

HUNTING AND FISHING AMONG THE SOUTHERN KALINGA*

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Among the six major mountain peoples¹ of Northern Luzon, only two, the Kalinga and the Apayao, maintain hunting and fishing as an appreciable supplement to their regular food gathering and growing activities. But although the Kalinga are probably the third most thoroughly studied group, after the Bontoc and Ifugao, there is little in the literature on their hunting and fishing techniques, terms, ceremonies, omens, seasons. This lack of information is especially regrettable in view of the striking decline of hunting and fishing in the southern, and especially southwestern, portions of Kalinga-Apayao Province during the last decade.

This article then will give fairly detailed information on current hunting and fishing practices among the Southern Kalinga, explain where, when, and how these data were gathered, review the literature already written on such practices, give a brief reconstruction of the recent history of the decline of hunting and fishing, and finally indicate the impact of current political considerations and the future direction of hunting and fishing in Southern Kalinga.

Existing Literature About Hunting and Fishing in Kalinga

Seven full-length treatments of the Kalinga have been published. The oldest are Fay-Cooper Cole's two books in the early 1900's on the Western Kalinga,² who are often referred to as the Tinguian. Cole

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¹ Generally considered to be the Ibaloi, Kankanai, Bontoc, Ifugao, Kalinga, and Apayao.

² Fay-Cooper Cole, *The Tinguian: Social, Religious, and Economic Life of a Philippine Tribe* (Chicago: Field Museum of Natural History, 1922). and *Traditions of the Tinguian: A Study of Philippine Folklore* (Chicago: Field Museum of Natural History, 1915).

has about five printed pages on hunting and fishing³ and mentions that many deer and an occasional pig are caught by the dogs chasing them into long nets stretched across the runway of the game.⁴ This method is apparently not used in Southern Kalinga.

Roy Franklin Barton's book on Kalinga law⁵ — as understood in Lubuagan, Lubuagan — in discussing hunting covers only the rules governing the distribution of meat after the kill.⁶ His discussion of fishing is limited to about one page on rules governing the use of streams for fishing and the questionable statement that "fishing is not economically important."⁷

Edward P. Dozier's 287-page survey of Kalinga life in 1959-1960⁸ has less than two pages on hunting and two short paragraphs on fishing.⁹ Jules Deraedt's long article on a Northern Kalinga group¹⁰ focuses on kinship and has only two sentences on hunting and fishing.¹¹

Francisco Billiet and Francis Lambrecht's translation and analysis of four folk epics from Southern Kalinga¹² is an invaluable work, but it does concentrate principally on headhunting and tells us little if anything about wildlife hunting. Esteban T. Magannon's study of religion among the Southern Kalinga in Lubo, Tanudan Municipal District,¹³ has two short hunting rituals in the appendices.¹⁴

When, Where, and How These Data Were Gathered

This article represents some of the first part of a 12-month study of food gathering and growing activities among the Southern Kalinga. By Southern Kalinga I refer to the ethnic divisions proposed by Billiet

³ Cole, *The Tinguian*, pp. 378-386.

⁴ *Ibid.*, pp. 379-380.

⁵ R. F. Barton, *The Kalingas: Their Institutions and Custom Law* (Chicago: University of Chicago Press, 1949).

⁶ *Ibid.*, pp. 85-87.

⁷ *Ibid.*, pp. 87-88.

⁸ Edward P. Dozier, *Mountain Arbiters: The Changing Life of a Philippine Hill People* (Tucson: University of Arizona Press, 1966).

⁹ *Ibid.*, pp. 132-135.

¹⁰ Jules Deraedt, "Some Notes on Buwaya Society," *Saint Louis Quarterly*, Vol. 7, No. 1 (March 1969), pp. 7-110.

¹¹ *Ibid.*, p. 9.

¹² Francisco Billiet and Francis Lambrecht, *The Kalinga Ullalim* (Baguio City: Catholic School Press, 1970).

¹³ Esteban T. Magannon, *Religion in a Kalinga Village: Its Implications for Planned Change*. (Quezon City: University of the Philippines Community Development Research Council, 1972).

¹⁴ *Ibid.*, pp. 73-75.

and Lambrecht,¹⁵ in which the Northern Kalinga occupy the Saltan River valley west to Salegseg, Balbalan, and south to Balbalan, Balbalan, the Mabaca River valley, and the upper Matalag River valley into Apayao Subprovince.¹⁶ In political units the Northern Kalinga occupy roughly Pinukpuk Municipal District, the eastern part of Balbaian Municipal District, and the southermost part of Apayao Subprovince. The Western Kalinga occupy most of Abra Province, where maybe a quarter of them are ilokanized beyond recognition, and the upper, Saltan River valley. In political units this is Abra and western Balbalan Municipal District. The Southern Kalinga occupy the middle Chico River valley from about eighteen kilometers south of Pinukpuk Municipal District to Bontoc Province and the Chico River tributaries of the Mananig, Tanudan, and Pasil Rivers, including part of northeast central Bontoc. The Southern Kalinga then live primarily in the political units of Lubuagan, Pasil, Tinglayan, and western Tanudan Municipal Districts in Kalinga-Apayao and in Natonin Municipal District, Bontoc. (Dozier postulates a division of Kalingas into Northern, Southern, and Eastern,¹⁷ but I don't consider his division valid; his two-month sojourn in two Kalinga villages was too brief to give him authority to speak on the tricky business of ethnic boundaries, and his thinking on boundaries seems to be dominated both by the rather arbitrary Philippine political divisions and by his prior commitment to a theoretical division between wet and dry rice farming.)

This article is based on data gathered in Pasil and Lubuagan Municipal Districts during the five months from July to November 1973. The hunting data are primarily from informants in the four barrios of Pasil that are widely regarded as the best hunting barrios, Balatoc, Colayo, Pugong, and Bagtayan (Bagtayan is actually a sitio of Galdang barrio); the fishing data are primarily from informants in one of the best known fishing barrios of Lubuagan Municipal District, Tanglag. My principal informants include Agaton, Tanglag; Tabas Angalao, Colayo; Dionisio Awing,

¹⁵ Billiet and Lambrecht, *op. cit.*, pp. 41-42.

¹⁶ Although I have never been able get a clear ruling on this, it seems that since Kalinga-Apayao was created as one province in 1968, there is technically no longer any such thing as Kalinga or Apayao Subprovince. However, it is awkward to speak of Kalinga and Apayao as anything but political divisions since the boundaries have little geographic or ethnic validity.

¹⁷ Dozier, *op. cit.*, pp. 7, 9, 11.

Dalupa, Pasil; Ireño Bagyom, Galdang, Pasil; Alfredo Bakidan, Balatoc; Jose Balangi, Tanglag; Antonio Bulawit, Sumadel, Tinglayan Municipal District; Maximo Diwayan, Pugong; Max Duguiang, Lubuagan, Lubuagan; Lukas Gayodan, Dangtalan, Pasil; Miguel Herano, Bagtayan; Manuel Lamao, Bagtayan; Lognas, Dangtalan; Bulao Longodan, Colayo; Julio Meguingan, Balatoc; Gavino Mosing, Pasil Poblacion; Eduardo Nalog, Dangtalan; Juanito Palangyo, Pugong; and Jacinto Tullabang, Balatoc. Much of the data was translated by my two guides from Dangtalan, Andrew Dompao and Willy Kub-ao. Also, I went on several hunting trips in the forest surrounding the Bato rice field area of Pugong and in the forest area along the Tabia River between Bagtayan and Balbalasang, Balbalan; and I was able to observe some fishing activities in the Saltan River near Secsean, Balbalan.

*The Importance in Hunting of the Idaw*¹⁸

The *idaw* is a small bird about 12 cm. long with a black bill, a yellow breast, and dark red feathers; it is thought to be a variety of *maya*. It is believed that Kabunian, chief god of the Kalinga, speaks

¹⁸ A note on the rendition of Kalinga words in this article: Since my study is not at all linguistic, I have very little to say about the Kalinga language. It is evident that pronunciation, vocabulary, and occasionally grammar vary from region to region and even village to village; it is also evident that the pronunciation of Kalinga is very difficult for a non-Kalinga to learn (cf. Barton, *op. cit.*, p. 17). Almost all written Kalinga is biblical; Billiet has translated much of the Roman Catholic bible; and C. Richard Gieser of the Summer Institute of Linguistics, much of the Protestant bible. Neither of these translations contain detailed terms for hunting and fishing. My main concern here is simply the "spelling" of Kalinga terms. I have followed primarily the systems of Billiet and Gieser, which are close though Billiet's is based on Lubuagan speech and Gieser's on the speech of Guinaang, Pasil. I have used for voiceless stops the symbols *ch*, *k*, *p*, *t*, and *v*; for voiced stops *b*, *d*, and *g*, and for continuants *l*, *m*, *n*, *ng*, and *c*; for voiced vowels *a*, *e*, *i*, *o*, *u*, and *w*. The diphthongs are *ai*, *ao*, *ei*, *eo*, *ia*, *io*, *oa*, *oe*, *oi*, *wa*, *we*, *wi*, *wo*, and *wu*. In accordance with established systems I use *ay* for the *ai* sound and *ow* for the *oa* sound. Place names and individuals' names are spelled traditionally; some of these traditional spellings use symbols not in the above system, e.g. the barrio Colayo with the Spanish *c* rather than with *k*.

Almost all the vocabulary and spelling was checked with interpreters in Dangtalan, Pasil. In all Kalinga dialects the *l* and *r* are indistinguishable to my ear, therefore my interpreters, who seemed to know the difference, always had to point out this spelling. In Dangtalan *d* is sounded *ch*: this seems to be peculiar only to the Guinaang region and Lubuagan. My Dangtalan interpreters were not too helpful here, but wherever it seemed appropriate, I have rendered the *ch* sound into the

through the *idaw* and foretells good luck or misfortune. Almost all Kalinga, even those with Western education, pay close attention to the *idaw*. There are many beliefs connected with the *idaw*, and the reading of *idaw* signs varies from barrio to barrio and especially from region to region. The *idaw* is an extremely important traveling omen among the Kalinga,¹⁹ and so I will enter some comparative data here of beliefs from regions other than those barrios along the Pasil River. Although the *idaw* is the main traveling omen, any object, plant, animal, or natural event can convey a message from Kabunian. I will here discuss primarily only those pertaining to hunting.

In the hunting barrios of Pugong and Bagtayan and in general throughout the eastern portion of Pasil there is general agreement on the following *idaw* beliefs. (The barrios of Balatoc and Colayo in western Pasil, having been settled primarily from Tulgao, Tinglayan, have somewhat different beliefs, which I will summarize briefly later.) The *idaw* can give a sign in three places: 1. the place of beginning the trip to the hunting grounds, 2. the first resting place, and 3. the hunting place. However, a bad *idaw* at any time means that the hunters must return home. If there is only one good *idaw* in any of the three places, this is sufficient for a good hunt as long as there are no bad *idaw*. Ideally there should be three good *idaw* in the three places. (I am using the word *idaw* as the Kalinga do, i.e. to refer to both the bird and the sign.)

The following are bad *idaw*, and the hunters must return home whenever they have one: A sad *idaw* that does not sing loudly but

pan-Kalinga *d*. Other sounds difficult for a non-Kalinga to distinguish — and possible errors in my spellings — *g* and *k*; *b*, *p*, and *v*; *d* and *t*; and *k* and *g*. Some investigators (see e.g. Dozier, *op. cit.* p. xx) gave up entirely trying to distinguish *o* and *u*. Again, with the help of my interpreters I have made a spelling distinction that I believe reflects pronunciation.

One additional note about language; Some of the Kalinga terms are of recent Ilocano origin and some of Spanish origin. I make no effort to point out any of this since it is beyond the scope of my article.

¹⁹ Traveling omens, especially from birds, are important to all mountain peoples in Northern Luzon, but these omens have not been systematically studied. I hope to have an article in the near future on traveling omens among the Kalinga. (Indeed, traveling omens and other signs of birds, objects, and events are both important and strikingly similar throughout the Philippines. If someone compiled the beliefs of the mountain "pagan" peoples and also those of the traditional, rural lowland "Christian" peoples, many would be surprised at just how similar they are.)

simply sits still and acts droopy; an *idaw* singing behind the hunter; an *idaw* singing on the left (termed *dumaog*) generally means that there will be a storm; an *idaw* flying across the hunter's path from left to right (termed *akom*) generally means the hunter will become too weak to carry things.

The following are good, and the hunters will have success: A *happy idaw* dancing and jumping around; an *idaw* singing on the right side (termed *malboy*); an *idaw* flying across the path from right to left (termed *bumasot*), which means generally that the hunter will bag a lot of game and will have the strength to carry it all home. If no *idaw* appears, the hunters must return home when they reach the hunting grounds. This omen is termed *dorpas*. To avoid such a completely wasted trip, many hunters purposely call the *idaw* to get a sign. It is called by an a-i-o-o-o-o-o sound uttered very loudly by the hunters.

The *idaw* can also tell a number of other things, e.g., both *malboy* and *akom* may also mean that an animal is trapped in the hunter's pit; an *idaw* singing near the pit means that the animal in it is dead or rotting; an *idaw* singing a peculiar tic-tic sound means that the hunter will make a catch but may meet an accident on the way home.

Other birds that carry the word of Kabunian to the hunters include the *pisot*, a large white bird. As a general traveling omen the call of the *pisot* means that when the traveler reaches a sick person, that person will die immediately. To the hunters it means that game will be killed. If it is heard at home in the evening, the hunters should go hunting the following morning. If they hear it in the fields, they may expect something to have happened in the village. If they find that nothing has happened, they should go hunting the following morning. If someone gives the hunters a piece of meat on their way back to the village, that invalidates the *pisot* sign. The cry of the *coling*, a hawk, is a strong sign; it is the ghost of the *idaw*. Upon seeing or hearing a *coling* anywhere the hunters must return home immediately.

The call of the *coop*, an owl, generally relates to marriage proposals; if one is in the house of his intended and hears the *coop*, he must leave immediately. Only the most traditional hunters will call off a hunt when hearing the *coop*, but since the *coop* usually calls only in the early morning hours, many hunters leave home later in the morning. The sound of the *sumigod* (a type of *idaw*) is a special

sign telling the hunter returning home with a new hunting dog that the dog will be a good one.

In Colayo and Balatoc there are generally two places for the hunters to listen to the *idaw*; both are resting places on the way to the hunting grounds. If in sighting or hearing two good *idaw* the first is on the left and the second on the right, this is termed *basil-ang* and is good. If the first is on the right and the second on the left (even though they are good *idaw*), this is a bad sequence termed *tokang* and the hunters must return home. (In some traveling situations, such as for trading, specifically a type termed *ba-at*, a *tokang* may be good.) A good *idaw* sound starts low with a slow tic—tic—tic and speeds up to a high-pitched tic-tic-tic-tic. A bad sound is a low, slow chuk—chuk—chuk—chuk. All sounds must be happy ones to work in the pattern; a sad sound is always a bad sign and the hunter must return home.

Billiet and Lambrecht, in speaking of *idaw* signs in Tanudan Municipal District, write:²⁰

The chirping (*palitpit*) or the talking (*bagbaga*, *makabagbaga*...) of the *idaw* birds may be either a good, neutral, or bad omen. The augury is good (which means "proceed"), if the chattering is accompanied by "prrrrrrrrrrr" rolling sounds (*malboy kad*); it is neutral if the call is "pit pit pitpit pit pit pit"; it is definitely bad if the call is a continual whistling "wissss dsdsdsssiw" (*sumigud kad*), meaning "return home." ... Warriors [and hunters] stop six times to listen to the *idaw*'s call at six different stations along the path they are to follow; the sixth station is not far away from their village. Once they have passed the sixth station, they no longer pay any attention to the bird's call. The first (*mangona*) and second (*kagwa*) stations, both fixed by custom, and the fourth (*kapat*) station are the most important: the auguries at all these three stations must be *malboy* ("have a good sound"), unless the augur (*mangidaw*), a member of the group older than the rest, who is a recognized expert in interpreting auguries or omens, says that a neutral augury at the first or second station is good. In any case, however, the augury at the fourth station must be *malboy*. If at the third (*katlu*) station, the augury would be definitely bad, the warriors [and hunters] may nevertheless proceed, hoping that the fourth would be good. Bad auguries at the fifth (*kalma*) and sixth (*kanom*) stations no longer prevent the warriors [and hunters] from proceeding, since the augur will easily find a way of explaining away a *sumigud* bad omen through favorable omen.

Other bad omens that mean hunters must call off the hunt include a snake crossing the path, a recent earthquake or landslide anywhere in the hunters' home area, traveling path, or hunting area.

²⁰ Billiet and Lambrecht, *op. cit.*, pp. 277-278.

Also, if hunters hear a deer baying during the night, they should not go hunting the next day.

To foretell the fortunes of a hunt, hunters may read the bile of a pig butchered for some ceremony not connected with hunting. If the bile is small or empty, the hunters will not catch anything; if it is full or large, they will. A very common belief throughout the mountains concerns sneezing. If any person or animal sneezes during the moment that the hunters (or any travelers) are thinking about just setting out, then they must postpone the hunt or trip for an hour or so; generally some news is expected during that hour. If continually sneezing is heard, they should put off the hunt until the next day.

According to Dozier, "In Mabaca [in Balbalan Municipal District] if you dream of rice cake mixed with coconut oil or if you dream of drinking wine then you will catch a fat wild pig. Generally in the north, dreaming of a dead person is considered to be a sign of good luck in hunting A complete rainbow is a good sign, but not an incomplete one."²¹ Some informants told me that if only part of the hunter's cigarette burns after he lights it, he will surely catch something.

I have given here what seem to be the most widespread hunting omens in Southern Kalinga, plus some uncommon ones and a few from other areas of Kalinga. Such signs and beliefs are endless. Every barrio and indeed every hunter can always add to the list; anything done, felt, heard, or seen before a noticeably successful or unsuccessful hunt is a candidate for an omen. Some of them become more widespread than others; some never go beyond one hunter. All my informants without exception, however, strongly believe in the common *idaw* signs.

The Importance in Hunting of Dogs' Nipples

Hunting dogs are highly valued and now rather scarce in Southern Kalinga. A pair of good hunting dogs costs about one carabao, and a carabao currently sells for around ₱700 in Kalinga. The very best hunting dog will cost one carabao by itself. Hunting dogs in general are called *mingor*, which is the same term applied to a warrior who has killed at least one person. A similar term is *mangarat*.

²¹ Dozier, *op cit.*, p. 133.

Most informants said the two terms mean the same, but one hunter said that the *mangarat* can hunt alone but the *mingor* needs companions.

There is much information on how to recognize good hunting dogs but not much on how to train them; they generally learn by running with the pack. Some training occurs when owners throw stones at chickens for puppies to chase. However, hunters will never bother with a dog that does not have good hunting signs, and the most popular system for recognizing good hunting dogs is by their nipples. Again, the nipple rules vary from hunter to hunter, barrio to barrio, region to region even more than the *idaw* signs. The following information is limited to the barrios of Pugong and Bagtayan.

The best hunting dog is called a *bukod* (sometimes *bugtong*) and is recognized by examining the fourth nipple from the rear (in a row of five) on either side; this nipple should be balloon-like and the surrounding area clean and clear. Some hunters identify the *bukod* by the rear nipple, saying this double nipple must have the two parts widely separated.

Usually dogs hunt in packs, but the *bukod* can track down, catch, and hold a deer or wild pig all by itself until the hunters come. Some of the *bukod* before are reputed to have gone out occasionally by themselves without any hunters to track, kill, and eat a wild piglet. They are rare now; Bagtayan had seven just before World War II but has none now. In the old days the famous hunters used three to five *bukod* on one hunt. In all of Pasil there are now only three *bukod*; two in Malucsad, one in Pugong.

A dog called a *pa-as*, according to one hunter, can be used for hunting only by widowers and is identified by the nipple nearest the rear being single instead of double. Another hunter denied this, saying the term refers to a dog whose offspring all die. Still another hunter, while agreeing with the nipple rule, adhered to only part of the second hunter's explanation, saying that if the *pa-as* proves himself in a hunt, it means no harm will come to the owner's family; and if it doesn't, then an offspring of the owner will die.

The commonly used term *sabat* refers to a class of dog's nipples, not to an individual hunting dog. The nipples are not aligned crossways in the *sabat* breeds. Another hunter said that *sabat* has nothing

to do with nipples but refers to a point in the hunt when barking dogs have found signs of an animal and other dogs join them. It should be noted that all this disagreement comes from two barrios only about one hour and 15 minutes trail hike apart, both within the same Guinayang cultural region, and from experienced hunters.

Even more so than *idaw* signs, the nipple rules seem to be endless. Generally anything that is unusual in a dog's nipples is taken as a sign, and if that dog turns out to be a good hunter, then the sign becomes a rule. With the scarcity of hunting dogs, one cannot afford to ignore a dog, so the hunters look hard for peculiar nipples. Some more recent classes of nipples indicating good hunting dogs include these: unaligned nipples of any sort (*basiwal*); three nipples for the double rear one; an extra nipple (*sawal*) or missing ones; a nipple in the middle of the penis with a depression leading to the nipples on either side (*colis*); elongation of the nipples across the body rather than the length of the dog, as is common.

Still more nipple rules include the belief that a dog with balloon-like nipples should be owned only by rich men and a dog with thin nipples should be owned only by the poor. If one nipple is in front of the penis and often urinated on, then the dog will easily follow the animals' trail. If the nipples are twisted counter clockwise, the dog is a coward; if clockwise, a hero. All my informants believed strongly in all nipple signs though their interpretation of them sometimes differed.

There are other signs by which hunters may recognize a good hunting dog, but these appear to be more recent and are not quite so strongly held as the nipple beliefs. Dogs with ears that flop down are not considered good. Apparently it is believed that floppy ears will impair the dog's hearing on the hunt. But if one ear is pointed forward and the other flopped down, this is a good sign.

If the dog's hair is coarse, it will be a good hunting dog. Also, if the whorls on the underside of the dog are in the middle and not at the sides, as is common, the dog will be a good hunting dog. If the dog's tail leans to the left, it must be cut. Most of the short tails in Southern Kalinga are for this reason. Black spots on the lips and mouth are good, and if any of the dog's feet area are a different color, it will be certain to catch the animal whose track it steps into.

Hunting Techniques in Southern Kalinga

Often hunters go out in groups of ten or so and then break up into groups of two or three, each with several dogs, though sometimes hunters prefer to be alone so that they will not have to share their catch. Also it is believed that dogs with one hunter will not tire so easily. Resting of dogs depends on how much they run. Five hours in a day is about maximum, and they have to be rested the next day. Usually they run for two or three hours two days in a row and are rested for two.

Especially since the banning of firearms with martial law, dogs are easily the hunter's most valuable tool. The dogs generally chase down the game and surround it. There is much shouting during the hunt to cheer on the dogs and to locate where the hunters are. This shouting is with a wa-a-a-h-o-o-o-o sound. The hunters keep their eyes and ears open. If a hunter spots a deer or if one knows where deer are or if one is inquiring where deer are, he points with his hand closed: it is believed that if a person points with fingers outstretched, the deer will run in that direction far, far away. But the game is usually found by the sharper senses of the dogs.

When a dog has found an animal, it starts barking and the chase is on as the other dogs join in and the hunters try desperately, and not always successfully, to keep up with the dogs as they dash through the forests, up and down cliffs, around trees, through the underbush. Deer usually head for water and are trapped in the middle of a stream; wild pigs are usually cornered against boulders. Dogs may chase the squirrel-like *mutit* up a tree, and then the hunter knocks it out. When it falls to the ground, the hunter will have to fight off the dogs to get it.

If the deer is greatly tired when trapped in the stream, it will not fight hard, and sometimes in these cases the dogs tear it to pieces before the hunters can get to it. It is a very rare dog that simply grabs hold of the game and does not let go until its owner comes. If the dogs get so far ahead that the hunters cannot keep up with them and then cannot find them, it is expected that the dogs will return home the same hunting day. If they do not return, it is probably because they are having a feast in the forest. The next day the hunters send boys or relatives to search the river banks for the carcass of the deer to see whether any meat can be salvaged. This is termed *ubo*.

Dogs usually keep their distance from the cornered wild pig, simply barking at it and keeping it from escaping; lots of good hunting dogs have been killed by getting too close to a cornered wild pig. Usually the hunter cripples the pig with one spear thrust, then lets go of the spear — since the strong wild pig will be thrusting about — and finishes it off with his bolo, often striking at the spinal column. Generally after the spear thrust, the dogs rush in and hold the pig. Great care is taken in killing wild pigs because they are widely regarded as dangerous. The deer, which is usually in water when caught, is speared and then the hunter pulls it with the spear toward him on the head with a stone.

The common spear (*tubay*) is about two meters long and steel tipped with one wing or backup hook on each side; some may have two on each side. Also, spear tips can be made from the tough *bikar* bamboo (related to the *anos* bamboo). It is cut crossways at an acute angle making a sharp point. This tip is about 20-30 cm. long and is fitted over a piece of wood around two meters long for the complete spear. This traditional spear has no wing. Bolos may be made from any iron; they are often fashioned from automobile springs. Most of the steel spears and bolos in Pasil come from the blacksmiths in Uma, Lubuagan.

Distribution of Meat from the Kill

The meat from the kill is divided evenly among whomever is around, whether or not they participated in the hunt. It is said that farmers with fields near the forest may spend more time in their fields than really necessary in the hopes of getting some meat. Although anyone may spear a hunted animal, he cannot touch the carcass until the original hunters arrive on the scene. The share of the meat is called *ilang*, a term covering the share of meat from any type of butchering. Persons arriving on the scene after the butchering has started do not receive an *ilang*. The hunters by custom save back for themselves the head, neck, and thorax.

Usually the intestines and other inside parts (sweetbread) of the animal are cooked and divided and eaten on the spot of the kill (or nearby), while the meat shares are taken to the home uncooked. The lungs and bones are given to the dogs. The part of the sweetbread that the hunter may not finish and takes home is called *mer-utu*. The

division of anything that was cooked in the forest is called *bilay*. Special distribution includes the head going to the leading hunter or the oldest man in the group. Also, the head and the neck may be divided between the oldest man and the leading hunter. When one uses a borrowed dog or rifle, the owner of the rifle or dog gets a share of the meat, but the hunter gets the head. (The liver is divided evenly — unlike the butchering of domestic animals where it goes to the attending elite.) Generally owners of dogs get two *ilang* and those without dogs get one *ilang*. Shares are also given to persons the hunters meet on the way home.

The *ilang* is cooked at home, and friends and relatives are invited. One may save back part of the share for the immediate family, but if one saves back “too much,” he will be “talked about.” If the family doesn’t have rice, then they cook the *ilang* and take it to the house of some relative with rice, and that relative gets a large share of the meat. Small rattan strips tied and looped at the end may be stuck in the *sawali* wall of a person’s house in remembrance of *ilang*.

Business hunters have the meat to sell but usually eat the sweetbread. Generally the shoulder and the loin are sold, usually bringing around ₱40 from traveling middlemen for a full-grown pig, and the rest of the meat is taken home. The middlemen’s going to a business hunter’s house to buy meat is called *sifierr*. Salting and smoking of the shoulder and loin is sometimes done but is rather rare; it keeps for about a month. Meat is quite scarce in Southern Kalinga, and so nobody cares about storing it.

Trapping Techniques Used by Hunters

There are four main types of traps used in Pasil: 1. *Beto* — This generally refers to pit for trapping wild pigs and sometimes deer. They can be constructed in a variety of forms, but generally these are the steps: A. The pathway of the animal is located, usually leading to and away from watering spots, B. a hole is dug about one and one-half meters deep, sometimes square and sometimes round, with a diameter of a meter and one-half (a stone wall may be necessary if the soil is soft), C. the hole is covered in a criss-cross manner by easily breakable sticks. D. the sticks are covered with leaves and moss. Occasionally sharpened bamboo poles are placed in the bottom of the pit,

but this is considered dangerous to persons who may walk by; it was done more frequently in the past when there were fewer people around. Also, if the animal is killed in the pit, he is more likely to rot before the hunter gets back. One hunter may have 20 to 50 pits, and before World War II one barrio may have had as many as 1,000 pits in its hunting grounds.

Variations in the construction of the *beto* depend on the ingenuity of the hunter. Mamerto Dollipes of Dangtalan (who is primarily a farmer, not a hunter), for example, constructed a device to scare the wild pig into the pit; wild pigs are known to be very clever and will avoid pits. The pathway in this case is on the edge of a swidden and is hemmed in on one side by a fence and on the other by heavy bush. Above the pit are two stationary logs planted in the ground in an upright position. Between these two are three heavy logs leaning loose against one piece of wood. The single piece of wood, which is placed crossways between the two stationary logs, is held by one piece of wire looped around the stick and attached to a string. The string then is stretched across the wild pig's path. When the pig trips the string, the falling logs will frighten him into the pit. In addition the pit is baited with camote and taro, which are highly favored by wild pigs. A variation on this trap would be one constructed exactly the same except that no pit would be dug; instead the pig would be frightened over a shallow cliff to fall on bamboo spikes prepared below or frightened over a deep cliff to be killed in the fall.

2. *Kortib* — This trap is usually placed at the edge of a swidden along a fence. Heavy logs are set upright against the fence and held by a stick that will be released when the attached string or vine is triggered by passing wildlife. The logs fall directly on the animal, pinning it to the ground. This is the simplest trap to construct.

3. *Balais* — This is a spear trap for pigs or deer. It is dangerous to bypassers and is usually marked by crossed sticks placed around it or by horizontal marks cut in nearby trees. About two or three meters from the pathway of the animal a stick with a sharpened steel tip is set up at the level of the heart of the animal. A 60-cm. piece of bamboo is stretched and bent tight and then tied with string or vine. A string-trigger is set across the path, and when the ani-

mal touches the string, the spear is released. A rifle can be substituted for the spear.

4. *Lasag* -- Generally used for wild chickens, birds, and *mutit*, this trap is considered by some hunters for use only by children, but it is still a commonly used trap. A string or vine is tied to a stick that is then bent. The other end of the string is looped and placed on the ground with a trigger. When released by the animal stepping inside the loop, the trap jerks the animal up and secures him by the foot.²² This trap is generally placed on ground where there are many scratches.

Minor traps include the following: 1. *Apad* -- A trap for lizards similar to the *lasag* but usually smaller. 2. *Savid* -- Used for hunting bats at night when they feed on the fruits of the *kamussa* tree, this consists of several long leaves with sharp, curved thorns tied on long poles that are swung at the bats thus entrapping them. 3. *Nightlight* -- At night the hunter may place a kerosene light on an elevated rock and cover it with a screen. Birds will fly into it knocking themselves out, and the hunter simply picks them up. 4. *Pangati* -- Used for catching wild chickens. It is tied to a rope pegged to the ground and on three sides around it is spread a screen about three meters in length. Pegged to the ground, the screen has circles of twine about 10 cm. in diameter placed at about every 14th cm. along the screen. When a wild chicken comes to fight, it gets entangled in the screen.²³ Usually only one chicken at a time is caught.

Hunting Seasons and Habitats of Wildlife

Although hunting is done year-round, dry seasons (*dagun*) from February through April is the primary hunting time. Rainy season (*agilid*) brings out the much disliked small, black leeches. They suck deeply and a hunter can bleed considerably after removing them, usually by simply pulling them off. Occasionally these leeches get into the eyes and cause considerable trouble. Also, in the dry season the hunters are usually free from their primary work in the paddies and swiddens -- nobody in Southern Kalinga hunts full-time because everyone has at least one field to attend since planting in the swidden and harvesting in the paddy does not begin until June.

²² Cf. Cole, *op. cit.*, p. 381.

²³ Cf. *ibid.*, pp. 380-381.

It would be thought that hunters would have detailed information on the habitats of various wildlife, but I could get little information on this; the hunters say simply that they depend on the *idau*. It is known that deer and wild pigs, the most commonly hunted animals, inhabit thickly forested areas, that lizards may be found near or in caves, that bats are found in the *kamussa* tree, and that the *mutit* and *vuwot* (squirrel-like animals) are generally hunted at night.

Ceremonies Associated with Hunting

There are few ceremonies currently practiced by hunters in Southern Kalinga, and the old-timers do not recall that many ceremonies were connected with hunting in the past. The one common ceremony is that when the hunters butcher a deer or a wild pig on the hunt, they spill the blood on the ground as an offering and ask the spirits for another animal the next day; it is believed that the spirits own the wild animals. The ears and nose may also be offered to the forest spirits. In Lubo, Tanudan, according to Magannon, the liver is roasted and then thrown piece by piece in the direction of the surrounding mountains and offered to the spirits in those mountains.²⁴

There is a ceremony termed *songa* that may be performed on at least three different occasions to improve the hunt. If a good hunting dog has been catching animals and then for no discernible reason it catches no more, the owner may butcher a chicken for the spirits to persuade them to let the dog continue good hunting. The head and feet of the butchered chicken are put on the end of a stick and placed up on the house. The owner (no medium is necessary) says something to the effect of "allow my dog to catch again" and smears the chicken blood on the dog, generally around its nose. The same ceremony may be done for a rifle that no longer hits its target or no longer kills or for a new rifle but not for a new dog. And, lastly, the *songa* may be done for those who get sick after a hunt. A medium is required then and it is similar to a curing ceremony.²⁵

²⁴ Magannon, *op. cit.*, p. 73.

²⁵ In Poswoy, Balbalan, according to Dozier, "A ceremony called *songnga* is performed in cases where the illness of the patient is so grave that death is considered imminent." (*Op. cit.*, p. 180). It is a worrisome fact of life for linguists and anthropologists that many terms while belonging to the same class of events will have meanings that vary considerably. A long list of such words could be compiled from just the seven studies mentioned in this article.

When traps are used, the hunter usually places a *purdos*, the knotted stem of the *runo* plant, by his door for one day indicating that visitors other than the immediate family are prohibited. At least one technique used by several hunters after unsuccessful hunts — and to which some hunters took strong exception — was to get a new *idaw*, a good *idaw*, in the forest before returning home and then to go out before sunrise the following morning to avoid any further *idaw*. In Northern Kalinga according to Dozier, hunting amulets include lemon fruits, rattan vines, crocodile teeth, a certain ginger.²⁶

Terms for Forest Wildlife

As with much of the Kalinga language, these terms may vary from place to place. I found that such detailed terms as these — which are all from Bagtayan — are not generally known in barrios that are removed from the forests and that have few hunters. The generic term for deer is *ugsa*. The female deer up to five months old is commonly called *igaw* (also *keis* and *taag*). The mature female deer is called *am'od*. There are many terms for the male deer due to his distinctive horns. These include the following: *poliwos*, suckling and beginning to have horns; *todo*, weaned and with horns about five cm. long; *padanga*, horns beginning to have branches; *sarakan*, full grown with hard horns; *mamotod*, horns are being knocked off (they say it's tired of having such horns); *mangobeobe*, horns starting to grow again; *mamobodo*, horns grow long and are soft with hair on them; *lasilas*, age when it is ready to die of old age.

The generic term for wild pig is *biaboy* or *laman*. The following terms apply for both male and female: *chagaw*, youngest suckling; *mamorporting*, small piglets, still suckling, whose color is yellow-brown or white and striped with the hair beginning to turn black; *sumsumhong*, weaning age; *gamayan*, full grown and completely black. A female pig able to bear offspring is called *pidchar*. The male is identified by the growth of his tusks: *ngisi*, canine teeth beginning to push out lips; *manabsavit*, canines protrude about one cm.; *vucar*, canines protrude about four cm.; *mavungot*, canines are about six cm. long and curve for the last 3 cm.

The generic and only term for wild chickens is *itaw*.

²⁶ Dozier, *op. cit.*, p. 134.

Fishing Techniques and Ceremonies in Southern Kalinga

Although fish are not planted in the paddies — it is said they would destroy the rice — a very small fish termed *palispis*²⁷ flourishes in the older fields. The people say that these fish tastes bad and that they didn't use to eat them but now they do. They are trapped with a conical woven bamboo trap about 12 cm. long and about nine cm. in diameter at the large end. The small end has a removable cap where the fish are taken out. It is called a *ḡobḡob-ong*. The fish enter a small hole at the large end and cannot get out because of small inward facing bamboo spikes. The placing of the traps is termed *mangto-ong* and is usually done sometime before harvest after the rice is ripened. They are usually placed near the stone walls so as not to destroy the rice.

Fishing techniques in the streams and rivers include the following:

1. *Sarop* — This refers to a diversion of the water in a stream to make it flow through a smaller side stream. Since it requires the building of dykes and dams, it is the only fishing technique that is done by groups of fishers; all other fishing is normally done individually. First, a trap termed an *ugat* is placed at the end of the diversion where the water will flow back into the main stream. The *ugat* is built along the same principle as the *ḡobḡob-ong* but is much larger, its size depending on the size of the diversion. After the placement of the trap, dykes may be built to reinforce the diversion, and the main stream is dammed. Also, bamboo floors (termed *asar*) may be constructed to catch the fish.

2. *Sidok* — This is a conical net about one meter in diameter at the mouth and about two meters long to its tapered end. The net is generally stretched around a circle of strip rattan at its mouth, and the net is handled by two crossed bamboo sticks attached to two sides of the mouth. It is generally used after rain when the water is muddy and the river swollen. The fisher stands in the water to use it.

3. *Dalloḡ* — The same as the *sidok* but smaller, this net is used by the fisher as he stands along the river banks.

²⁷ *Palispis* is translated by Kalingas as "Japanese fish." Some said that may be they were called that because the Japanese brought them during the occupation (which seems unlikely), but nobody knows for sure. The fish were not eaten before World War II, and therefore I couldn't get a clear answer on whether they existed before World War II; they weren't important enough then for anyone to recall clearly.

4. Goggles-and-rod-with-hook — The rod, which is often fashioned from an umbrella rib, has a fish hook secured on the end, and the fisher simply spots the fish and hooks it — or he may run the hook several times through a school of fish. The fisher often swims underwater and looks under flat rocks. If he stays out of the water, the technique is termed *vongwit*; if he goes in, it is termed *kamit*. Sometimes at night the fisher will use a flashlight for bait. This is of course a clear water technique.

5. *Bantak* — Generally for bigger fish, this is the common hook and eye technique. It may be used in clear or muddy water.

6. *Udal* — This is a trap exclusively for eels, and it takes about one day to construct. The size depends on what kind of eels the fisher expects to catch, but generally it is a long tube somewhat over a meter in length made of woven bamboo with one end closed. A frog is often used as bait tied near the closed end. One end of a string is attached to the bait and the other end to a strip of bent bamboo, which when pulled, will snap closed the door of the trap. It operates on the same principle as the *lasag* trap and will catch eels in muddy or clear water but is traditionally used only in muddy water.

7. *Tabokol* — This is a throw net with weighted leads. Before commercial products the fishers used leaves of abaca and maguey plants to make the string for the nets.

8. *Om'i* — This technique uses a vine (also termed *omli*) that is pounded into powder and then broadcasted into a stagnant pool. After 30 minutes the fish float dead to the top and are picked up by hand.

9. *Laray* — Used for catching crabs, this technique refers to putting a worm on the end of a string and then pulling it slowly as the crabs stick onto it.

10. Spearing — Any large fish and especially eel may be speared. This is often a night activity with flashlight and clear water.

The ceremonies and omens associated with fishing are somewhat similar to hunting but generally much less complicated. For example, the sound of a *pisot* simply means that the fisher will have a good catch for many days. Also, the *idaw* signs are simplified. If the fisher is not having good luck, he may butcher a piglet or chicken near a stream in a regular *songa* (or *lipon*). There are no distribution rules for fish.

Fishing Seasons in Lubuagan Municipal District

April and May are the main fishing months. In these months the water is muddy and the rivers and streams small. The *laray*, *sarop*, and *udal* techniques are used extensively in these two months, and May especially is regarded as the best time to trap eels. Nets are used from August through November when the rivers are often swollen. Goggles-and-rod-with-hook and spearing are used whenever the water is clear but most often in July and August. The *tabokol* technique is also used in July and August when the rivers are not swollen and the stones can be clearly seen and are not covered with moss. *Bantak* and *omli* may be used anytime.

Types of Fish Caught and Other Notes

By their Kalinga names the fish most often caught in Tanglag are *dalit*, eel; *ikan*, a squat fish of 30-40 cm. length; *kolidaw*, probably the largest fish, which is usually somewhat shorter than a meter; *pari-long*, a sucker fish about 15 cm. long; *dagdaw*, small shrimp *kikipip*, a term for any small fish; *ti'apia*, a flat, black fish 15 or so cm. long; *balanba*, a fish about 10 cm. long with a long snout; and the small *mochi* fish.

Only eels are sold for cash, usually in Tabuk, Tabuk, the provincial capital, which is about 40 kilometers east of Tanglag, and sometimes in Lubuagan, Lubuagan. The other fish are bartered for rice or consumed at home. The only preservation technique used is drying. In the villages along the major rivers of the Chico, the Saltan, Mabaca, the Tanudan almost every male fishes, but most fishers along the Chico River agree that the fish were more plentiful just after World War II than now. There is relatively no fishing on the Pasil River since it is very swift and polluted from the mining area in the western part of Pasil Municipal District.

The Historical Significance of Hunting Grounds

It seems evident from any theoretical or empirical viewpoint that hunting was more important in the 19th century and earlier in Southern Kalinga than it is now. Agricultural systems during those times were largely land-extensive, i.e., swiddens, with more leisure time for both headhunting and wildlife hunting than the present predominantly land-and-labor-intensive, two-crop paddy system allows. A point not

so evident concerns the ownership of hunting grounds and forest resources. Barton writes quite bluntly, "The hunting grounds of every region are open to every Kalinga,"²⁸ but this statement conflicts with much other evidence. In support of his position Barton points out that provisions for opening and closing hunting areas are not mentioned in peace pacts, but this serves only to indicate that peace pacts are fairly recent and cover only the law and order factors necessary for trading and eliminating the headhunting that had become bothersome by the early 1900s to both the Kalinga and the American administration. Again, it must be kept in mind that Barton's sources of information were limited to a few individuals from Lubuagan town, which as a population center had by the 1940s no more specific hunting grounds but instead encroached on the hunting grounds of the surrounding barrios, as I was repeatedly told in Pasil barrios.

That hunting grounds could be owned is shown by the fact that one of the continual large-scale difficulties in Pasil during the early 20th century concerned the protection of hunting grounds. Balatoc in western Pasil was settled largely by people from Tulgao, Tinglayan, sometime well before the 20th century. In the early part of the 1900s other settlers from Tulgao, which must have been a land-scarce area, tried to settle at Colayo, about a five-hour hike from Balatoc. However, under the leadership of Kaiabu, a famous headhunter and Balatoc figure during the Spanish period and throughout the early American period, Balatoc drove off the settlers several times, destroying their swiddens and beginnings of terraces, and Colayo was not settled permanently until the 1930s after Kaiabu's death. From all indications they were driven off because Balatoc, or at least the elite of Balatoc, claimed the Colayo area as its hunting grounds. This seems to be a classic illustration of elites keeping the forest intact for their own hunting while farmers go land hungry, as happened in Europe, especially in the 11th, 12th, and 13th centuries. The appropriation of hunting grounds begins from the historical moment when two hunting parties from different villages cross each other's path. The population density in Southern Kalinga is such that one can only imagine that this happened some time ago.

Forest resources in Southern Kalinga certainly can be held in private ownership, and this must have started whenever two indivi-

²⁸ Barton, *op. cit.*, p. 85.

duals looked at the same tree for the first time. That the rich in Tannudan owned forest resources in the very olden days is evident from the ancient folk epics.²⁹ Almost all the *yakal* trees (first class wood) and most of the *manguprol* trees (second class wood in the forest along the Tabia River in Pasil are marked as privately owned.

Much of the current difficulty about the boundaries of Pasil Municipal District — accented by the potential tax source from the gold and copper mines — is that the later peace pact boundaries were sloppy in specifying hunting and forest resource areas because of the overemphasis on peace and trade. Government acts that create municipalities and provinces in the mountains generally simply name barrios in the absence of land surveys. The boundaries of the barrios are generally thought to be in the peace pacts, which the government is obliged to respect though they are not necessarily accepted as final. although the few early peace pacts — before the American occupation — were made primarily to settle trouble about hunting areas, the decline of hunting, along with the other factors mentioned above, meant that later peace pacts would be poor representations of traditional boundaries.

The Rise of Population and the Decline of Hunting

Census figures are notoriously unreliable. Any official population figures for the old Mountain Province unit from before 1935 may be regarded as inaccurate; Barton points out that these numbers were grossly inflated by the American lieutenant-governors so that their subprovince would look more important and money could be more easily gotten from the insular treasury.³⁰ The modern census have improved considerably, but they still must be approached with caution; Billiet and Lambrecht explain how the 1960 census in Abra is inaccurate in its counting of the various ethnic groups.

My own on-the-spot population and house count in the Poblacion and barrios of Pasil shows the recent official census to be in error by only about two percent, which is rather remarkable. This encouraging accuracy, plus the ethnic homogeneity of Southern Kalinga, gives us some reason for a bit of faith in the last three complete census in

²⁹ Billiet and Lambrecht, *op. cit.*, p. 158.

³⁰ Barton, *op. cit.*, pp. 14-15.

Southern Kalinga. I am therefore entering the official figures here.³¹ (Since the boundaries of these Municipal Districts were different prior to the 1970 census, the barrio populations were used to compile the 1960 and 1948 figures for comparative purposes.)

These official figures indicate a steady population growth for more than the last 20 years in Southern Kalinga. The historical depth to my demographic and census data is not yet completed, but a preliminary survey indicates that with the exceptions of a small pox epidemic just before the turn of the century, a 1920 flue epidemic, a diarrhea epidemic in 1924, a severe rice shortage in 1927-1929, and perhaps the current (1973) measles epidemic we can say with some certainty that the population of Southern Kalinga has increased fairly steadily in the last 100 years, despite some out-migration to mining and educational centers. My data indicate an exceptionally rapid population growth from 1930 to 1941 — also a period for intensive building of irrigated and terraced rice paddies — and a moderately rapid one from 1950 to 1965 — when many barrio extensions and new sitios were established.

Population growth leads to a number of changes in the ecosystem (and in the people's culture);³² the most important of these for hunting is that the use of more and more land for agricultural systems decreases the forest land. This decrease of wildlife habitat, coupled with the intensification of the remaining hunting in smaller and smaller forest areas, means that the wildlife decreases at a progressively more rapid pace. (At least most of the wildlife decreases; it seems that rats, freed from the larger predators that kept them in check and able to survive in grasslands, increase quite rapidly, much to the dismay of the rice farmers.)

³¹ Kalinga-Apayao Census Branch Office, Bureau of Census and Statistics, Republic of the Philippines, "Population, Land Area and Density of the Province of Kalinga-Apayao by Municipality — Censal Years 1948, 1960 and 1970," *Kalinga-Apayao Census Banner*, Vol. I, No. 2 (April-June 1973), p. 8.

³² See Ester Boserup, *The Conditions of Agricultural Growth: The Economics of Agrarian Change Under Population Pressure* (Chicago: Aldine Publishing Company, 1965); Don E. Dumond, "Population Growth and Cultural Change," *Southwestern Journal of Anthropology*, Vol. 21, No. 4 (Winter 1965), pp. 302-324; Michael J. Harner, "Population Pressure and the Social Evolution of Agriculturalists," *Southwestern Journal of Anthropology*, Vol. 26, No. 1 (Spring 1970), pp. 67-86; and Brian Spooner, ed., *Population Growth: Anthropological Implications*. (Cambridge: The MIT Press, 1972).

POPULATION GROWTH

Municipal District	Population			Area Sq. K's	Density			Percent Growth	
	1970	1960	1948		1970	1960	1948	'60-'70	'48-'60
Lubuagan	7,236	6,006	4,919	329.5	22.0	18.2	12.7	20.5	43.3
Pasi	5,557	4,801	4,035	188.0	30.0	25.5	21.5	15.7	19.0
Tanudan	5,696	4,607	3,849	349.1	16.3	13.2	11.0	23.6	19.7
Tinglayan	10,317	9,135	6,935	189.5	54.4	48.2	36.6	12.9	31.7

Although the last of the wild carabao in Southern Kalinga were seen in Lubuagan and Tanudan Municipal Districts sometime in the 1920s, the smaller wildlife of pigs and deer was maintained up until about the last decade, when there was a very sharp reduction in their numbers. Many persons in Pugong can vividly recall that just after World War II wild pigs mixed with domestic ones right in the barrio and were easily shot. They faded out by the mid-1950s and now keep to the forest, making their foraging forays only into the swiddens. Even the Lubuagan-Tabuk roadside barrio of Ableg — just 12 road kilometers from the Lubuagan population center — had hunting grounds and hunters just after World War II, but now there is no more hunting in Ableg. The Dollipas' trap mentioned earlier is in the Lonong rice field area about five trail kilometers from Lubuagan, less Lubuagan, and has not caught a wild pig in over a year, though a person hiking through the area in the early 1960s would see several wild pigs in a day. Just before World War II Galang had six full-time hunters who bagged at least three animals every day, and every one ate meat at least once a day. Now there is about one catch every three days, and some families have meat only once a month — and this is usually from butchered domestic animals. Just after World War II hunters in Balatoc, which is surrounded by forests, were catching three to five animals a day, and just before martial law in 1972 they were catching one to three animals a day.

In general throughout the hunting barrios of Pasil the hunters were getting three to five catches a day per barrio in the years before World War II, two to three a day just after World War, and about one a day during the dry season of 1972. Perhaps the most dramatic evidence of the growth of population and the decline of wildlife is in the area known as Amdalaw on the cliffs of the Pasil River just north across from Dangtalan barrio. In the late 1950s and early 1960s a young man in his mid-20s named Gavino Mosing killed many a wild pig in the then unpopulated Amdalaw area. This same man is now the mayor of Pasil and has his house in Amdalaw, supervised the building of a feeder road through the area in 1972, witnessed the laying of the foundations for the permanent municipal buildings there in October 1973, and has encouraged several families to move to Amdalaw, now known as Pasil Poblacion (or the Municipal Site).

The Effects of Martial Law on Hunting and Future Prospects

According to various newspaper accounts, based on government releases, in the first nine months since martial law was declared on September 21, 1972, a total of 532,616 firearms were confiscated, 145 private armies were disarmed and disbanded and their political overlords placed in detention, and over 12,000 criminals were apprehended. The outlawing of firearms has been the most immediately felt consequence of martial law among the Southern Kalinga. Before martial law almost every farmer went to his field armed with both a revolver and a rifle; a belt of ammunition completed the Kalinga workday costume. Most Kalingas welcome this change to a less trouble-charged atmosphere, though some Kalingas adhering to the more traditional concepts of revenge regret that their freedom in such matters is now curtailed.

In terms of hunting and fishing the results of martial law are still difficult to determine. There is less of an economic burden on hunters in terms of firearms; before martial law a shotgun costs ₱400 and a semi-automatic rifle costs ₱1,200. But now the expensive dogs are more necessary than ever. The hunting techniques using firearms are suspended. One hunter mentioned that a common way of hunting wild pigs before martial law was to whistle when one was spotted; the pig would usually stop still, and if the hunter fired immediately, he had a catch. Also, the hunter could wait at a guava tree for the pig to come to feed.

At least in Northern Kalinga and probably in Apayao "wild pigs, deer and other wild-game animals have multiplied and schools of fish are now teeming along creeks, streams and rivers" since martial law even to the extent that "some farmers have complained that the increase of wild pigs in forestlands have [sic] resulted in the destruction of kaingin crops by foraging wild animals."³³

There has been no noticeable increase of wildlife in Pasil and Lubuagan. The significant controlling factor is probably the extent of the habitat when the forests decrease to a certain point, and an increase in wildlife in Southern Kalinga probably should not be expected as might take place in the extensive forests to the north.

³³ Augustus U. Saboy, "Animals Are Happy," *Baguio Midland Courier*, Vol. XXVI, No. 7 (July 22, 1973), p. 3.

Even if hunting were completely abolished, it would be difficult for the wildlife to maintain its current population in view of the continual expansion of terraced paddies, especially in Pasil. It is doubtful whether the fish resources of Southern Kalinga, especially of the Pasil River, could ever regain their pre-World War II levels without extensive ecological program, including the stocking of fish in the mountain streams. Fishing in the other major rivers will probably remain a minor activity for some. It seems that hunting, however, is destined to become a thing of the past in Southern Kalinga in the rather near future; when the catch becomes less than one animal a week, hunters will find it more profitable to spend their time on extending their swiddens and building new terraces, which of course will further reduce the forests.