

# The Edible Bird Nest Islands of Siam.

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The Edible Bird Nest islands of the world are not numerous, and are probably confined to the Indian Ocean north of Madagascar and eastward over to the East and West coasts of the Siam Malaya Peninsula, down in the Malay archipelago and some of the tropical islands of the Pacific. This paper has to do with the Bird Nest islands of Siam, largely those of the Choompon region. The greater part of the time that I have spent in investigating this interesting subject has been spent with an old friend. His Excellency Phya Waiyawoot, the ex-Governor of Chaiya Province, whom Mr. Warrington Smyth pronounced, "One of the most interesting men that he had met in his Siam travels," who had charge of the Bird Nest Farm for many years, and who has been most enthusiastic in study of the habits of these attractive little nest builders. His Excellency is by far the best authority on this subject among our Siamese friends. And it is due to him to say that his knowledge of the subject is in accord with the views of the scientists who have investigated it. The writer is indebted to him for many of the facts of this paper. I have also gleaned some knowledge from numerous cruises, in the past twenty-five years, among the Bird Nest islands off Choompon, Lang Suan and Chaiya, and many charming islets off Fanga and Krabee Provinces, on the Bay of Bengal side of Siam. The Bird Nest islands of Singora, five in number, located on the inland Sea, because of their natural beauty, and the attractive caves found within them, are well worth visiting.

The most profitable group, for Siam, is the Thirty Bird Nest islands off the coasts of Choompon, Lang Suan and Chaiya Provinces. In this group of islands, the Bird Nests of three, viz., Lang-Ka-Chew, Koh-Ngarm-Yai and Koh-Ngarm-Noi, are whiter, heavier, more nourishing and higher priced than the nests from all other islands. The nests from these three islands are eagerly

sought after by the epicures of China, and called by them Kong-Ean. One small islet of this group, with an area of hardly more than four acres, just below the Choompon harbour, gave to the Bird Nest Farmer eighty-thousand Ticals worth of Edible Nests in one year.

An holiday, any time during the months April to September inclusive, might be delightfully spent in visiting this group of islands.

The easiest way to reach them would be by one of the East Asiatic Company's steamers to Choompon. And there procure a Siamese sail boat (Rua Pet) for cruising among the islands. Of the thirty islands of this group, only fourteen are favoured by the birds with very large numbers of nests. The attractiveness of the Bird Nest islands on the west Coast of the Peninsula is simply grand. Their natural beauty surpasses that of either the coasts of Java or Japan. Tourists in Europe and America travel long distances to enjoy much tamer scenery.

The picturesque forms of these little islands are very suggestive of fairy stories. Once when sailing in a Chinese craft among these islands, we noticed an opening in an islet down to the sea level. The tide being out we waded into the tunnel some sixty feet through the solid stone wall of the island, thus entering a beautiful amphitheatre more than one-hundred feet in diameter. The walls were one-hundred and fifty feet high with a broad open sky light. Because of the rising tide we had to retreat from this charming place. Not far from this islet is one shaped like a large Chinese tea-pot, and beyond that "Swan Island" on which rises a graceful slender rock shaped like a swan's head and neck, and yonder a group resembling the grain stacks of a harvest field.

But I do not wish to weary my hearers with ecstasies over the almost matchless charms of these islands. We have seen, however, what beautiful homes these hard working little nest builders have chosen. I beg to assure you that should you have time to cross the Peninsula, say from Bandon up the right branch of the River Looang, over the watershed to the Panga province, that gem of Siam for natural beauty, and there take a sail boat for ten days sailing among the islands and islets of Panga bay, you will be abundantly rewarded. Would that all the members of this Society



might realize the enticing natural scenery of Siam's coasts, especially of the Bird Nest islands. Then you would be ready to say, O Siam ! I admire Thee, I love you more than ever. Forgive my lack of appreciation, it was all due to slight acquaintance.

Now let us acquaint ourselves with the tiny birds that contribute so largely to the luxuries of the Royal feasts in China. They belong to the family of Swifts, so called because of the extreme speed of their flight. Classified by some scientists with swallows as "*Hirundo Esculenta*." Others say that they form a genus "*collocalia*," of which the number of species is uncertain. Whilst there is some resemblance between the builders of the edible nests and the chimney swallow of England or the barn swallow of America, it is an outward resemblance. Our little friend on the Peninsula has no near affinity to the swallows there or their allies in England and America. Whilst the former avoids the abodes of men and builds its little home out at sea in the lonely caves and crevices of uninhabited islands, and rarely gets accustomed to the presence of the few guards and nest gatherers there, the swallow is so trustful that it establishes its home in the chimneys, barns and other structures erected by man, and even in unoccupied rooms if permitted to do so. We may also note a wide difference between the material and structure of the nests of these respective birds. The swallow uses mud, straws, and little twigs in making its nest, and is very economical of the secretions used in glueing together the material. But our little species of the "*Genus Collocalia*" uses the secretions of its salivary glands almost, if not exclusively, in making its nests. In this nest there is an absence of mud, twigs and other coarse material, therefore it is considered edible. But the swallow's nest, who could eat that ? We have also observed that the swallow of these coasts, as well as our home swallow, is on the wing, much slower, less graceful and more unsteady than the flight of our little edible nest builder, which makes much swifter journeys and is free from the jerks in flight so characteristic of the swallow. This bird's graceful, easy evolutions in the air, where it is able to remain from daybreak to sunset, are simply admirable.

Then again the edible nest bird is remarkable for the development of its salivary glands, being larger and having greater capacity for secretions than those of the ordinary swallow. This difference seems reasonable when we remember that the one uses various



coarse materials for its nest with only enough saliva to glue it together, whilst the other weaves its nest, we believe, wholly from the secretions of its glands, and it is finely wrought from slender threads. Our industrious little friend has a shorter bill than the swallows, and its bill has not lateral bristles like the swallow, its wings are longer and it is smaller than the swallow of the coast. The weight of this important little swift is only 2 Salungs and 8 Hoons, or about 165 grains. We have frequently noticed the swallow of the coast lighting upon mud banks from which it smuggly collects its food and material for its nest. But we have never seen the edible nest bird light either on land or objects floating on the sea. They leave their abode at the first break of day, keep on the wing all the day and return in the evening to their work of nest building. The swallow, owing to the use of various materials easily procured, builds its nest quickly and rudely. The edible nest bird weaves its symmetrical little nest from long spider-web like threads of saliva which has been sought in the air miles and miles away and the pains-taking little creature spends about *one-hundred days* in making its first nest. One interesting feature common to the two birds is that they remember the exact place of former nests that have been either destroyed or taken away for commerce. The swallow, whose nest has been destroyed during its absence, will return and build on the indentical spot of the former nest. So with our island swift, although the first nest has been cleanly removed by the bird nest hunter. The bird at once commences to build the second nest on the very spot of the first, and when the second nest has been removed the third nest is hurriedly attached to the same place. Our Siamese friends, like the scientific men of Europe, who have written on this subject, make a distinction in naming these respective birds. Whilst the land swallow and the island swift are both called "Noke-Ee-Enn," the latter are distinguished by calling them "Noke-Kin-Lome," *i. e.*, the wind eating bird. May I quote from His Excellency Phya Waiyawoot, the best Siamese authority on this subject. He says "The birds are two kinds. During the cool season we are accustomed to see one kind flying about high in the air and frequently perched upon the roofs of houses. This is not the kind that builds edible nests, although there is some resemblance. Both are small, about the size of sparrows, a smoke black color. But the bird that makes the edible nest is more beautiful in form and



smaller than the other, and may be distinguished by small white dots in the tail plumage. The land bird is tamable, makes its home among the houses ashore, but the edible nest builder can not be tamed and never frequents the homes of men." Please notice how closely this view accords with the results of scientific research. It is also well known that there is no little difference in the anatomical structure of the birds in question. The writer regrets that he was unable, during the preparation of this paper, to find any of the several Scientific Articles that have been written on the subject. Otherwise information of a more definite and interesting character might have been furnished the Society.

It is hoped, however, that the few facts obtained may prove of some interest. As to the question "Where and how does the bird get material for the edible nest?" This is a difficult question to answer, yet we can hardly give place or time to the popular view that the edible nests are composed of some kind of sea weed and other vegetable matter collected by the birds. The Siamese closely connected with the bird nest trade disbelieve this theory and testify that they have never seen the birds alight on such material; and they never bring it in their mouths to the nests, neither is there the least trace of vegetable matter in the nests. Phya Waiyawoot says that he has repeatedly caught the birds when nearing the nest to engage in building and invariably found their mouths filled with glutinous saliva resembling the white of an egg. His Excellency gives no place to the sea weed or vegetable theory. Close observers in Java, more than fifty years ago, avowed their disbelief in this popular view, and joined by others of later date, after close examination and thorough analysis, have shown that: "These remarkable nests consist essentially of mucus, which is secreted by the salivary glands of the birds and which dries and looks like isinglass." This is in keeping with the theory of the bird nest collectors as indicated by the name they have given the bird, "Noke-Kin-Lome," or wind eating bird, thus named because of their belief that the bird takes all its nutriment, as well as the material from which it builds its nest, from the air. Several years ago, the Bird Nest Farmer, having learned that in Java three sets of nests were secured each season, resolved to secure three sets instead of the two that he had been accustomed to secure. So he went patiently to work to train the birds to build three nests during the



season. This was not an easy task for either the nest gatherers or the birds, but finally the earnest little workers were persuaded to build three instead of two nests as in former years. The nest is a neat little piece of work, especially the first nest. It is shaped like one half the lid of the small China teacups that we often see in this country, or half of a very small saucer, a snug little pocket fastened securely to the stone wall, so constructed that it is well nigh impossible for the eggs or young birds to roll out of it, and were it let alone there would be no accident to the birds. The season for taking the nests begins with the month of April, or the beginning of the S. W. Monsoon, and closes at the end of September. If this Monsoon is tardy in gaining sway, then the birds are tardy in building their nests.

The second quality of nests is taken thirty days after the first, and must be taken promptly, otherwise the quality will not be preserved. About 90 days after this the third quality is taken. This ninety is allowed for building the nest, placing the eggs, hatching and rearing the birds. So soon as this nest is vacated it is taken, but it is very inferior because hastily made and mixed with feathers. About thirty days are required for oviposition and incubation, and sixty days before the young birds are sufficiently developed to look after themselves. At the end of the first year the birds make rather small nests, the second year larger, and not until the bird's third year are the nests made considered perfect. The first take of nests is graded as the first quality, because the nests are more carefully made, contain more nutriment, are heavier, thicker, and whiter than grades two and three. The birds have not had to hasten in weaving the nests, in fact the construction has consumed about one hundred days. The first and second nests are made by the female birds alone. The second quality is made very hastily. It often happens that while the birds, both male and female, are working at the third nest, in their anxious struggling to deposit the mucus on the nest, and haste to complete it, a wing accidentally catches on to the nest, which soon dries, holding the bird fast until it perishes. The third quality is made, of course, with the greatest haste, it is poorly constructed and smaller than the first or second nests. It is an interesting fact that whilst the male bird does not aid in building the first and second nests, he works very earnestly in aiding his anxious and suffering mate in making the third nest. It has been



observed that the bird, through anxiety and hurried work, grows thin during the making of the third nest, so much thinner that its weight has been reduced from normal 165 grains to 105 grains, and the female bird suffers so much while waiting for the completion of the third nest, the male bird seemingly sympathizing so deeply with its suffering mate, that the pair instead of making all day flights for nest material, go out for one to two hours, return hurriedly, and work unceasingly until the nest is completed. It often happens that, when the third nest is being used for incubation there is loss by the young birds or the eggs falling out to destruction, thus there is danger that these plucky little creatures may be greatly diminished in number. Then too the nest gatherers often get more impatient than the birds, taking away the nests before the swiftlets have flown and leaving them to perish. The bird nest farmer reckons that he loses no small amount of money each year from the death of birds adhering to the nests, the perishing of the young, breaking of eggs, and inferiority of hastily made nests. Another loss results from the fact that the Island guards and nest collectors are very fond of eating the young birds. The swiftlet is so plump that when fried it is considered a dainty dish. At one time rats were numerous on one of the most productive islands, and annoyed the guards and collectors by pilfering their food. To avoid this a good mother cat was carried off to the island, in course of time there was a large family of cats and the cats killed so many birds that the Farmer was compelled to pay a reward of four ticals for each cat killed. Thus the cats were exterminated but at no small loss to the Bird Nest Farmer. It was also found that numerous Boa Constrictors on the various islands were making sad havoc among the birds. This loss was overcome by paying a reward of four ticals for each snake killed, so the Boa Constrictors of the islands were exterminated. These birds do not migrate like the swallow, they abide in the islands. "They breed in caves which they inhabit in great numbers and occupy them jointly and yet alternately with Bats, the mammals being the lodgers by day and the birds by night." Mr. H. Pryer has given one of the latest accounts of some of these caves in North Borneo (Proc. Zool. Society, 1885, pp. 532-538.) The Bats and Birds do not always dwell peacefully together, and the Bats have been known to drive the Swifts away from an island, thus causing another loss to the Farmer. This happened once on the island "Kang Sua" Sawee Bay. In one year the Bird



Nest Farmer collected fifteen piculs or 1500 caties of the three qualities of nests from this one island; averaging the nest at 60 ticals a Chang, ( the price this year ), the amount realised was 90,000 ticals. Finally a dreadful battle took place between the Bats and Birds, the poor swifts were defeated and routed so that in the following year the Farmer collected only eight Changs or 480 ticals worth of nest from that same island. When the Bats finally disappeared from the island, the brave little swifts returned and last year yielded the Farmer fifteen piculs of nests or ninety thousand Ticals. If the Siamese of the coast should emulate these persistent hard working little birds, what a great change would be wrought in the Peninsula !

One great annoyance to the Farmer is in the fact that the island guards and nest collectors carry off a good amount of nests annually. Notwithstanding a strict watch of these valuable islands, by armed guards on the islands and patrol boats, there is frequent daring poaching of the nests. The poachers are largely Chinese, they use small sail boats, usually " Rua Pet," five or six poachers to a boat. The poacher prepares himself for his dangerous work by packing dried boiled rice, pepper, salt and salt-fish enough for three days, with torch, matches and knife for taking the nests, down into a large bamboo joint, which is then hermetically sealed and fastened to his belt, also a long rope wound about his waist for use in descending the caves or going over the cliffs. They then sail their little craft in the shadow of the island, as closely as possible, when one or two of the poachers swim off to the island, or if in day time a quiet dive is made to the island. Having reached the island the poacher is quickly at work, securing enough nests to make it profitable. Then at the appointed time, may be a few hours, may be one or two days, the boat returns to pick him up, and he quickly swims out to the craft having his bamboo joint well packed with valuable nests. But if caught in the act he is severely dealt with. Some have not lived to tell of the adventure. According to law the poachers are fined in proportion to the Revenue from the Farm. This fine is fixed at three days of the Revenue for the year in which the poaching was done, *e. g.*, the Revenue for the Choompon Birds Nest Farm for the current year is 272,000 ticals, so that three days' Revenue is about 2,255 ticals, the fine for a single act of poaching edible bird nests. The last and strangest loss of The Bird Nest



Farmer is caused by some of the guards and nest collectors, who are opium smokers and instead of using the ordinary lamp for heating the opium on their pipes, take the little bird, yet without feathers, from the nest, kill it, punch a hole in its back, in this insert a small wick then place all in a China-cup and light it. The little bird is so fat, that in the estimation of the opium-smoker, it makes a good economical lamp. A former Bird Nest Farmer tried hard to compel these untiring little nest builders to make four nests in a season, instead of the three that they now so laboriously make, but he failed, and surely he deserved to fail. Since these birds choose caves, cliffs and other dangerous places for placing their nests, the gathering of them is perilous work, thus many a poor fellow has lost his life.

The nest gatherer stands in a large basket made of rattan fastened to ropes in which he is lowered into the cave through an aperture or sky light. He works from the top or ceiling of the cave down to the bottom, the rope is lowered or hoisted according to the number of taps made upon it by the man in the basket. He carries in his basket four poles varying in length according to need. On the end of each pole is a sharp flat instrument resembling a Siamese spade. With this instrument he pushes against the walls thus swinging himself from one side of the cave to the other. On the end of the instrument he has also a lighted torch that he may see to cut off the nests. This requires no little skill, for the nests must be removed without breakage. The collector descends from two to six-hundred feet. When the basket is well filled, he signals by so many taps on the rope, when he is drawn up, rests for an hour or two, and then descends for another haul. From three to fifteen days are spent in removing the nests from a single cave. The nests are placed so thickly upon the walls that there is but little space between them. The cave, being lighted by torches, presents a beautiful appearance. About five-hundred men, guards, boatmen, and nest collectors are engaged in the Choompon Edible Bird Nest Farm. Some one hundred and fifty of these are nest collectors, they are professionals called by the Siamese "Cha : Haw." A distinct class, they do not depart from their pursuit, and are succeeded by their children and grand-children. Each bird nest cave has three "Cha : Haw," divided, as to skill, into 1st, 2nd, and third class, and having become acquainted with all the dangers of that particular cave,



there they remain. The first gets two ticals, the 2nd one tical, and the 3rd three salungs, and food per day. Formerly these "Cha : Haw" were all slaves, exempt from all other service, and held firmly for this only. They spend fifteen days in securing each take, or forty-five days in the season. From the Choompon Farm one hundred and twenty piculs of edible nests were gathered during the past year, these being sorted into three qualities, called first, second, and third grades. The price fluctuates, but at present it is as follows, in Hong Kong:—

1st Grade	\$ 4,700.—	per picul.
2nd     ,,     ,,	3,700.—	,,     ,,
3rd     ,,     ,,	2,500.—	,,     ,,

The first grade brings \$ 47.—per Chang (*i. e.* 1½ lbs.), the average of the three grades being \$ 36.33 per Chang; turning this into ticals we find that the bird nest farmer's income for the past year was 720,000 ticals. To the present Farmer the Government sold the bird nest farm for three years at 3,400 catties or 272,000 ticals a year, even the small farm of a few bird nest islands in the Singora region selling for 36,000 ticals last year. I am indebted to a Siamese, intimately connected with the Farm, for these figures. Whilst the Farmer may lose on the investment in an occasional year, I have known him to clear 60,000 ticals in a single year. But owing to large investments in the start it would not pay the Farmer to undertake it for less than three years. It is an interesting fact that the Siamese learned of the importance of this trade from the Malays, and that the bird nest farm was started some time in the reign of "King Pra-Nang-Klow," who began to reign A. D. 1824. The Farm was then sold for 4,800 ticals a year; now it is sold for 272,000 ticals. By far the greater part of the edible nests are shipped to China, and handled by agents in Hongkong. On arrival of a shipment, the agency is thronged with buyers, all eager to purchase the first quality. The rooms are soon cleared. The supply is not equal to the demand. As both a luxury for the table, and a valuable tonic, the edible bird nest is ranked, by the Chinese above ginseng, edible sea leeches, soft deer horn, and shark's fins, all so highly valued in China. The manner of preparing this dainty in China, is to soak the nests in cool water over-night, then place them in a closely covered dish which is placed into a pot of boiling water for about one hour in which is put a sufficient



quantity of sliced ginseng and rock sugar. The most favorite and beneficial time for partaking of the dish is about daybreak before one has risen from his couch. Our friend Phya Waiyawoot, who is the edible bird nest connoisseur of Siam, offers the following favorite recipe:—"Expose the nests over-night to the heavy dew, then before day shred and boil them for one hour in well sweetened water." The nests also form a part of one of the best curries of Siam, called "Sip-Song-Yang," or the curry of twelve ingredients. In Siam the edible bird nests have a high medicinal value, and enter the best prescriptions for the cough of consumptives. The favorite manner of preparing them for coughs is to mix the nests with pure water and rock sugar, closely cover the dish and set it down into boiling water, to throw a few grains of rice into the boiling water and not to open the dish in which the bird nests are placed until taken from the boiling pot. Examine the grains of the rice that were cast into the boiling water, for as soon as the rice is cooked the edible bird nests should be considered sufficiently prepared. Then place the dish containing the bird nests, the lid having been removed, out in the dew on some elevation until midnight. At midnight quietly awake the patient, he having been informed that he must remain passive, making no movement whatever save to open his mouth and quietly swallow three large table spoonfulls of the bird nest syrup. The beneficial effects are simply marvellous. The tonic properties of these nests are everywhere recognized in Siam. Given a knowledge of the Siamese language, an acquaintance with the Siamese romantic stories of the East and West coasts of the Siam Malaya Peninsula, such as the story of Chou Lai and Maa Rampung, a knowledge of the habits of the little birds that weave the edible nests, the life of the nest gatherers, the stories of the poachers, an appreciation of the sublimely beautiful scenery of the islands, and active imagination and some poetic genius, then one might write romance on this subject that would attract and charm the readers of all lands.

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