# Social Control and Bird's Nest Harvesting among the Idahan: A Preliminary Observation

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## Abstract

This paper is an attempt to describe briefly the nature of bird's nest production among the Idahan. Since ancestral time the Idahan have developed a social mechanism, based on kinship principles, to control seasonal access to rock chambers bearing the nests, and to rotate harvesting rights between various clan members. Being an ethnic minority, the Idahan operate as a closely knit corporate group insofar as bird's nesting activities are concerned. The distribution system also ensures ethnic solidarity among the Idahan. The sole benefits of the harvests can only be enjoyed by them as the sole inheritor of the nesting caves provided that they work together as a closely integrated social and economic unit.

#### Introduction

The Idahan of Sabah have long been known for their involvement in the harvesting of edible bird's nests, a highly valued ingredient used in Chinese *haut cuisine* since the Ming Dynasty period. Although the Idahan are major producers of the nests, they are not the consumers. Instead almost all the harvested nests of the swiftlet species are sold to middlemen who in turn supply them to traders in Singapore and Hong Kong. The lucrative cash return the Idahan get from selling the produce makes bird's nest harvesting an important, and indeed jealously guarded, occupation. The Idahan believe that the nests are a gift from their great ancestors, but are just too valuable, and perhaps too sacred, to be consumed as part of ordinary everyday meals.

This paper discusses the nature of bird's nest production among the Idahan who live in eastern part of Sabah.<sup>1)</sup> In particular, the focus will be on the way the Idahan organise themselves as some kind of kinship corporate group with regard to nesting activities, including the distribution of harvesting rights among the clan and ecological manage-

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ment of the nesting caves.

Bird's nest harvesting has become synonymous with Idahan ethnic identity due to the fact that they are about the only group which has a permanent claim on harvesting rights to several caves since "ancestral times." What makes the relationship between bird's nest harvesting and the Idahan really special is the existence of some kind of control mechanism which regulates access to the nesting chambers. The net effect of this regulation means that the natural resources are prevented from being over-exploited to the detriment of the swiftlet species. The key to success seems to be embedded in the way kinship factors are integrated into the method of ecological and social control. Since ancestral times the Idahan have been known to observe strictly both ecological and social rules regarding bird's nesting activities. No one was really sure as to how this kind of control mechanism has evolved, although the Idahan would have attributed it to a time-tested practice dating back to their great ancestors.

The control mechanism covers two main aspects: the communal decision as to when harvesting could be done during the year, and the allocation of harvesting rights among members of the clan. First, harvesting, as a rule, is permitted only when the fledging period is over, thereby letting the birds complete the full term of breeding cycle before the nests are taken away. Second, harvesting rights are distributed among members of the larger Idahan kinship group through a rotation system. This means that nearly all members of the Idahan clan are given access to the nesting chambers. But an important social implication of the control mechanism is that nesting chambers are not the property of any lineage or individual. Apart from that access to these chambers is controlled at the communal or clan level.

The control appears to be effective as an indigenous form of ecological management. In contrast to other places known for nesting activities, swiflet caves under the control of the Idahan seem to be well preserved and able to endure regular harvests with a steady amount of nests being produced from year to year. There are also nesting caves in other parts of Sabah, but collection rights are farmed out by the government to the highest bidder in an open tender system. More often than not this also leads to over-harvesting. In view of this, it is no surprise that total production of bird's nests has been reduced

of the Bird's Nests of Madai, Baturung, Segarong and Tepadung), Tuan Haji Imam Injir bin Panjang @ Ahmad, Datu Asibi bin Datu Agasi, Encik Abdul Karim Gurau, Encik Hamid Aong, Encik Mohamad Yunus Kuyong (Chief Clerk of Mahkamah Anak Negeri, Lahad Datu), and Haji Manap OK Usah (Chief Harvestor of Madai Caves). I am most grateful for the research grant provided by the Asian-Pacific Center, Fukuoka, Japan. An earlier version of this paper was presented at the International Workshop on Food and Ethnography, "Cooking up Hong Kong: A Study of Food Culture, Changing Tastes and Identity in Popular Discourse" organised by the Department of Anthropology, the Chinese University of Hong Kong, June 1–4, 1998. Thomas P. Gill, Visiting Research Scholar at the Department of Cultural Anthropology, Kyoto Bunkyo University, read and gave valuable comments on the draft of this paper, but the normal disclaimer applies.

quite significantly in the past decade. Because of the decline in the production of bird's nests in other places, the Idahan have now become one of the most important producers in this part of the world.

The edible part of the nests, taken by itself, does not have any distinctive taste. But the intense desirability of bird's nests among the Chinese in Hong Kong and China in particular, perhaps can be explained by what E. F. Schafer has termed the obsession with emphasising social differences between rich and poor through cuisine. Commenting on the cultural behaviour of the rich during the T'ang period, Schafer mentions that the importation of Indonesian and other spices was an important social indicator: rich households were generally addicted to foods from abroad; "foreign food (to say nothing of foreign clothes, foreign music, and foreign dances) were rigorously required at tastefully prepared banquets and this necessarily included dishes cooked in the Indian style" (quoted in Goody [1994: 108]).

Perhaps it could also be added that bird's nests represent materials of relative scarcity. Not only that, actual harvesting of the nests, as any Idahan would testify, involves some degree of physical and ritual danger. Since they are items of rare origin they are therefore viewed as culturally and socially prestigious. Their transportation over long distances, together with the risks involved, makes the trade in bird's nests even more exalted, and by the time they reach the shores of China and Hong Kong the commercial value of the nests will have increased many fold.

## Bird's Nest Economy and Trade

The hills of Madai in Lahad Datu district, where this study was conducted, are among the four localities in which the Idahan lay claim to traditional rights of nest collecting. The trade in the product probably started in or before the early 15th century when the Chinese frequented the region in search of various tropical products. According to Harrisson and Harrisson [1970] the earliest authenticated record of Sino-Borneon contact is 631 A.D. which began with the arrival of a deputation from the capital of Brunei sultanate located in Kota Batu to the south of present day Sabah—at the court of T'ang Emperor in Ch'ang-an. After the 7th century, there was further increase in the contact, although it was rather erratic. The following two or three centuries saw the trade between China and the region prospered, "bringing considerable wealth and impact to the east coast .... Chinese stonewares and porcelains, iron, glass beads and textiles were obtained and traded inland, often in exchange for edible nests" [ibid:: 35]. It was also mentioned that Admiral Cheng Ho, the Muslim eunuch serving the Ming court, was responsible for inaugurating the trade in edible bird's nests when he made his first voyage to Sulu region around 1405 A.D. The Idahan claim that their ancestors first traded the bird's nests to a powerful Chinese group further north across the Sulu Sea, just about the time Islam was introduced, around 1408 A. D. Presumably this could have been the admiral's delegation.

In any case, the trade itself had a humble beginning since the supply of bird's nests during the last century was quite plentiful. However, during the latter half of this century, the price of the nests increased drastically due to short supply aggravated by the extinction of the species in other places.

It is related by the Idahan that at first bird's nests have little commercial value until their ancestors showed them to Chinese traders. The Chinese were already familiar with the product which they previously knew from elsewhere. They asked if more could be gathered and promised they would return regularly to trade for them with Chinese goods. According to the Idahan, upon realising that the Chinese had a keen interest on the nests, their ancestors were quite cautious about disclosing the exact locations of the nesting caves, but assured them of a continuous supply if the Chinese agreed to wait at the coast.

The use of the bird's nests among the Chinese can be traced back to the Ming Dynasty (1368–1644). The nests were considered to have the magical quality of "cure-all." Even today they are supposed to work various wonders, "from improving the complexion to warding off influenza, to cleansing the body of toxins, aiding digestion, and are recommended for those suffering from lung problems like bronchitis, tuberculosis, asthma, etc." [Tan 1995: 7]. The Chinese book of medicine, *Zhong Yau Da Ci Dian 1978* (Big Dictionary of Chinese Medicine 1978), recommends bird's nests for purifying the blood and lungs. At banquets the bird's nests are served as a popular soup of prestigious value, reputed to revitalise internal organs and promote a smooth complexion [*ibid.: 7*]. The Chinese also believe that the nest acts as an aphrodisiac, another factor which accounts for its large demand and high prices [Smythies 1981: 186].

The collection and sale of the nests seem to be very lucrative economic activities indeed. The price in September 1995 was RM893.75 per kilogram for black nests, while the price for white nests was RM4,062.50 per kilogram.<sup>2)</sup> The quoted price was paid by brokers who bought the nests directly at Madai cave site. The actual price of the nests once delivered to Chinese middlemen in the town is much higher, at least 15 to 20 per cent more. It is reported that the price of bird's nests in Hong Kong in September 1995 was HK\$360 for about 50 grams. A kilogram of nests of premium quality can fetch up to HK\$30,000 with the vendor making about HK\$7,800 in profits.<sup>3)</sup> According to the World Wildlife Fund Organisation, Hong Kong seems to be the world's largest importer of bird's

<sup>2)</sup> RM (*ringgit Malaysia*) is the Malaysian unit of currency; one US dollar was equivalent to about RM2.50 at the time this research was conducted in September 1995.

<sup>3)</sup> The writer was in Hong Kong in June 1998 and managed to visit several shops specialising in bird's nests. The range of price for medium quality nests varied from HK\$450 to HK\$1,180 for 50 grams; or from HK\$9,000 to HK\$23,000 per kilogram. White nests of very good quality were selling from HK\$21,000 per 600 grams or HK\$35,000 per kilogram.

nests, with a total import value of about HK\$17 million in 1992. A large proportion of this eventually finds its way to China [Lim 1995: 22].

The edible nest is made from the dried-up saliva of a number of swiftlets species, which belong to the Micropodidae family; the most common are the *Collocalia maxima* and *Collocalia vestita*. In the Malay language the species is known as *layang-layang*, or *lelayang*. More specifically, the species that builds its nests in limestone caves is called *layang-layang gua*; in Indonesia this species is referred to as *burung walet*. The Idahan term for the bird is *kelimpisau*.

There are other species of the swiftlets which build edible nests. Beccari [1989: 57] reports that in the limestone hills around Serambo area in Sarawak, the species *Collocalia nidifica* also produces edible nests. Another species, known as *Collocalia fuciphaga*, produces "white nests," but birds of this species build their nests in crevices of sandstone cliffs along the sea coast [Smythies 1981: 189] and are not cave dwellers. Swiftlets, often referred to as swifts, are to be differentiated from swallows, despite the fact that the two share many similar physical features. "Swifts are aerial insect-feeders and spend the greater part of their time in the air... true swifts have very weak legs, and never perch like swallows on wires, branches or rooftops, but cling to vertical surfaces" [Holmes and Nash 1990: 23]. A common feature of these swiftlets is "their remarkable ability of finding, not only their way, but their own individual nest amongst hundreds of others in *total darkness*" [Smythies 1981: 186; emphasis original]. The species relies on echo-location, some sort of avian radar to guide them in the flight [Holmes and Nash 1990: 23].

The saliva is used to cement mainly down feathers in the construction of the nest, the typical size of which is 8 cm long, 5 cm wide, and 3 cm deep. "It is half-saucer shaped, the flat side against the cave wall, buttressed at the side with two thickened feet, which are the main support of the nest" [Banks in Smythies 1981: 187]. These nests are built in clusters in the rock recesses or chambers some 30 meters or more above the cave floor. Each chamber, known as *pesui* in the Idahan language (Malay: *lubang gua*), may contain a large number of nests, depending on its size and location.

The *Collocalia maxima* species takes about two months to build the nest, with a minimum of 40 days. Incubation takes 28 days with a fledging period of about two months. Therefore, the rearing time of a single brood is between five to six months [Smythies 1981: 187].<sup>4)</sup> It is most crucial that the nests are collected immediately after the fledging period, otherwise they would drop to the ground and eventually eaten by wild pigs, rats, and insects which thrive in the birds' dung. Nests that fall off to the ground appear to have no commercial value at all. Only matured nests plucked from the walls of

<sup>4)</sup> The fledging period of other species of the swiftlets may vary. For instance, in an observation of another species of the *Collocalia*, the *C. esculenta*, Burgess notes that "... approximate time from the laying of the egg to the fledging of the young is about five weeks" [1961: 265].

the nesting chambers are good enough for sale.

The edible nests come in two types. The more expensive ones, the white nests (sarang putih), are made entirely of the bird's saliva. These are normally produced by the Collocalia vestita. The other type, the more commonly available, is produced by the Collocalia maxima. It is known as the black nests (sarang hitam); they contain a considerable portion of saliva as well as down feathers plus some other vegetable materials, usually grass and small twigs.

## The Idahan People

In this paper, the Idahan clan refers to a group of people who collectively claim themselves decendants of a legendary ancestor, Besai, who was said to have originated from Kinabatangan river. The present-day Idahan population numbers between 5,000 and 6,000, and they are to be found mainly in Lahad Datu district. According to their creation myth, the seventh generation of ancestral figures after Besai laid the foundation for the Idahan's claim to the harvesting rights of the edible nests.

These ancestors, a man by the name of Apoi,<sup>5)</sup> and his dog, Siod Rapat, discovered a number of caves while chasing a golden deer in a legendary hunt that took them to various places where the swiftlets were known to thrive. Bird's nests found in these caves have ever since been declared tribal properties of the Idahan. The following excerpt is part of the creation myth which underscores the Idahan's claim to the harvesting rights in various limestone hills around Lahad Datu:

After a while Siod Rapat said, "Brother, I want you to remember this hill. Its name is Madai. In the future you and your children will find riches here." Gomorid said: "Yes." After a wild and fruitless chase Siod Rapat stopped on top of Baturong Hill and waited for his brother, who caught up hours later. Siod Rapat then said: "Brother, remember also this hill. Its name is Baturong. In the future it will give you and your children riches." As before Gomorid replied: "Yes." They looked again for the golden deer. The two brothers grew tired and they rested on top of Tapadong Hill. Here, as on top of Madai and Baturong Hill, Siod Rapat told Gomorid to remember the hill, the name of which is Tapadong. Gomorid, as before replied: "Yes." (quoted from Orolfo [1961: 271])

<sup>5)</sup> The culture hero of the Idahan, Apoi, seemed to have different names in other versions of the creation myth. Orolfo [1961] refers to this hero as Gomorid (see quotation from the following myth below). An interesting point about the trilogy of the culture hero, his dog and the golden deer is that they are blood brothers. This theme seems to be quite common not only among the Idahan, but also among other indigenous ethnic groups in Borneo.

The Idahan have been enjoying these customary rights with respect to four locations: Madai, Baturung, Segarong and Tepadung. These rights were later endorsed by the British administration under the Chartered Company of North Borneo and the government. In 1914 the Bird's Nest Ordinance (Sabah Chap. 14) was instituted to regulate their collection in various parts of the state. The ordinance also gives recognition to the Idahan's traditional claim to the caves in the four locations. Since the British colonial period, the Lahad Datu district office has kept a register of claims to the harvesting rights of the nests. The Forestry Department also keeps a close supervision on harvesting activities, while at the same time taking responsibility for collecting taxes on the nests. It is estimated that the Madai caves produce a total harvest of 1 to 1.5 metric tons annually.

The Idahan live in various settlements in Lahad Datu district, the main one being the village of Sepagaya located in the outskirts of Lahad Datu town. It takes about one and a half hours to drive from Sepagaya to the Madai hills.<sup>6)</sup> Most Idahan who are directly involved in nest collection own a second house within the vicinity of the caves, which are occupied during harvesting seasons. In between the seasons the households move back to their respective villages to work in various occupations. Only a few individuals stay behind to look after the caves.

## Social Control for the Bird's Nest Harvesting

The Idahan have a bilateral or cognatic system of kinship, meaning that people trace their descent through both male and female lines. Although the word clan is usually used to describe a kinship system which has only a unilinear form of kin reckoning, either matrilineal or patrilineal, the term is still applicable to the Idahan case, which includes all people under a single corporate group regardless whether these people trace their descent to a common ancestor through mother's side or through that of the father. Hence an Idahan clan may constitute all those who could prove linkage to any of the known ancestors through either side of the parent. Another feature of the Idahan kinship system is the tendency among them, until quite recently, to marry endogamously. Because of this a person may have multiple claims to collection rights of the bird's nests by virtue of the lineages of both parents. As a matter of fact, those who marry non-Idahan do not lose these rights.

The annual right to collect the nests from each chamber (*pesui*) is assigned in rotation to various groups of people who could prove their relatedness to known. These are the ancestors who originally laid claim to the chambers. The word lineage (Malay:

<sup>6)</sup> Idahan settlements are also found in Tabanak, Sagangan, Binuwan, Bikang, Terusan, Diwata, Segama and Kampung Ipir. For a concise description of the village of Sepagaya and the kinship system of the Idahan, see Moody and Moody [1990].

*keturunan*) is used here with some caution for want of a better term. In the Idahan's case it designates a group of people who could trace their ancestry, either through mother's or father's side, right up to a known ancestor.

Harvesting rights are enjoyed by a group of lineages for one year only, but the following year the same chamber will be assigned to another group of people made up of people from different lineages. At the same time, the previous year's group will disband and each lineage will rejoin other lineages to form another group with collection rights to other chambers. It will take from two to five years before the rotation comes into full term, depending on how many groups are entitled to a particular chamber.

To understand the rotation concept for a particular chamber, and how the group of claimants is formed, one has to work backward through many generations until one comes to the "founder ancestors" who first discovered the nesting chamber. Most likely a chamber was never discovered by a sole ancestor. Due to the dangerous nature of nesting caves and the rock surface, the founder ancestors appeared to have worked in a fairly large group when looking for new, unclaimed nesting chambers. Once a new chamber was discovered, the rights to collect the nests would be claimed by members of this "discoverer group," and subsequent rights thereafter would be inherited by their respective descendants. It is not clear how a decision was reached as to who, among the original founder ancestors, secured the first turn in the rotation that follows. But whatever rotation currently observed by the Idahan appears to have been based on a pattern decided since "ancestral time," with elders of the clan keeping track of descent lines of respective ancestors and the claim to the harvesting rights by their descendants. The role of the elders are therefore most crucial in determining these entitlements, but from British colonial period onwards claims to harvesting rights began to be recorded in the form of a registry.

I have extracted from an Idahan registry book a typical listing of lineages which are entitled to harvesting rights to a nesting chamber, in this case that of Lagapung Gaya (see Table 1).<sup>7)</sup> Column 1, row 2 of the table indicates various years during which the lineage group headed by Rajah Tuah and Datoh Assibi is entitled to the collection rights. All the descendants of both ancestors enjoyed the rights in 1906, 1910, 1914 and so on.

In 1906, (column 1, row 2) harvesting rights to Lagapung Gaya went to the

<sup>7)</sup> I have not been able to obtain a more recent data from the registry of ownership claim due to various logistic reasons. Further field research is likely to produce more comprehensive result from the registry. What is recorded in Table 1 appears to be incomplete for two reasons; first, there are no entries for the years during which the turn in the rotation were supposed to be given to particular groups of lineages; the gap is represented by the ellipsis in the table. Second, the registry has not been updated because the last entry stops in 1965. In addition, by now the descendants of respective lineage groups would have expanded in terms of their real number. The manner they are presently being accounted for in the distribution of the harvest needs a closer examination.

Table 1 Collection Rights for Lagapung Gaya Nesting Chamber

Year of Collection	Deceased Lineage Heads	Succeeded by
1906, 1910, 1914	Rajah Tuah	Indak
1954, 1958, 1962	Datoh Assibi	Datoh Jelilohassan 1/4, Lana 1/4, Dayang Bayanbudiman 1/4, Sukal 1/4
1907, 1911, 1915	1. Balengan	1. Donop
1955, 1959, 1963	2. Pengeran Beranas	2. Awal Udin
	3. Mot	3. Mohamed Eusope
	4. Geleh	4. Mohamed Esah
	5. Pitau	5. Indal
	6. Sarikon	6. Jambun
	7. Panglima Saludin	7. Maloyon 1/2, Tibun 1/2
	8. Mohamed Esah	8. Ipat
	9. Dato Halimah	9. Nawila 1/5, Sapiudin 1/5, Inoh 1/5, Buanda 1/5, Tagi 1/5
	10. Gaun	10. Inang 1/3, Pel 1/3, Matega 1/3
	11. Denuru	11. Tiran
1908, 1912, 1916	Rajah Tuah	Indak
1956, 1960, 1964	Datoh Assibi	Datoh Jelilohassan & others
1909, 1913, 1917	Sri Rajah	Sri Rajah Jangga
1957, 1961, 1965	Hatib Tanbasong	Abdul Kadir
	Ban	Kabang

Source: Register of Owners of Madai Caves (Tatasusila Pemilik-Pemilik Madai).

descendants of two founding lineage heads, Rajah Tuah and Datoh Assibi. Rajah Tuah (column 2, row 2) had only one survivor, Indak, while Datoh Assibi had four (column 3, row 2). Hence half of the amount of harvest for the year they are entitled to went to Indak, while the other half was distributed between four people (namely Datoh Jelilohassan, Lana, Dayang Bayanbudiman and Sukal—being the survivors of Datoh Assibi).

But if one goes further down the first and second column, one could see that the same lineage group headed by Rajah Tuah and Datoh Assibi is given another turn for the collection rights, namely 1908, 1912, 1916 etc. (column 1, row 4). In actual fact, the same group enjoys the rights every two years. This appears to be an interesting point about the rotation; the interval between respective turns is "uneven" among the individual lineage groups. While the group headed by Rajah Tuah and Dato Assibi enjoyed the rights for two terms in the rotation cycle, the other two lineage groups enjoyed only a single term each.

To illustrate this point, the rotation table is examined in detail. If in 1906 Rajah Tuah and Datoh Assibi's group was entitled to the rights, the following year, 1907, harvesting rights to the chamber were claimed by another group consisting of survivors to 11 founding members, namely Balengan and 10 others (column 2, row 3; hereinafter referred to as Balengan *et al.*).<sup>8)</sup> But in 1908, the rights reverted back to the lineage groups

<sup>8)</sup> In the case of their respective descendants (column 3, row 3), one could see that all the /

headed by Rajah Tuah and Datoh Assibi. However in 1909 the rights did not revert to survivors of Balengan *et al.*, the previous year's incumbents. Instead it went to a third group headed by three lineage heads consisting of Sri Rajah, Hatib Tanbasong and Ban (hereinafter referred to as Sri Rajah *et al.*; column 2, row 5). What is interesting here is that while the group headed by Rajah Tuah and Datoh Assibi enjoyed the rights every other year, the other two groups (Balengan *et al.* and Sri Rajah *et al.*) only got their harvesting rights only every four years. A nesting chamber like Lagapung Gaya is therefore shared by three distinctive groups, but the entire rotation cycle consists of four terms, of which one group seems to enjoy two terms while the other two groups are entitled only to one term each.

There must be some form of social and cultural explanations as to why one group enjoys the harvesting rights every other year, while the other two enjoy them once every four years. It must be admitted here that more work could be done to ascertain the cause of this irregular spacing of harvesting turns. One possibility is that the asymmetrical form of distribution could be a sort of levelling mechanism which among the Idahan is not implausible considering the tightly-knit and closed nature of the community. Thus groups which have access to fewer nesting chambers could have been given the economic advantage of shorter intervals in the form of "uneven" turn in the rotation. There could be other logical explanations for this which needs further exploration.

The rotation ensures the cohesion of the Idahan as a kinship-based corporate group. For one thing, no single chamber belongs to any lineage permanently. What is being put on annual rotation are the rights to collect the nests, while the chamber itself remains the communal property of the Idahan as a clan. Most of these chamber rights are normally shared between people who originate from the "discoverer-lineages," namely those ancestors who first came across these chambers. The actual number of people in the respective lineage, and the number of lineages sharing the chamber, will determine the share of the harvest eventually received by individuals. In cases where the lineage membership is large, an individual may receive only a nominal amount.

The rotation system seems to ensure that every lineage has a fair chance of benefiting from a number of chambers irrespective of their size and harvest capacity. Because there are at least 116 known chambers within the Madai cave complex, and a few hundred more in the other three hills of Baturung, Segarong and Tepadung, no one lineage will go without collection rights for a particular year. In most years a lineage should have multiple rights in various chambers.

One of the control mechanisms used in the management of the cave's resources can

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 \</sup>int \text{discoverer members had only a single survivor, except for Panglima Saludin (no. 7), Dato Halimah (no. 9) and Gaun (no. 10), who had two, five and three survivors respectively. Hence part of the harvest originally assigned to Panglima Saludin will have to be split among the survivors into two, that of Dato Halimah into five and that of Gaun into three.

be seen in the way the Idahan organise themselves collectively as a cohesive corporate group. All nesting chambers are claimed collectively by the Idahan clan since time immemorial. As such whatever benefits an Idahan could enjoy from the nesting chambers is communally decided by the elders of the clan provided the person could prove his or her kinship relatedness to any of the founder ancestors, either through father's line, mother's line or both.

Clan leadership is based on kinship seniority, and elders decide on matters related to these claims. They are highly respected for their intricate knowledge of Idahan genealogy, and because of this they have the final say in verifying entitlements and disputed claims. Overlapping claims do occur from time to time, but most are settled through their mediation. Not only that, the committee often had to interfere when complains are received concerning harvesters transgressing and collecting nests belonging to adjacent chambers.

A 15-member team constitutes "The Committee of Inheritors to the Bird's Nests of Madai, Baturong, Segarong and Tepadung" (Jawatankuasa Pewaris Sarang Burung Madai, Baturung, Segarong dan Tepadung) which looks after the general interests of the Idahan people in terms of ecological management of the caves, the most important of which is deciding on the harvesting times. The post of chief harvester (*ketua pemungut*) is crucial because among other things, his responsibility is to co-ordinate works done by the teams of harvesters. His other job is to keep intruders away from the caves especially during breeding seasons. For this purpose a group of able-bodied Idahan men find ready employment as security guards who conduct regular patrols of the caves to ward off thieves.

# Harvesting of the Nests

Harvesting of the nests is done by specialised climbers, known as *tukang pungut*, using intricate systems of guy ropes, rattan ladders and bamboo poles. The work is by no means easy since it requires advanced acrobatic skills to reach the chambers, which are often as high as 30 meters. Because of this, harvesters have to work as a team; one person climbs to the highest point possible and then using the specially plied rattan ladders, he manoeuvres his way down into the rock chambers to get to the nests. Other members of the team keep the rattan ladders steady by means of long bamboo poles and guy ropes.

Because of the danger involved and because of the specialised skills needed, not every Idahan man is qualified for the profession. Moody and Moody [1990: 144] mention that birds' nesting is "an activity that cannot be done safely without a support team to hold the rattan cables used for guying the ladders, and to help with the raising and lowering of ladders and collection baskets, etc. Thus, it is a group activity whereby fathers and sons or brothers become co-labourers, often in the company of more distant

relatives and friends." All in all, it is the experience gained early in one's life which constitutes the most important part of the profession.

It appears that among the Idahan themselves skilled groups of people have emerged, who receive training from childhood to do the dangerous task of scaling the rock surface. They work for others during harvesting seasons and are paid handsomely, depending on the degree of difficulty and danger involved. In fact, for certain parts of the cave, no other people are able to reach the chambers except for a few known teams of harvesters. Their services are highly demanded during peak periods and they are in the position to charge more than the going rate for the kind of neck-breaking jobs others are not willing to do.

The daily rates paid to harvesters vary between RM30 and RM50 per person depending on the difficulty of the job. In places where extra equipment is needed, the cost of acquiring such apparatus is recovered from the sale of the nests for the year. Therefore, a considerable amount of the proceeds may go towards defraying labour and equipment costs.<sup>9)</sup>

There used to be only two harvesting cycles during the year, *papas* (from March to June) and *penango* (from September to November) [Moody and Moody 1990: 144]. But in 1995 the number of harvesting seasons was increased to three, namely *papas* (20 April to 5 May); *penengah* or *penango* (15 August to 10 September) and *ekor* (15 November to 15 December).

It is yet to be verified the ecological implications resulting from this decision. Because of the shorter break between harvests, the hatchlings may not have enough time to grow to full maturity before the third harvesting season takes place. However, more systematic studies need to be done on the life cycle of the particular species of swiftlets nesting in Madai and other caves.

The change to three seasons may be prompted by an increase in the price of bird's nests in the world market, perhaps due to a reduction in supply resulting from the destruction of traditional sources in other areas. In fact, in some parts of Southeast Asia over-harvesting is not unknown. Under unregulated conditions harvesters have done most damaging work by collecting nests still bearing unhatched eggs and fledgings. As a result some caves are known to have been permanently abandoned by the species in favour of other places.

Despite the additional harvesting period, there appears to have been a relative

<sup>9)</sup> For instance, in the case of a chamber by the name of Tagbatu, the sale for the harvest in September 1995 was RM12,000, but after deductions of labour and equipment costs, only RM3,000 remained. This amount had to be split into eight shares because for that particular year the chamber was claimed by eight different lineage groups. The final share has to be further distributed to individual members of respective lineage, which is why the net amount eventually received by an individual is very modest indeed, especially when the lineage membership is large.

increase in the actual amount of nests harvested for the case of some chambers. For instance, a chamber by the name of Balok Kajong in Madai used to produce a total harvest of 30 kilograms in 1994; but in 1995 the harvest had increased significantly to about 40 kilograms. How far the sustainability of this increase is yet to be seen in the future.

Another important point about the sustainability of the swiftlet species can be related to the fact that the Idahan tend to regard the caves with great respect and deference. There exists a body of belief among the Idahan concerning taboos related to bird's nest harvesting. The observation of these taboos helps to keep the place secluded during non-harvesting seasons hence leaving the nesting chambers and fledgings in peace. Deference to the guardian spirits of ancestral times may take the form of various offerings—perhaps similar to what has been described by Harrisson and Harrisson [1970: 44, 84]—including the use of yellow rice, white fowls, ceramic jars, and goats. Although present-day Idahan no longer placate the guardian spirits in a very rigorous way, they nevertheless harbour a considerable store of respect for the sanctity of the caves as ancient burial grounds and dwelling places of their ancestral spirits. Hence, a marked change of behaviour, which only a true Idahan can explain, is expected of a person whenever he enters the cave.

## Recent Changes

Accessibility to the cave in the old days from Sepagaya and other Idahan settlements was not an easy matter. One had to travel by sail boat for at least one day and one night followed by another two hours of trekking by land. Poor accessibility in the past meant that the caves were likely to be left alone for most part of the year. Nowadays a gravel road leads right up to the caves' entrance, thus providing easy access to the nesting sites. It also brings more people there, including intruders and thieves.

Second, a number of people, especially youths, are unemployed and it is most tempting for them to sneak into the caves to steal the nests even if they are not yet matured. This temptation is further fuelled by the high price of the nests and the availability of ready buyers in the black market.

It also appears that many non-Idahan brokers have been injecting money into the bird's nest economy by making advance purchases of the harvest from the rightful claimants years ahead of their turn. Large sums of money from Singapore and Hong Kong have reportedly been used to secure this kind of sales. Although not fully approved by the committee of Madai inheritors, some shady arrangements appear to have taken place. To what extent these deals will influence the effectiveness of the Idahan's traditional method of social control of the resources remains to be seen.

In many cases, the actual collection of the nests is now trusted to professional

harvesters. This means that the rightful claimants can now wait in the comfort of their home for their shares to be delivered to their doorsteps; they need not bother going to the cave site themselves. This contrasts with what used to take place in the old days when harvesting seasons provided a valid reason for members of the larger Idahan clan to get together. It was on these occasions that bird's nesting activities really underscored the real meaning of being an Idahan, when existing kinship ties were being re-validated and re-emphasised on a regular basis. It appears that the gathering of relatives from various lineages at the caves has certainly enhanced communal solidarity of the Idahan as a corporate kinship group.

Another trend concerning the bird's nest economy is that over the years, and despite the high prices the nests can now fetch at market, the final shares of the harvest received by individuals have tended to get smaller and smaller. Since membership of the lineage has increased considerably, a larger number of people has to share the same amount of harvest. In addition, operating costs involved in the collection of the nests have increased drastically, thus cutting further into the profit margin.

## Conclusion

Among the Idahan bird's nest harvesting seems to centre around two main things. The collection of the nests is regulated by traditional social controls dating back to ancestral times. It is based on intensive ecological observations on the species of birds producing the nests. Their observation of the behaviour and life cycle of the species over a long-term period has equipped the Idahan with a body of indigenous knowledge most relevant to the management of these natural resources. Despite the high demand for the bird's nests, the Idahan have not yet succumbed to the temptation of collecting them during breeding seasons. Insofar as the dictates of the market economy have not destroyed the Idahan's ingenuity in traditional conservation techniques, the survival of the swiftlet species is guaranteed.

Second, the social organisation of the Idahan, which is based on kinship affiliation, is another mechanism which directly contributes to the continuing survival of the swiftlet species. Because of the rotation system, the rock chambers and the nests are no perpetual property of any single person. While harvesting rights rotate on an annual basis to be shared by several lineages, the caves themselves remain the communal property of the Idahan.

The system of resource allocation practised by the Idahan can perhaps, for the lack of a better term, be referred to as a form of usufruct, where the rights over animals or the produce are given greater importance than the rights to alienate the land—on which the resources are found—in the form of private ownership. Hence a system has to be instituted to determine in what manner the resources could be fairly distributed among

members of the group. For the Idahan the social control of the harvesting is done at clan level. As such the concept of custodianship seems to be more appropriate than that of individual ownership in ensuring effective management and distribution. Had the chambers been designated as individual property there is no telling how damaging their exploitation could have become.

The caves which provide economic sustenance to the Idahan are always considered sacred grounds, a factor which keeps people away most of the time, except during harvesting seasons. The secularisation of space directly benefits the swiftlets, which are left alone to breed for most of the year, thereby perpetuating the survival of the species.

Conservation techniques used by the Idahan have definitely made full use of three important elements found in most traditional societies: indigenous ecological knowledge, kinship organisation and belief systems. Perhaps the kinship element should be given another special mention here. It underscores an important aspect of Idahan ethnicity and their minority position in the larger society of Sabah: since bird's nesting rights are exclusive to the Idahan, and membership of the clan is meaningful only through kinship relatedness, Idahan identity and the bird's nesting economy are intertwined. As long as they continue to identify themselves as Idahan and remain as a cohesive corporate group, they are assured of their traditional claim to the harvesting rights of the nests.

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