

similar knobbed arrows are used in South America by certain tribes, to kill Trogons and other fine plumaged birds. One man brought for sale a large Bird of Paradise, dried in the usual manner, but he wanted the full price for it asked by the Chinese dealers at Dobbo.

Mr. Moseley writes of this excursion as follows:—"I procured two guides, a man and a boy, and promised them a florin for every Bird of Paradise that I shot. I had previously been in pursuit of the birds at Wokan, but they were not so common there, and I believe that the native guides did not exert themselves to show us the birds, as they no doubt regard them more or less as property, and a source of wealth.

"My first acquaintance with the great Bird of Paradise (*Paradisea apoda*) was at Wokan. I was making my way through the forest with a guide in the very early morning, when a flock of birds flew by in the misty light, passing right over my head. They flew somewhat like a flock of jackdaws, and I was disgusted to realize when too late that they were a flock of the very birds I was in search of. I did not fire for fear of disturbing the woods. I heard them cry soon after 'wauk, wauk,' but could not come up with them.

"At Wanumbai with my guides, I first encountered a number of Fruit Bats, which were on the wing in the early morning, and I killed one with a young one hanging at its breast. We soon heard the cry of the great Bird of Paradise, 'wauk, wauk.' I crept up within shot with my guides several times, but as usual, though they saw the bird plainly amongst the foliage, I could not make it out in time, though I saw the leaves rustle, and I did not want to fire without making sure. The guides, in view of the florin, were as excited as I was, and kept seizing my arm and pointing, 'burong mate, burong mate,' but away went the bird without showing itself to me. The birds seemed to keep constantly on the move in the trees, hopping from branch to branch, and were very quick and silent in their flight away to a fresh spot. Several times I saw them amongst the branches of trees so high that it was useless to shoot at them, for my cartridges, specially prepared with nearly four drachms of powder, had no effect. The birds seemed to be as often single as in companies, and were evidently on the feed in the early morning. At last a hen bird flew up off the ground close to me, with a small lizard in her beak, and pitched on a dead branch to eat it, and I shot her. But, of course, what I wished was a male in full plumage. This, however, was not to be obtained, for not a single one was shot. It is remarkable what a very large proportion of young males and females of the great Bird of Paradise there seems to be, to the comparatively small number of males in full dress. I believe I saw one at the top of a high tree, but am not certain. Probably the old males are warier, being often hunted, and keep out of the way. They require four or five years to develop full dress.¹ At the breeding

¹ It is improbable that *Paradisea apoda* loses its breeding plumage as soon as the breeding season is over. *Paradisea minor*, as has been observed in the case of specimens kept in confinement in the Zoological Gardens, London, certainly loses its plumes only at the moulting season, like other richly ornamented birds. *Paradisea apoda* moults, according to Wallace, in January or February, and is in full plumage in May. At all events there must have remained birds with plumes in September.