

Edible Bird-Nests.

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THE Salanganes, which build the edible nests that are looked upon as a very great delicacy, especially by the Chinese, are small birds belonging to the family of Indian Swallows. Their name is derived from the main island, Salanganes, belonging to a group of islands of the same name near the Malacca Peninsula, where these birds abound. The Salanganes, which are of similar dark grey appearance to our bank Swallows, are birds from 12 to 14 cm. (5 to 5½ inches) in length, and measuring 30 cm. (12 inches) across the wings. Their wings are of considerable size, and therefore very suitable for sailing through the air. Their beaks, as is the case with all other Swallows, reach very far back behind their eyes. Anyone who has sojourned at the south coast of Java, with its rocky cliffs falling perpendicularly into the sea, will remember with delight the panorama spread before the gaze of the tourist. At the foot of these cliffs the breakers which roll in from the very deep sea have hollowed out the limestone rock for thousands of years, and formed large caves, which are overhung by the rocks. Here it is that the Salanganes are found. Where the breakers are strongest, and the sea has formed huge caves in the rocks, large numbers of these birds may be seen flying to and fro. They may be seen passing through the thickest spray, where they find their food, consisting of small marine animals. If one walks to the prominent rocks east of Rongcape and sits down on the edge of the precipice, a cave can be seen near the foot of it, and by watching the rolling waves it will be noticed that the entrance of this cave is entirely covered with the sea, which now and then recedes, when the Swallows will be seen to pass in or out of the cave with lightning speed. Far back in this high and dark cave their nests are attached to the rock. As often as a large wave approaches the sea enters the cave with a thundering noise, and closes it up completely for several minutes, compressing the air in the interior of the cave and confining it to a very small volume. The compressed air, on the other hand, throws the water out again with tremendous force, and a column of spray shoots out from the cave like the smoke from a discharged gun. That such a grand phenomenon must make a deep impression on the mind may be easily imagined.

Before we describe the gathering of the nests, let us pause for a minute and see how they are built. As it is very difficult to watch the birds closely, it is not to be wondered at that up to the present day doubts exist amongst investigators as to the composition of the nests. Bontius says that "small birds belonging to the family of the Swallows move at the time of

breeding from the interior to the rocky coast of China and collect a viscous material from the mud of the sea near the foot of the rocks, probably cetaceum or spawn, from which they build their nests. The Chinese pull these nests from the cliffs and export them in large numbers to India, where they are highly prized, boiled in chicken or mutton broth, and considered by *gourmets* the best of all delicacies." Other investigators think the Salanganes build their nests from material secreted by their own bodies. This substance is secreted so vigorously sometimes that it is mixed with blood. Traces of blood are frequently found on the nests. After the birds have once selected their places for nesting, they will return to them repeatedly. According to recent investigations, a thick, tough mucus is separated in large quantities by a gland, which accumulates below the tongue and is pressed with the tongue against the rock. After a foundation for the nest has been started in this manner, the birds will cling to the projection thus formed and will add layer upon layer of their strongly flowing saliva by alternately moving their heads to the right and to the left. While working in this manner it frequently happens that they unintentionally remove feathers from their breast or neck, which are thus accidentally worked into the nest. The thick margin which is built finally on the nest is bent slightly inward, and forms a kind of parapet, which protects the young birds from falling out of the nest. The margin is lengthened out winglike on both sides and stuck tightly to the rock, whereby the whole nest is greatly strengthened.

The nests are harvested three or four times a year, the first time in April or May, the second time in July or August, the third time in November or December. At the commencement of harvesting, or "gathering," as the expert calls it, only about half the nests have been left by the young birds. The other half contains either eggs or young birds without feathers. The eggs are eaten and the young birds thrown away. Harvesting begins when the majority of the nests contains birds with stubble-like feathers (fledglings). Nests containing such fledglings are the best; those containing young birds without any signs of feathers form a second quality, and those containing eggs a third quality article. Nests containing young birds ready to fly from the nest are black and unsuitable for use, and it may be generally said that the nests are the more valuable the lighter their colour. The six Badong caves yield on an average 13,520 nests every year, and are therefore inhabited by at least 6,760 birds.

That the gathering of these nests is very dangerous, and that people following this business carry their lives in their hands, so to say, is evident, if we consider that, apart from the above-mentioned caves, all these nests are fastened to very high and practically perpendicular cliffs.

Although large numbers of Salangane nests have been collected for centuries, no decrease in the number of birds has so far been observed. China imports yearly about 9 million nests, amounting to a total weight of 168,000 lbs. On the north coast of Borneo, 1 lb. of the best white nests is worth 50s. at least. The nests, which have the form of a quartered egg, are so thin that about 70 go to a pound. It requires three nests to make a soup for one person. The more or less soiled black nests are relatively cheap, for the price is only 2/- to 3/- per lb.

The Chinese first soak the nests and afterwards place them in a tightly closed pot, together with a fat capon or Duck, and allow them to boil gently for 25 hours. The Japanese boil them into a slimy mass, which is mixed with sugar and eaten cold. European epicures have them sliced and boiled in strongly spiced broth; they are said to stimulate the appetite, an effect which is probably partly due to the action of the spices.

Stray Feathers.

A ROBBER.—A case in which the White-eared Honey-eater (*Ptilotis leucotis*) figured as a breaker of the "eighth commandment" recently came under my notice. A pair of these Honey-eaters were building a nest on the banks of the Cardinia Creek, Beaconsfield, and, although lining material was by no means scarce in the locality, they selected a lined nest of the Brown Tit (*Acanthiza pusilla*) as a suitable source of it, making frequent trips to and fro till they had exhausted the supply. The Tits evidently recognized the futility of ministering to the Honey-eaters' wants, and therefore moved to more favoured breeding-grounds.—F. E. WILSON. Melbourne, 22/10/09.

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CAN BIRDS RETAIN THEIR EGGS?—In the flight aviary in the Melbourne Zoological Gardens a pair of Black-breasted Plovers (*Zonifer tricolor*) laid two eggs, but before the clutch of four could be completed a young Sacred Kingfisher (*Halcyon sanctus*) ate them. This catastrophe put the Plovers off from laying any more at the time, but about a month later, on 3rd November, they nested again, and six eggs were laid—that is, the usual clutch of four and apparently the two that should have been laid with the first clutch. Is it possible that the bird has power to prevent its eggs coming to maturity? and, if so, are those retained merged into the succeeding clutch? This in some cases may help to account for the number of eggs in a clutch being so irregular. Possibly other observers may have noticed the same occurrence.—D. LE SOUËF. Melbourne, 19/11/09.