A Sketch of the Life of Samuel White—Ornithologist, Soldier, Sailor, and Explorer.

By His Son, S. A. White, C.M.B.O.U.

XIX. THE ORNITHOLOGIST AND SAILOR.

There were few of the Aru women seen, and it is my im-

pression that they are not allowed to speak to strangers, and this also applies to the girls. Whenever I came suddenly upon a home where there was a woman at work, she would drop whatever she had in her hand and rush up into the house. I met one in any of the little tracks through the bush she would run and hide. I always passed on without taking the slightest notice, but I think this shyness soon wears off. I had a better opportunity of seeing some of the little children, for I made it a practice to give them beads and other presents when I saw them, then the fathers and friends of others would bring them for me to look at, but the poor little things were as much terrified as if they had been taken to see a wild beast. Both men and women adorn themselves with beads and other ornaments of brass, pearl, tortoise shell, finger rings, earings, and necklaces; the beads in greatest demand among them are mixed white and coral red. The Aru people are very fond of keeping pets of all kinds. Dogs, cuscus and birds, as well as fowls, cockatoos and parrots of the most brilliant plumage, and every conceivable hue were brought to me, generaly tied by the leg to a piece of bamboo bent into the shape of a triangle, and it is surprising how tame they appear. This is no doubt due to the training they get. The natives are continually mauling every thing they have, either dead or alive, and are often very cruel to them; indeed they have neither thought nor feeling for them. Poor wounded birds are tied by the legs to a stick and kept hanging and fluttering till the leg mortifies, or they die of starvation. The dogs they have about them are diminutive, ill looking, half-starved mangy curs, and can be useful for nothing but making a noise. The brutes are a pest and source of constant anxiety. When I camp near a village, they prowl about all night, and if anything is left within their reach they are sure to carry it off. I know not what religious the Aru people possess, or if they have any. All, the natives have canoes, and the larger prau is plentiful, "dug-out", made the former being a mere out of a solid log hollowed out in the centre, and they are from 18 to 30 feet long, by 12 to 18 inches wide, well-formed, sharp at both ends, and have a good shear. Some have a couple of cross beams projecting over each side 4 to 5 feet, and have a piece of bamboo or cocoanut fastened fore and aft, with rattan to form an outrigger, and give the craft more stability. boats will hold 3 or 4 or even 6 to 8 men who propel them with The larger vessels. short spade-like paddles at a good pace. are much better craft, they are regularly and ingeniously built on a keel, which does not add much to the draft of the craft. Every plank is hewn out of a solid log, and cleats are left every two feet in the solid wood; these cleats when the planks are in their places, come opposite to each other, and form rows from These, after they have been boarded verkeel to gunwale. tically, are fitted with bent pieces of wood made to fit and touch every cleat, and are laced down to them with rattan; these form the timbers of the ship, and the planks are hewn to an inch or an inch and a half in thickness with the cleats about two or three inches deep. The scarfs are generally curved, and about a foot long, the plank being laced to the keel, the latter in some instances being continued at one end to 8 or 10 feet above the craft, and ornamented at the top. The planks are bevelled one edge to the other as well as being laced, and the whole is made tight by caulking with cocoa-These boats usually have a deck of split bamboo lashed down with rattan, and a small neat house built on

this, into which the crew can creep. It is propelled with short broad paddles, or a large mat sail made of pandanus leaves sewn together, and hoisted on a bamboo yard to a triangle or tripod mast, and lashed down to the craft. Of course these boats can only sail before the wind, and they are going continually from the Blackangtanna to Dobo with articles they have for barter. The trade of the Aru people must be very limited, for there was nothing that I could see that is worth trading for.

The Paradise plumes appear to be the chief thing they sell, and they fetch 20/ each; very few pearlshell, and still fewer pearls are found. I had a few pearl shells offered me, by some of the boats which were passing on their way to Dobo, and the price asked for small shells was five rupees a pair. The pearls offered me were very small, and a few edible birds nests and some sugar cane seemed to be all the Arue people could trade in except it be a little "Trepang" which I should judge as very poor quality, it being a very different article from that which I have been used to seeing in the straits. The edible birds nests seemed to be valued at about threepence to sixpence each. Every kind of fruit and vegetable was very scarce and dear.

Minerals in the Aru Islands are wanting. I did not see or hear of any. The whole of the country seems to be of a

limestone formation.

## MAMMALS.

The Mammals of the Aru Islands are not so numerous in species or specimens as in most parts of Australia, nevertheless small mammals such as rats of various kinds are by no means scarce in many districts. They frequently annoyed us, by destroving our food and specimens. The largest of the animals which came under notice while I was camping on the islands was the pig, and I found that in his wild state he was a lanky ungainly looking beast (the Malay name for this animal is The only species representing the kangaroo on the island is a wallaby of moderate size, and a distinct species. The greatest distinguishing mark being a broad white bar on the thigh. It is very like some of our scrub wallaby. The natives at times catch these animals in snares, and I have had them brought to me tied by the legs till the limbs are swollen and numb, or coiled up in a basket where they must have been confined for days or weeks, so that in either case the unfortunate animals could not walk, and never lived more than twentyfour hours after being liberated. The next in size to the wallaby is the cuscus, a tropical opossum of large size, and with a tail which is perhensile and bare of hair for half its length. This

animal lives amidst the foliage of the trees, and feeds upon the voung leaves and shoots in a similar manner to some of the Australian opossums, but the cuscus differs from the opossum Australia in colour, and its fur is very thick and woolly, and often of a dirty, creamy white. The ears are very short, and the skin about the face, especially about the eyes and nose, is a bright, pinkish flesh colour and gives a decided character to its appearance. The texture of the skin of the cuscus is very different from that of the Australian opossum; the skin of the latter is tough and capable of making good thin leather, but the skin of the cuscus is so tender that it will not bear its own weight while skinning, and the greatest care must be observed to get it off the animal whole. When the cuscus is brought in by the natives it is never perfect. If in a dead state it is sure to have been struck with something to kill it, which always breaks the skin, if alive it is sure to be bound with rattan, which cuts the skin about the legs or other parts, and even when brought in baskets the creature's struggles damage it very The carcase is usually very fat, the flesh white, and much esteemed by the natives. Three colours are represented in my collection. A middle-sized one with light grey upper surface and a large one of a dirty creamy white, and a small animal whose fur is creamy white with large and irregular I procured about eight other species of blotches of black. small mammals, such as rats, some of these being large, some small, some had coarse hair, others fine fur, some were water rats, some lived in the scrub amongst the fallen timber and rocks, whilst others took up their abode with the natives in their houses. One animal was very like our bandicoot, but was very small and had a very long nose and short tail, another was closely allied to the squirrel, having a long bushy tail, and it was of a dark brown colour. From the number of species and specimens I procured during my short stay, I should think that the rodents and small mammals were fairly represented in the The bats are very numerous, some subsist on fruit and vegetables, others feed on insects like small bats. fellow is as large as a small dog, with a long snout like a hound, pleasant looking eyes, short-pricked ears and wings, measure considerably over four feet across. Then there are others whose bodies are not bigger around than one's finger. I procured five or six species while hunting in the Arus, the larger ones were shot like birds with the shot gun, but the small ones were captured in fly nets like night moths.

## THE BIRDS OF THE ARUS.

The birds of the Arus are plentiful in some districts, yet there are places where a collector would fail to find two Owing to the short duration of my visit, it may three species. be I am not competent to judge of the number of species. recorded over two hundred species, and saw and heard others. I did not procure all the species to be found in the island, and nearly all the birds are to be found either in Australia or New Guinea, yet there are some species confined to the island and found nowhere else, the chief of which being "the Great Bird of (Paradisea apoda), and called by the natives "Burong Matti." This magnificent creature is not found in any other part of the world other than the country of the Aru group. It measures 18 or 19 inches from the bill to the end of the fail, not including the wire feathers, which are 20 inches longer, these long wire-like tail feathers, and the side plumes adorn only the old male birds, the females and young of the first year or so are almost uniform chocolate brown, being a little darker on head and chest. It is stated that the birds must live ten years before they arrive at perfection, and this is not unreasonable when we know some of our birds in Australia require several years to perfect their plumage. I have observed that the common "Rosehill" parrot (P. adelaidensis) I have ob. when kept in confinement will improve in depth and brightness of plumage for 7 or 8 years, and I am of the opinion that the lovely bird of Paradise may take quite as long or longer to I have been able to procure some good come to maturity. The first year or two of their lives there is series of this bird. little difference between the sexes without it be that the males are a little larger, then a light yellow tinge appears on the back of the neck, and the chest is darker brown, then the head becomes mottled with yellow, and a few green feathers appear on the chin, and the two central tail feathers lengthen out, but are mottled on both sides, after this the head becomes bright citron yellow, the chin and the throat are covered with short scaly features of emerald green, and of metallic brightness. Around the base of the bill is a ruff of hair, like feathers, of a deep green, the feathers stand out on end, and look like plush; the bill is of a light leaden blue, and the eyes have brightened to a deep citron yellow; the tail feathers now lengthen to a foot or eighteen inches, and the web disappears except at the end of an inch or so when they are half an inch broad; the next stage—the colours all brighten, the eyes become very bright and sharp like a hawks, the chest is deep purple brown, the

central tail feathers have grown to 24 inches or more, and are destitute of web with the exception of a little at the base; the bird is now perfect with the exception of the plumes, scarcely a sign of which can yet be seen. The plumes appear a few inches at first, and are of a brownish yellow colour, increasing in length, volume and brightness every year. When half grown they are pale yellow, but when full grown they about 24 inches long and of the most intense orange yellow at the base, with a finer gloss than silk lustre and depth of colour gradually dying away towards the tip into a soft brown. These birds must be seen alive or freshly killed to realize their full beauty; in life they are most beautiful birds, and have made the heart of the Naturalist beat and bound when he had one of these glorious birds within his grasp for the first time. When the great Bird of Paradise is adult or nearly so, he ranks amongst the shyest birds in the world, he resorts to the highest trees in the scrub, and the cracking of the smallest stick under one's foot, or the sight of any moving object is sufficient to send him off. The easiest and best way to obtain these birds is to take advantage of some of its habits; one peculiar to the family is to repair in the forenoon to certain large trees, when they produce their loud call of "Cark" or "Wark" repeated several times, and with the old birds the voice is much more deep and sonorous than the females and young males. On the large horizontal branches of the large trees, the male birds dance and display their plumes, and it is now that the Naturalist can procure his specimens. I have called these birds into a tree under which I was standing by mimicking their voices; they have several calls besides the loud call "Wark" one a low soft note when feeding, and when caught or wounded give a call much like a domestic fowl when being caught. The natives ascend their dancing trees and conceal themselves in the lower branches to get at shorter range and shoot them with blunt or often pointed arrows. Just before evening a man brought me a fine bird, but with not much plume. It had been hit with a blunt arrow on the tip of the wing, which was dislocated. The man who had brought it told me he had a dead bird for me (Burrong Matti), all my senses told me this was not the case. for the bird was fighting, struggling, and squeaking vigorously, yet the fellow persisted in it being a dead bird, but are we not just as absurd, for the Naturalist has named it the legless bird of Paradise, which is not the case, for it possesses exceedingly strong and well developed legs and feet, quite as strong if not more so than our common crow, which fit it for a variety of purposes, for I have seen it moving in the tree tops when feeding with the ease and activity of a *Ptilotis*, and at other times clutching a large branch, and throwing its heavy body and great plumes about with the greatest ease. Whether Linne when he named this bird really thought they existed without legs is a The food of this bird seems to be entirely fruit, the puzzle. stomachs of all those examined did not contain a single insect, but were crammed with fruit of several kinds, some were filled exclusively with wild nutmegs, and most of them contained the remains of this spice. When the bird had been feeding upon this fruit, the flesh of the bird smelt strongly of spice. stomach of this bird is large and membranous, the carcase never fat, but very muscular, the bones compact and strong, the neck being long and the skin dry and very tough, adhering very closely to the body; about the throat the skin is thick, loose and lined with several layers of thin watery membrane, which gives that part a fluffy appearance. The side plumes, although voluminous spring from a patch of skin on each side of the breast, not larger than a half crown piece, the skin here is compact, hard, and firmly attached to the muscles of the breast, which. tear away with the skin when skinning, if a knife be not used. What is most surprising in this bird is the hardness and toughness of its skin, while the flesh is decomposing. I have had birds brought to me that have been killed a week or more, the flesh being green, rotten, and stinking, maggets crawling from the eyes and mouth, but strange to say, with the exception of the thin membrane on the abdomen the skin was still tough, and the feathers firm. After a little washing, an operation these bird's feathers bear remarkably well, a good skin can be made. Any other bird under these conditions would have been minus its feathers before half finished. They are birds that will stand a lot of handling, for I have seen a native bring a bird for sale, and while coming to terms (it sometimes requires hours to complete a bargain), constantly rub the bird up and down, rub it on his arms and face, press it, pat it, stroke it, till I have been nearly crazy, and felt as if I would like to knock the fellow down and trample him underfoot. When the purchase has been completed I have had to take the bird and wash it with soap to remove the stains the beast had left on the delicate yellow plumage. The natives maul everything alike, and some of the small birds were spoilt, but they soon learnt to do better. Some small birds were brought to me in a filthy state, and I showed the fellow who brought them what he had done, and what he should do in future. I then threw the birds down, and

made him take them away. After this they learned to bring in the birds, strung through the nostril with rattan, and then they would string five or six small birds on the one piece of rattan, most of them alive and squeaking, fluttering and crawling, till scarcely one in the bunch had any feathers on the neck or back. The great bird was my great quest, and I offered liberally for them, indeed, extravagant prices for freshly killed birds, for I knew that they were rare and shy, and the natives alone knew their haunts, so with a little exertion and a liberal distribution of tobacco I persuaded hundreds of men and boys to go out and hunt in every part of the islands for specimens. I have had as many as fifty men come in at once with birds for which I would have to give four pounds worth of goods to each man, and amongst others there would be two or three of the great Towards the end of my visit I had practically all the men of Aru Islands collecting for me.