

THE RIVER NAPO.

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BUT little has been heard of the river Napo since the year 1551, when Orellana descended this now historic stream; and no steps have been taken towards colonizing the fruitful country through which it flows, if we except the policy of a former dictator of Ecuador, who banished his political enemies thither, in the hope that they would, sooner or later, fall victims to savage or beast.

It was, perhaps, the air of grim mystery which enveloped it that induced me, when at Iquitos, near its mouth, to undertake a journey up this river, and it is the result of my observations during that trip, combined with the experience acquired from a three years' residence in the Amazonian region, which I propose to deal with in the present paper.

The journey from Iquitos to the delta of the Napo, and thence to the Curaray, a tributary on its right bank, was made in fourteen days in a steam-launch drawing four feet of water. From the Curaray to the village of Napo, a distance of about 340 miles, I travelled in a canoe: time occupied, forty-two days. Thence to Quito proved a toilsome journey afoot, through trackless forests and over high mountain ranges, that lasted ten days. Altogether I spent nearly three months in getting from Iquitos to Quito, distributed as already stated, with the exception of a few days spent at rubber stations en route, and a fortnight at the Jesuit Mission at Archidona, on the termination of my canoe voyage, owing to the absence of catechized Indians to carry my *impedimenta* forward.

For all practical purposes, and to facilitate a description of this river, it may be divided at the junction of the river Coca, and treated as two distinct streams, the Upper and the Lower Napo. The line of demarcation at Coca is so apparent as not to escape the notice of even the most superficial observer. The bed of the river here ceases to be of sand, and above Coca it is entirely rocky; the river, that up to this point has a fall of about 0.873 foot per mile, suddenly acquires a stronger current in a fall of 7.4 feet. The low flat country is here left behind, and with it the luxuriant vegetation characteristic of the Amazon basin. Slight elevations occur that gradually increase in height as one approaches the eastern spurs of the Cordillera; and the temperature falls several degrees in as many miles after entering the upper stream.

The *embouchure* of the Napo is divided into three channels, the central one being the largest and most navigable. It is 1100 yards wide, and has an average depth of three fathoms. The first, or eastern outlet, is extremely narrow, and too shallow to admit of any craft larger than a canoe. The third channel is about 300 yards across, but is also

shallow, and its greatest depth never exceeds a fathom and a half. The whole of the delta is low, but this is more noticeable about the third outlet, where the wide low-lying banks present the appearance of marshland. The island of Destacamento, formed by the main and western channels, abounds in pebbles, and it is said that gold has been obtained from it, but I was unable to establish the authenticity of this statement. The fact that polished quartz pebbles are found thereon, as also in the bed of a streamlet at the rear of Iquitos, is remarkable, as in all the country round, within a radius of fifty or more miles, not a stone of any description is obtainable.

During the whole of its course, the Lower Napo is an extremely sluggish river, whereas the upper stream is remarkably swift. The following altitudes taken by me, the approximate distances from one point to another, together with the width of the river, will fully explain this:—

Altitude at mouth of the Napo	...	...	...	391'	above sea-level.
" " " of the Curaray	...	...	...	507'	"
" " " of the Coca	...	...	...	784'	"
" " the village of Napo	...	...	...	1450'	"
Distance from mouth of the Napo to the junction of the Curaray				200 miles.	
" " " of the Curaray to the junction of the Coca				250 "	
" " " of the Coca to the village of Napo				90 "	
Width of main channel at the mouth of the Napo	...	...	...	1100 yards.	
" opposite the Curaray	...	...	...	800 "	
" " the Coca	...	...	...	450 "	
" " the village of Napo	...	...	...	40 "	

The whole of the course of the Lower Napo is navigable for steamers drawing but little water. As yet, no steamer or launch has essayed to pass above the Curaray, and ordinary propelling vessels could not go up much further except at the imminent risk of being laid high and dry by a sudden fall in the river.

The depth of the channel is very variable, owing to the alternate rise and fall of the river and the shifting nature of its sandy bottom. An average of two fathoms may be taken between the mouth of the Napo and the Curaray, and from a half to one fathom on approaching the Coca. The only class of steamer that could navigate this river successfully would be a flat-bottomed stern-wheeler, provided with log-guards, and drawing not over thirty inches when laden. The supply of fuel is practically inexhaustible, the entire length of the Lower Napo being studded with groves of *Copirona* or Mulatto wood, *Palo Remo*, and other resinous trees that are suitable even in a green state for fuel. At Puca Urou, some 250 miles from the mouth, there exists a deposit of bituminous substance, not unlike coal, which could be utilized for generating steam.

The average temperature on the Lower Napo is 8.° Fahr., and the variation throughout the year is very slight, except during the equinoxes,

when the thermometer not infrequently registers 64°. On the Upper Napo, however, a marked variation is noticeable—the mean temperature during the dry season, from June to November, being 75° Fahr., and in the wet or wintry season, 78°. At Archidona the average descends to 72° in summer. During the whole of my three years' residence on the Amazon the thermometer rarely went above 90°, and never five degrees beyond, whereas during the dry season it stood frequently at 76°.

Owing to the numerous lagoons that line the course of the river, and to the swampy nature of its banks, malarial fever, rheumatism, and dysentery are prevalent; but experience tends to show that when a clearing is made in the forest, the use of light flannel underwear adopted, and a regular and frugal diet observed, these dangers may be minimized. The natives are subject to two kinds of cutaneous disease, which appear to be constitutional. One is a bluish discoloration of the skin, and the other a white blotch where the *cutis* has, apparently, lost its pigment. Where the origin of these diseases lies it is difficult to discover, but the simple Indian will assure you that the former comes from eating tapir, and the latter from an undue consumption of white cayman.

As a field for colonization, the Napo valley, from the junction of the Curaray to the village of Napo, leaves little to be desired; but the Upper Napo, for obvious reasons, would be preferable for an Anglo-Saxon immigration. Meanwhile, and until a good road were made to connect Napo or Archidona with Quito, communication could be adopted with the main Amazon by means of the steam-launch already described, and there is no doubt that a scheme for colonizing this region, if carried into effect, would prove successful. Individual efforts, however, cannot be too strongly condemned; the influx of colonists should be wholesale. Native labour cannot be relied upon. The *yumbos*, or semi-civilized Indians, which are met with on the upper part of the river, are a lazy, treacherous set, and do next to nothing beyond providing their *curés* with the needful means of subsistence; while the savages on the Lower Napo are quite untractable, and have, moreover, acquired such a wholesome horror of the Viracucho, or white man, and his rifle, that they flee at the sight of him.

The various tribes of Indians that inhabit the Napo region differ but slightly from one another in their manners, customs, and belief, and in describing the Zaparo tribe at length, I shall have given a fair illustration of the generality of them.

The Zaparo tribe, which inhabits the country that lies to east and west of the rivers Pastassa and Napo, and from about 0° 40' S. Lat. on the north, to 2° 20' S. Lat., close to the Curaray, on the south (an area of about 12,000 square miles), is made up of numerous subdivisions or families, among the principal of which are the Ahuishiris, Andoas, Curarayes, Matagenes, Mautas, Meguanes, Nuganus, Nushinus, Rotunus, Shiripunos, Sinchiatus, Supinus, Tiputinis, and Yasunis. Though an

integrate body when threatened from without, they live in a state of continual feud among themselves.

They lead a semi-nomad life, and are not always to be found at their settlements, as they follow in the wake of the animals they chase when these migrate eastward or westward in search of ripening fruit. They cannot be said to live in villages, for the temporary beautiful rustic sheds they erect, which are open on all sides, and contain no other furniture than a couple of palm-fibre hammocks slung crosswise within, serve them only a few months at furthest, until game becomes scarce, when they strike camp and press forward. The Curarayes, Yasunis, and Tiputinis are, however, exceptions to the general rule, for they seldom quit their villages, and lead an agricultural life. Beyond hammock-plaiting and the weaving of fishing-nets, the Zaparo knows of no industry whatever.

In general appearance these Indians somewhat resemble the Chinese. They are below medium height, fairly well developed, and very hardy. As in the Chinese, there is the rounded face, small obliquely set eyes, and prominent cheekbones; the nose and lips are rather thick, the former being slightly flattened. They are beardless, and usually wear a shock of unkempt hair, which is somewhat finer in the gentler sex. The women have, on the whole, a very pleasant cast of countenance, and are beautifully formed. They enjoy a great amount of freedom, which is only just, seeing that they do all the work—hunting excepted, which alone is the duty of the men.

The only covering worn by both male and female alike is a long shirt of bark fibre in a single piece, called a *llanchama*. To obtain this, they fell a moderate-sized tree, and baste it with clubs until the outer bark is broken off, and the interior fibrous envelope becomes detached from the wood. This inner bark, when removed, is partially closed at one end, two armholes are cut in at the sides, and it is then sun-dried preparatory to being ornamented with fret and circle designs in red, without which it would not be considered serviceable.

Their weapons are the *macana*, or two-edged sword, and the spear, which they manage dexterously. I had the pleasure of witnessing a spear-play between two parties, consisting of about a score of warriors on either side. They aimed deliberately at one another in rapid succession, and caught the flying weapons of their adversaries as they approached. Sometimes one brave, more expert than the rest, would catch three or four, and, whilst hurling them back again, catch another. In spearing fish they are remarkably expert, seldom failing to transfix the finny prey at a first cast. The *macana* is made either of *chonta* (palm wood) or *huacapa* (*lignum vitae*), and is a most unwieldy weapon. It is usually about five inches broad at the point, and tapers down towards the handle; it varies in length from thirty inches to three feet. The blade is also painted with a red design in fret, as are the gourds,

and in some instances the savages themselves, especially when on the war-path. There is a smaller reproduction of this weapon, measuring from eighteen to twenty-four inches in length, termed facetiously the *Itumu-aishna*, or wife-corrector, which, as its name implies, is destined to quell domestic broils.

The men are very shy and silent before strangers, but, curious to say, the women—many of whom are really beautiful, and well calculated to excite the jealousy of their companions—are quite the reverse; jealousy is a dead letter to the Zaparo. In their connubial relations they are exceedingly irregular, and in the course of a season the head of a family will change, discard, rob, or buy twenty different spouses, many of the old ones coming back to him in the course of time. Each male is allowed to keep by him as many wives as he can conveniently maintain by the chase.

Each clan or division of the tribe is ruled by a chief, who is generally respected, and on occasion obeyed. He is never selected by the community, but falls naturally into place through a continually asserted superiority coupled with feats of daring. Besides the chief, there is yet another authority whose influence is illimitable: this is the *shimau*, or medicine-man—the oracle of the clan, whose word is never disputed, even by the chief himself. He it is who averts the evil influence of sorcery and witchcraft; and yet, when so required, can exercise either with impunity. He alone has safe access to the *Munyu*, or evil spirit, and, clad in tapir-hide, impersonates this demon when vengeance is exacted; only through his intercession can the wrath of *Munyu* be averted. It is the medicine-man who habitually drinks the divining *ayahuasca*, and, like the Pythoness of old, in his delirious trance converses with both good and evil spirits, unravels the mysterious future, reads the destiny of his tribe, and receives the commands of the Spirit of Life. Many of the adults also partake of *ayahuasca*, this practice in some instances degenerating into a vice. The beverage is a decoction of a certain species of liana, and is equally as narcotic, though less baneful in effect, as opium. When under its influence, the savage becomes simply unmanageable. He first commences to talk of birds and flowers, and every gay-coloured and beautiful thing imaginable, and, in this primary stage, is exceedingly amorous. Soon, however, this gives way to fearful delirium, when the patient becomes dangerous, and, unless forcibly restrained, would run amuck of every living being that crosses his path. This attack is followed by complete prostration, which ends in deep sleep. Owing to the powerful effects of this potion, none but male adults are allowed to partake of it. The first *ayahuasca* bout is quite an event in the career of a Zaparo warrior, and celebrated with feasting accordingly.

The Zaparo, in common with the majority of Indians in this region, believes in a dual existence—the good spirit, or “Spirit of Life,” and

the *Munyú*, or "Spirit of Evil:" among the northern clans the latter is designated *Zamaro*. According to their belief, if such it can be called, the Good one can, but seldom does, overcome the Evil Spirit. The latter is credited with carrying off any one he meets alone in the depths of the forest, to devour them in his lair. This I consider a neat explanation of the unaccounted-for disappearance of many who, single-handed, fall easy victims to the panther, jaguar, or boa constrictor.

They also believe in metempsychosis. As a reward for valour, the spirit of the departed one passes into the body of some ferocious jaguar or other beast of prey, and, by way of punishment, that of the coward takes up its abode in the form of some noxious or hideous reptile.

They are indisputably a practical people, so far as the preservation of their race is concerned. The aged and sickly, the fool and the helpless orphan babe, are, after a hurried consultation with the *shimasa*, ridded of their burden of life by a blow from a *macana*—usually the nearest relative undertaking this humanitarian task. Sometimes the living is interred with the dead. Theirs is an excellent rendering of "the survival of the fittest."

They consume a great quantity of game and fruit, but few cereals or tubers. The *Guayusa* or Napo tea is their favourite beverage. This is the dried leaf of a small laurel shrub, somewhat resembling the coca plant (*Erythroxylon coca*), which they also consume. During my trip I laid in quite a stock of *Guayusa*, and found it to be an excellent substitute for tea, being, if anything, slightly more aromatic. It is said they drink it of a morning by way of emetic, to rid the stomach of any surplus indigested food, but I cannot endorse the assertion. In my own case it proved an excellent sedative. The coca leaves, which they masticate, are very sustaining, and are only called into demand when they have long journeys to perform, or when their stock of *masato* (fermented yuca) is exhausted. They also distil the juice of boiled plantains by means of a primitive clay still, and obtain a nauseous, unwholesome class of rum, of which, however, they consume very small quantities. The *masato*, to which I have referred, is simply the masticated and fermented root of the yuca (*Jatropha manihot*). It is requisite that the root undergo the process of mastication, this being performed by the unmarried women, otherwise it would not ferment, and, fermenting, it loses any quality that may have been imparted to it during the process. The yuca thus treated becomes a pulpy mass, which is preserved for three or four days in earthen jars, when it becomes fit for use. A handful is worked between the fingers in a bowl of water, which becomes milky, and the fibrous parts are thrown away. It is very refreshing, though rather heady, and, in taste, bears a strong resemblance to sour milk. The *guineo* plantain, and several species of palm fruit, are treated in a similar manner, so that the Indian has a wide choice in the matter of refreshments.

When dealing with the subject of dress, I omitted to mention the charms of stringed monkey-teeth and iguana-skin bracelets affected by the gentler sex. The latter charm, which is considered the more potent, consists of thin sections of iguana tail-hide, which are slipped over the wrist when fresh and contract on drying.

The only other tribe which merits special mention, principally on account of physique, is the Coto, or Orejon, that inhabits the left bank of the Lower Napo, near its mouth. They are low in stature, and thick-set. Their physiognomy is strikingly repulsive, as they have a very broad face, square jaw, prominent cheekbones, and the thick lips and flat nose that characterize the Congo African, surmounted by long coarse black hair, beneath which is hidden a low, retreating forehead. But the most noticeable feature about them is, perhaps, the distended ear-lobe. At a very tender age they pierce the ear with a small piece of sharpened wood, which they allow to remain therein, exchanging it each day for one of larger dimensions, until the hole thus formed will admit of a large circular piece of cabbage wood, which is ornamented with a black spot in the centre. A pair I measured were slightly over four inches in diameter, and the ear-bands that encircled them resembled a carpenter's pencil. It is from this peculiarity they derive the Spanish appellation of "Orejones," or Big-ears; and it is the custom of besmearing their nude bodies with achiote, which gives them a striking resemblance to the red howler, that has earned for them the name of "Coto."

Being unable to gather any information regarding them from the traders on the main Amazon, I decided to visit one of their villages when ascending the Napo, and was fortunately assisted in this by a breakdown of the steamer's engine when almost opposite their territory.

I arrived at the village at dawn, but found only a few females and children playing around, the male population being absent, evidently upon a hunting-expedition—which, by the way, last for several days at a time. The village comprised some twenty huts, differing slightly from the usual style of Indian architecture, inasmuch as they were closed in on every side. On examination, these walls were found to be merely a continuation of the roof thatch of *yarina*, or ivory-nut leaves. There were no doors to these primitive edifices, and entry was made by lifting a loose piece of thatch. In one hut were two newly made mounds. At the head of each a spear was stuck into the earth, and on either side a stone hatchet partly embedded in the soil, and a bowl of mildewed masato. Doubtless they were graves.

In another were several *chambira* (palm fibre) hammocks, spears, stone hatchets, earthen pots, gourds, and a quantity of short lengths of cane containing poison. The stone hatchets, of which I saw a large number, are of two sizes: the larger weighing about four pounds each, and having a thirty-inch haft; and the smaller having a twelve-inch haft, and weighing one pound. These relics of the Stone Age are certainly

most unwieldy instruments, yet they manage to fell the largest trees with them, and scoop out fair-sized canoes. Where the stones come from is a mystery.

The canes containing the poison were suspended by threes from the roof. This poison, when fresh, is equally as good as that prepared by the Ticunas, but becomes innocuous after eight or ten weeks. In this substance the Indian dips the point of his arrow or spear, and inevitable death ensues from a wound inflicted by the weapon thus anointed. It is remarkable that, while causing death, this poison in no way taints the flesh of game killed through its agency, which may be eaten with impunity.

The Lower Napo abounds in fish and aquatic mammals, whereas the upper stream contains a very limited number of species. Below Coca, nearly every kind of fish found in other Amazon streams is to be met with. Those which are in principal demand are the *pirarucu* or *paiche*, the Amazonian cod, which attains to an enormous size, and rivals the huge pink *delphinus* which is so common on this river. The *paiche*, when salted and sun-dried, forms a staple article of consumption amongst the rubber-collectors and others in these regions. When broiled it is not unlike its marine counterpart, but, when otherwise prepared, has a disagreeable, rancid flavour. Next in importance comes the *gamitana*, not unlike a huge trout in appearance, ranging from two to four feet in length. This fish is found chiefly in the numerous lagoons that connect with the main river.

The manatee is much sought after by the natives, and the river tortoise or turtle, of which there are two varieties, yields them an abundant supply of meat and oil.

Just above the Aguarico I caught, among other small fish, three freshwater soles (*Pleuronectes lingula*), which attracted my attention, as they were the only specimens I had seen in the Amazons.

Alligators are plentiful near the mouth, but gradually disappear as one ascends, their place being taken by a beautiful large grey otter about four feet long, and bearing an exquisite fur. The fish met with on the Upper Napo comprise a number of *siluridae*, and several varieties of the carp family. One known as the *boca-chica* (small mouth), about the size of a mackerel, is much esteemed by the Indians, who catch and dry them by thousands.

The forests throughout the Napo country abound in game, such as tapir, capybara, peccary, venison, etc., and the wild turkey, curassows, widgeon, duck, teal, and partridge.

The plants at present under cultivation are the plantain, of which there are numerous varieties, the sugar-cane, maize, mandioc, cocoa, coffee, cotton, pistachio nut, and rice. The mandioc, or yuca (*Jatropha manihot*), is to the native as bread, or rather wheat, to the European. From its tuberous root they prepare what is known as *farinha*, which

bears a striking resemblance to African *kous-kous*. To prepare it they carefully peel and cut the root into small cubes, which are placed in water and allowed to remain there from eight to ten days, the liquid being occasionally changed. At the expiration of this period, dissolution will have taken place, and the whole reduced to a mass of pulp. The pulp is taken out and kneaded in fresh water, by which means the poisonous principle is extracted. It is then sun-dried, rubbed between the hands, when it assumes an irregular granular appearance, and finally baked in a conical clay oven. When fresh, *farinha* is very palatable, but becomes musty after a short while, and infested with weevils.

At the northern angle, formed by the junction of the Curaray, there are immense plantations of wild white cocoa (*Theobroma cacao*), the fruit of which is much sought after by the monkey tribe. This plant, which is of well-known commercial value, yields a nib scarcely inferior to what is known on the market as *arriba*, and can be easily cultivated.

It would fill a volume to give even the most meagre description of the vegetable wealth of this feracious region; an enumeration of its cabinet woods would mean a large-sized catalogue, and the same may be said of the medicinal plants. There is one point that bears upon the subject which I would wish to make clear, and that is the distinction between the *guadua* and the water-tree.

The *guadua* is essentially a huge bamboo that attains a height of about 120 feet. It is seen frequently on the upper part of the Lower Napo, bending gracefully over the water, and at a distance presents the appearance of a weeping willow.

The *catico*, or water-tree, is a variety of the *bombaz*, or silk-cotton tree, and yields timber almost like light cabbage-wood, as buoyant as cork. This tree lines the entire length of the Lower Napo, and on its tall grey stem the maximum rise of the river is clearly defined. Its leaves are very large, palmate, and silky, and the greater part of the trunk is branchless. Before the collection of rubber became of such paramount importance, the natives dealt with the traders almost exclusively in wax, which they obtained from the hollows in this tree, where it was stored by a certain species of ant.

In concluding this paper, I must mention that gold in illimitable quantities exists in the bed of the Upper Napo. The Indians extract small quantities by washing the sand, but their primitive method of extracting the precious metal gives only the barest results. On many occasions I have taken up loose boulders, and found it adhering to their lower surface, and in handfuls of sand taken at certain points it is distinctly visible to the naked eye.
