree-fork.

New skeps are usually put out about Christmas — in time for the main swarming season. They are lodged high in almost any kind of tree, but Shea-nut (*Butyrospermum parkii* Kotschy), Tamarind (*Tamarindus indica* L.), and Black Plum (*Vitex* sp.) appear to be favourites. Skeps are usually placed with their bee-entrances facing west, away from the main direction of driving rain.

Keepers were reluctant to disclose their methods of inducing bees to colonise new skeps, but the general principle seems to be to mix some aromatic substance with a slow-burning material and, with incantation, to put the mixture to smoulder inside the skep to give it a bee-attractive odour. The dried powdered flowers of *kalgo* [*Piliostigma thonningii* (Schum.) Milne-Redh. and dried powdered cow-dung are common ingredients. Keepers consider themselves well-favoured if half their skeps are eventually colonised !

Taking the comb: its yield and value

Skeps are normally opened once a year, just before the rains. Just after sunset, smoke from a torch of grass is blown gently into the hive to drive out the bees, who usually congregate on a nearby branch. Few bees get killed and, at sunrise, they usually make their way back to the hive, in which it is customary to have left some comb for them. In taking comb, keepers usually strip to a tight loin-cloth and, they say, with no loose clothing to entangle and enrage the bees, are seldom stung.

In a good season, a petrol-tin (18 litres) of comb-honey may be expected from four to five skeps, while a natural nest in a hollow tree may yield as much as two tins. A tin of comb-honey is worth 3/- to 5/- according to locality, but is said to have been worth 10/- some years ago.

Buying the 1942 honey-crop

During the 1942 season, honey-comb was bought at Kontagora itself and at three selected market-villages each about twenty-five miles away in different directions. Markets were open during May and June, with 10.4 tonnes of comb-honey being bought, at 2d per pound (4.4p/kg). Only well-capped comb-honey free of brood and pollen was accepted—extracted honey was all too likely to have been watered! Most comb arrived layered in calabashes, and contained a few dead bees and some ash and straw from the torches used to smoke out the bees.



Bee-keepers with a variety of hives



Newly made clay hives

Records suggest that about a quarter of the crop was bought, with distance from market being the main determinant. Thus about 75% of the crop within 5 miles of a market came in, but only 2% from places 15 or more miles away.

Processing the comb-honey

With much trial and error, and within the constraints of war, a crude but effective method of processing the comb was worked out. Honey was squeezed from the comb by hand at each buying station, and sent to Kontagora in petrol tins for refinement.

At Kontagora, the hand-squeezed honey was settled in 44-gallon (200 litre) oil-drums for a week, to allow impurities to rise or sink. The honey between these two extremes was then strained.

Bags of satin, 65cm deep by 12cm in diameter, with double-sewn seams, were partly filled with honey and each suspended over a wide basin (satin was the strongest and most finely woven fabric to hand). Honey was then 'milked' from the bag by repeatedly drawing the hands, thumbs and middle-fingers touching round the bag, firmly and slowly down its length. Bags were thoroughly washed after each milking, and were discarded as soon as showing wear. This worked well, and the 'milkmaids', chatting happily among themselves, liked it. Five maids, with forty clean bags to hand, could milk one drum of honey as the task for the day.

The balls of wax formed in squeezing the honey from the comb were melted by boiling them in water, and the molten wax skimmed off and sent to Kontagora for refinement. At Kontagora it was again melted in boiling water and, while molten, wrung through fine cloth to remove impurities. Clay pots were used for boiling, because they yielded an attractive orange-yellow wax where metal utensils yielded an unattractive grey-yellow wax.

Processing attracted numerous bees, which seldom stung us but had to be kept out of the honey! It usually sufficed to screen windows with cheesecloth and to keep doors closed, but occasionally we sought relief by working at night while the bees were abed!

The 10,400 kg of comb-honey bought during the season yielded 7,370 kg of refined honey, and 330 kg of refined wax. Thus proportions were: 71% honey, 3% wax, and 26% waste. The bulk of the waste appeared to have been old cocoons but, given the viscosity of honey, handling losses must have been appreciable. Costs, including purchase and delivery to rail-head, amounted to 2.45d per lb (5.40p/kg) of comb honey bought.

Kontagora honey

Kontagora honey is brown in colour and strong in flavour. Produced with the wartime improvisations described, it is cloudy, but contains no impurity visible to the naked eye. Under the microscope however, pollen grains and minute particles of wax and torch-ash may be seen.