

WARNING! WARNING! WARNING!

THE FOLLOWING FILE IS NOT TERMINATED BUT SOON WILL BE DONE ASAP IN HYPERTEXT AND WITH PIX WHEN NEED BE SO PLEASE BARE WITH ME TILL THEN, MUCH INFORMATION CAN BE USED MEANWHILE FOR YOUR ENJOYMENT OR PLEASURE. MEANWHILE IF YOU HAVE ANY TIPS FOR ME SEND

THEM UP BY E-MAIL TO:richard@io.org

MACHETE:

There's no possible use for machetes in Temperate climates, except for trimming a lawn if you like to do things the hard way. A machete is an excellent Jungle knife, ESSENTIAL for hacking through dense but tender underbrush.

In lush Tropical areas, where the water content of most plants is considerably higher than it is up north, it's most effective. If that's the direction in which you're heading, by all means take one. Otherwise forget it.

Also forget, if you do have to use a machete, about those old Jungle Jim movies where they slash once to the right and once to the left. Then move forward three or four steps and slash again. Swinging a machete through really dense undergrowth is good hard work.

If you're stubborn enough to want to get through, you may proceed at a rate of fifty feet or so a day. That's why river travel is so popular in Jungle regions.

TROPICS SURVIVAL & SPECIAL PROBLEMS:

The jungle is not the same everywhere. A primitive jungle has a multitude of giant trees with peak up to 30 metres forming a dense and well furnished dome. This jungle has few bushes and receives little light, and is easy to cross.

Many regions of the primary jungle are filled with immense glade & bush clearing which are cultivable. When those spaces are abandoned, the jungle takes over its right and transforms it in a bushy complex. This secondary jungle is much more difficult to cross than the first.

In the Tropics over half the land are cultivated. We mostly find rubber plantation, tea and coco nuts. In those places the people who take care of the plantation will be able to help you.

If the dry regions which are characterized by a stunted vegetation

are naturally more open than the damp jungle, they are however more difficult to cross, since we find very few landmarks, no trails and no human being.

Armed with a compass & much good sense One can venture through it in good faith. It is not as difficult as many persons believe to survive in inhabited tropical zone. Lots of people see the tropics as an enormous and impenetrable jungle which you have to cross using a machete all the time, (which Even Tarzan MUST use it. (Wrong!))

Under the Tropics land varies from thick forest, to #mangroves# to swamps to great pastures or stunted semi arid zone. In reality the greater part of tropical regions is not covered by this virgin jungle. Sure it is difficult to cross the jungle but normally there is little danger to fear the animals.

In fact in the Tropics the true dangers are not the animals nor the reptiles but rather the insects and bugs.

Many of them carry deadly diseases, one of the deadliest is the #paludism# transmitted by a mosquito.

In the jungle many persons are scared by yelling, cries and other sounds given by birds, animals and insects. However those fears are born from imagination rather than existing real danger. (Too many of us have seen too many Tarzan movies!)

FIRST MEASURES TO UNDERTAKE:

After a crash landing the first thing after F/Aid is to decide if you will stay near by the plane or abandon it and go search Rambo! If you are in area where the plane nor the signals can not be easily seen and that you don't have any wounded one in your group it might be wiser to leave.

FIRST YOU MUST TREAT IMMEDIATELY ANY WOUNDS:

For under the Tropics the smallest scratch can turn into an ugly wound in a few hours.

Do not leave the crash scene without marking the trees and as you go on to mark along as well your road should you have to turn back as well as to indicate any rescue party that could come along & would follow your direction.

SHELTER:

In the jungle night falls quickly, so get ready to go to bed early.

In the jungle one has to take more rest and more sleep in order to keep your strength and offer greater resistance to sickness. Try to raise camp on a hill or elevated place or bush clearing as far as possible of any swamps.

Thus you will be less plagued by mosquitoes and insects, and the soil will be dryer. Also it is the best place to install ground-air signals. Don't think nor dream to sleep directly on the ground. Rather make a bed by piling up branches which you will cover with palm leaves or any wide leaves.

You can build a water proof shelter in "A" shape which you cover with a thick layer of palm leaves, pieces of bark or sod of turf. It is similar to the shelters used in Northern Forest except that under the tropics it has 2 inclinations instead of one. Shelter file.*

If you stay near the plane, use it as shelter, you will probably be dry inside even in a damp jungle. Try to stop the mosquitoes to get in by blocking the door with a parachute or any tissues. Don't install your camp near a waterway or a swamp especially during the rainy season, you will be flooded.

Don't construct your shelter under dead tree or with dead branches nor under a coconut tree. A coconut could fall and kill you.

CLOTHING:

They protect you from weather, insects and other harmful bugs. Get the bottom legs into your socks and tie them solid. Make yourself a pair of leg puttee to protect your legs from leeches & ticks. Lower your sleeves and button up, thus you will protect yourself from mosquitoes bites, scratches from thorns and branches.

REMEMBER THE SMALLEST SCRATCH CAN TURN QUICKLY IN INFECTION.

When you undress (Jane or Tarzan) look on your body for any ticks, fleas, insects, leeches or any other vermin which will cling to your clothes or on your skin. Inspect your clothing & remove all insects that you see.

It is CAPITAL to keep your clothing clean, dry and in good shape. Dirty clothing wears out fast & can cause skin diseases.

REMEMBER the Trick to have a second shirt on a stick which dries up while you walk, and that you change at every rest, so as to avoid Malaria.

CLOTHING #2:

- 1) Loose fitting clothing are best, (no fashion show here unless you want the monkeys to have a good laugh Even Tarzan would!)
- 2) Most particularly at dawn and dusk cover your head and neck of a mosquito net or any piece of clothing.
- 3) In open country and undergrowth protect your head & neck from the dust and sun rays.
- 4) Walk carefully in undergrowth, for certain tall grass are sharp as knife and will cut your clothes to shred and you too.
- 5) If you have lost or worn out your shoes, improvise a pair of sandals using piece of bark or solid tarp.
- 6) Dry your clothing before night fall to avoid chills & fever.
- 7) Wash your clothes, specially the socks every day. Dirty clothes will rot & cause skin diseases.
- 8) When you don't wear them, ALWAYS hook your clothes so that ants nor scorpions, nor snakes will slide in them. Check your shoes before putting them on.

SIGNALS:

If unbroken your plane radio is your best bet, for the rescue radios in the jungle don't work too good.

ANY FIREWORKS SIGNAL DEVICES MUST BE KEPT DRY AND NEAR AT HAND.

It could be very hard to find the place where to install the signals, however you can use parachute panels or objects with contrasting colours which you install as **#youyous#* across waterways or a bay or in middle of swamps. Smoke signals or fires installed in bush clearings are equally really efficient. Use all means you can think of.

FIRE:

In the jungle it is your advantage to make a fire. You can cook with it, warm up in cool nights and it keeps away the mosquitoes & curious animals. No need to have a big fire, a small one will do and is easier to care. The bigger the fire; the bigger the fool.

Usually the combustible is abundant, but in the rainy season it can be difficult to light a fire for the dry wood is very rare. Among the great trees either alive or dead, we find many which have an

empty trunk core so at this spot, slice or cut or tear at this core for dry twigs which will serve as tinder.

Once the fire is well lighted you can add damp wood. Dry wood can also be found suspended to liana or laying on branches.

DON'T burn bamboo, it burns too fast, the smoke is dangerous and it can also explode and it does believe you me.

We find at the foot of palm trees some fibbers which ignite easily. The interior or termites nest is also very good to light a fire. Make a good provision of dry wood and keep it in a dry place either in your shelter or by covering it with big leaves. Dry your tinder and combustible near your fire camp if need be.

WATER:

Normally under the tropics, food and water are abundant. One finds water in rivers, small streams, swamps, lakes, ponds but this water is no good to drink unless it has been purified in some ways, best being. ALWAYS boil it 10 to 15 minutes.

COCONUTS:

When green and the size of grape-fruit it is at its BEST!

OTHER MEANS: see water file**

FOOD:

Food is plentiful in tropics, with much fruits and vegetables among the most comestibles are: * #sagou ou chou-palmier*# bananas, young bamboo shoots, coconuts and papayas and yams.

MONKEYS FOOD:

All that a monkey eats can be eaten by man. Raw flesh soon goes bad fast in Tropics.

FISH:

In the jungle most water streams are filled with comestibles fishes. Unless you would be close to a civilised region you don't have to worry about poisonous or polluted contaminated fishes. Only if you are close to the sea then there are some poisonous fishes

JUNGLE WALK AND MOVING AND EQUIPMENT:

Not being any Tarzan to swing along nor Jane to follow the tail end

of its circus, walking in the tropics can represent MUCH difficulties. Because of thick under bushes, heat and humidity, swamps #mangroves# & the absence of landmarks, no telephone, no bus, in other words, the pits. NO BARS!

MACHETE WONDER TOOL:

The most useful tool is the machete if one needs to move around. You use it for nearly everything, clear a path, find food, cut it, make shelter or rafts.

OTHER EQUIPMENT:

Also needed are a compass and a f/aid kit in case of fever or infection and a hammock plus a good pair of boots, 2 shirts with long sleeves and 2 pair of long pants. An axe, a watch, a mosquito net and any light material to use as shelter or signal sign. And this Survival Bible.

If possible follow the downstream of a water way which usually will dump itself in a greater water stream which will lead you to some habitated places. If you can, built a bamboo raft or any light wood and go down the stream. Rafting is the fastest and easiest transport in the Tropics.

Avoid crossing thick bushes, #taillis, mangroves# * and swamps. Stop early and prepare camp night for night under tropic comes early & suddenly.

MOVING ALONE:

Relax! Don't panic. Think??? and REMEMBER these tips. Step by step.

- 1) No one can outrun the jungle not even Tarzan!
- 2) Establish your position as clearly and rigorously as possible to determine your direction, if no compass try the sun and your watch (the old type). see map file***
- 3) Make provision of water and food.
- 4) Go in the same direction but not necessarily in straight line.

Avoid obstacles, don't confront them or try to go through. Easiest way is the safest, even if it means more walking. Take advantage of natural shelters.

MOVING JUNGLE TECHNIQUE:

There is a technique to move in the jungle and to crawl is not one nor to walk # a tatons # which would give you bumps, contusions and scratches. Rather turn your back and use your hips in a swinging motion, bend your body, make yourself small or bigger, slow or accelerate as need be.

TROPICS:

Survival experts tell us that:

NO OTHER CLIMATE ZONE OFFER SUCH GOOD CHANCES OF SURVIVAL and in the tropics one can find water food and enough raw material to produce the ESSENTIAL things such as tools, shelter, clothing.

TROPICS ITS DANGERS & REMEDY: DANGEROUS CREATURES:

The insects and other creatures shown here are not a major problem to survivors if sensible precautions are taken but can easily become one if not treated with respect.

According to survival experts, poisonous SPIDERS are not the menace they are often made or imagined to be. The Tarantula for instance rarely bites people. It much more likely that when men come in contact with it, some of its tough hair gets attached to his skin and cause a severe itch.

The bite of most other tropical SPIDERS has an effect similar to wasp sting. (Ouch!)

REMEDY:

Natives of tropical islands alleviate the pain with a mixture of salt and or sea water, honey and vinegar. Holding the lighted end of cigarette near the bite; its heat would apparently break the poison but at any rate the pain vanish immediately.

SCORPIONS ETC.:

You can usually keep away from large millipedes, although their bite can be as painful as a wasp sting.

But SCORPIONS are very insidious creatures, often lurking in clothes or shoes not being worn or an empty bed. If you happen to come in too close a contact with them they will sting you in a flash.

REMEDY:

Their poison causes nausea and fainting. American cowboys still use

mud & cold compress as efficient remedy and in southern latitude the wound is rubbed with grated coconut.

SCORPION #2:

Are found in the deserts, forests and jungle of tropical and subtropical and warm temperate areas, one kind living at 3,600m (10,800ft) in the Andes and are mainly nocturnal.

Most Desert kinds are yellowish to light green, those from moist or higher mountain areas brown or black. Average size is 2-5cm (1in) but giants in Southern Africa and New Guinea reach 20cm. (8in).

Some burrow but they are usually found under tree bark, rocks or other shelter, including your gear and shoes. The sting is in the tail. Many kinds cause only trivial discomfort, a few produce nerve toxins causing temporary paralysis for 24-48 hours.

Some scorpions from the Middle East, Brazil and West Mexico can inflict a fatal bite, but this is very rare and death is more likely in young children and the old or ill, who offer little resistance to it.

RECLUSE OR FIDDLEBACK SPIDER: (*Loxocees reclusa*)

Of North America is recognise by a violin shape on the back of the head. There are several different kinds, but "L. Reclusa" is the worst.

Bite produces fever, chills, vomiting, joint pain and spotty skin, within 24-48 hours. Although rarely fatal, tissue degenerating around the wound can cause disfigurement, or even lead to amputation if left untreated.

BLACK WIDOW OR HOURGLASS SPIDERS: (*Latrodectus*)

Occur in warmer areas, including desert, over much of the world. Small dark, all can be recognized by the red, yellow or white markings on the abdomen, hourglass-shaped in some. Bites produce severe pain, sweating, shivering and weakness, disabling the victim up to a week. Rarely fatal.

FUNNELWEBS: (*Atrax*)

Are large greyish or brownish spiders of Australia. Chunky, with short legs, their names allude to their web's shape. Nocturnal and not in hot dry, sunny conditions, but locally common. A bite can kill; symptoms as for the Black Widow.

TARANTULA: Theraphosidae & Lycosa

Are very large hairy spiders of tropical America; one kind occurs in Southern Europe. Of menacing appearance but although a bite is painful the poison is fairly mild and not disabling.

CENTIPEDES & MILLIPEDES:

Are mostly small and harmless but some tropical and desert kind may reach 25cm (10in). Their feet have sharp claws, which can puncture the skin and cause infections, and a few kinds have a poisonous bite. Brush off in the direction they are moving, there is less chance of them digging into you.

HORNETS:

Occur in swarms and make nests that are guarded ferociously. Some tropical kinds are **VERY AGGRESSIVE AND VERY POISONOUS**, and should be well avoided. The sting is like being punctured by a hot rivet & several at once can be fatal.

TICKS:

Are large and common in the Tropics; flat bodied and round, with a small biting head that eats into a wound.

Do not pull off; the head will remain & cause infection. Use heat, petrol, alcohol or hot water to make it drop off.

LEECHES:

Are blood sucking worm-like creatures of Tropical jungles and other moist areas, waiting, thread-like, on vegetation, before attaching themselves to a victim.

Better not to pull them off. Remove with fire or a pinch of salt. Leeches often carry infection.

VAMPIRE BATS: (Desmodus)

Occur in Central and South America. Small, nocturnal, they suck the blood of sleeping victims. Their bites may carry rabies. Keep covered at night in these areas.

SNAKES TIP 2:*

As to poisonous snakes the experts hold that men in the jungle come upon them no more often than on beast of prey. (Pray to God!) "You will probably **NEVER** see a poisonous snake, unless you try hard to

find one."

The thing that will scare you most in the tropics is the shrieking and howling (Jane?) (Tarzan or You???) and all the other noises produce by birds, monkeys & giant tree toppling. Marston Bates Traveller quotes: "I have seen more snakes both poisonous and harmless in Florida than I ever did in S. America. Certainly there are some there.. but as a rule they keep well hidden."

SNAKE REMEDY from STEAD*:

The simplest thing also the hardest to carry out, to keep as still as possible and just relax until help comes. Animals do this naturally. Dogs often bitten by a rattlesnake have been observed lying in the ground & staying in the same place for several days, then getting up again as if nothing had happened.

When snake poison gets into the blood stream, it destroys red corpuscle. It's is not fatal till it reaches the heart. The more slowly a victim of a snake bite moves the better is chances of survival.

TOURNIQUET & CAUTION:

If there is no antidote available, those chances of survival can be further increased by putting a tourniquet between the heart and the bite;

BUT LOOSENING IT EVERY 20 MINUTES.

So as not to stop the circulation completely. They could also disinfect a knife on an open flame, make a CROSS shape cut about half an inch 1/2 deep into the wound and sucked some blood off.
(Socket to me baby?)

The Swelling slowly went down. Finally when it had quite disappeared, they remove the tourniquet and as this did not bring on nausea the opposite effect from that desired.

POISONOUS SNAKES & WARNING:

Unless otherwise indicated to the contrary, these snakes should be regarded as Deadly poisonous. Do not approach provoke or handle.

SAFETY RULES, WATCH WHERE YOU STEP:

On average snakes eat only once a week. After eating and at the times when they shed their skin, they are sluggish and more easily trodden on.

LOOK CLOSELY:

Before parting bushes, picking fruit, some snakes are arboreal = (Live in trees) (not in 3's!)

NEVER TEASE, PICK UP OR CORNER:

A few snakes such as the bushmaster of South & Central America, Black Mamba of Africa and King Cobra of Asia will attack when cornered or guarding a nest.

USE STICKS NOT HANDS:

To turn over stones and logs and for digging.

WEAR STOUT BOOTS:

If you have them. Teeth of many snakes are too small to penetrate them.

CHECK BEDDING, CLOTHES, PACKS: BEFORE PUTTING THEM ONNN!

Snakes are known to use them as shelter. (Snaky bastards!)

STAY CALM:

If you encounter a snake. Do not move suddenly or strike at it. Back off slowly. In most cases the snake will be only too eager to escape.

TO KILL OR NOT TO KILL?:

If you have to kill a snake, use a long stick, preferably with a spring to it, and a single chopping blow to the back of the head. Make it effective the first time. A wounded snake is very dangerous.

NOTES ON SNAKES:

Snakes have excellent camouflage, only movement gives them away. In snake-infested areas you will pass many every day without ever noticing them. (Yerk!). The chances of being bitten are small and all but the worst cases recover.

In Malaysia more people are killed each year by falling coconuts and in India rat-bites produce many more cases for hospitalisation. A bite from a poisonous snake should ALWAYS be taken seriously, but there are degrees of severity. When biting in self defence, many

snakes inject only a little venom occasionally none at all.

If the snake is out of condition or has recently bitten something else, its venom may not be fully potent and there may be only a little in its venom sacs.

Clothing or shoes may have deflected the full force of the bite. In many poisonous snakes the dose of venom needed to kill a man far exceeds the amount that can be injected in one bite. Aren't you lucky or what!

SNAKES:

They are deaf, so you can yell your head off, loudly for help.

SNAKE BITES: FIRST AID:

Nearly all snakes will bite. If non-venomous the bite **MUST BE WASHED**, cleaned & treated as ordinary wound.

If you are not an expert better treat it as if it was a venomous one.

- 1) Avoid running, because the venom runs faster to the heart.
- 2) Stay calm but act quickly.
- 3) As much as possible, immobilize the affected part in such way as to be under the heart level.
- 4) On the bitten limb, at 2 or 4" from the bite, tighten lightly an improvised tourniquet (garrotte).

If swelling progress upward, stop its progression by getting the tourniquet, garrotte higher.

The tourniquet **MUST BE TIGHT ENOUGH TO STOP** the blood flow in the surface veins, but without stopping the arterial pulse.

- 5) In less than 1 hour, make one incision only with a (sterilised knife, razor blade etc.) just above each wound left by the hooks.

This "cutting **MUST** be parallel to the bite & **MUST** not exceed 1/2" long by 1/4" in depth.

- 6) If you have a suction pump from a snakebite kit use it on the wound to suck the venom, if not then use your mouth to suck, then spit off frequently the blood & other liquids coming off.

The snake venom is inoffensive into the mouth unless you have a

wound inside. Even then the risks are very small. Before letting off the tourniquet (garrotte)*, you MUST operate the suction for at least 15 minutes non-stop.

7) If after a time, the patient doesn't feel dryness & stiffness in the mouth, of any headache, of pains or swelling it means the venom was not toxic.

8) If its the contrary then it means: toxic, so keep doing the # 5.

CANADIAN & USA SNAKES:

Most Canadian snakes, reptiles are not poisonous, but when provoked they will bite. Treat this bite as simple wound. Although rare, the most common poisonous snakes in Canada are: Rattle snake, water moccasin, copper head snake. If you know you are going in such a region better to carry a snake bite kit.

4 KINDS OF POISONOUS SNAKES IN USA: Rattler, Coral, Moccasin, Copperhead.

The dangerousness of these is in general considerably overrated. Mortality from properly treated snake bites being less than 1%.

Even without treatment of any sort mortality runs only to 10 to 15%: hence the mistaken acclaim given such useless & often harmful "remedies" as tobacco juice whisky kerosene even potassium permanganate.

RATTLESNAKES: (Crotalus and Sistrurus)

Many kinds occur in all parts of North America, varying from 45cm (18in) to over 2.1m (7ft).

All have a chunky body, wide head and rattle on the end of the tail that is usually but not ALWAYS sounded as a warning. The largest are the various Diamondbacks, with distinctive diamond-shaped blotches.

COPPERHEAD: (Agkistrodon contortrix)

Averages 60-90cm (2-3ft) with a stout body coloured buff or orange-brown with rich brown bands & a copper-red head. Found mainly in the eastern USA. Fairly timid; bites are only rarely fatal.

COTTONMOUTH OR WATER-MOCCASIN: (Agkistrodon piscivorus)

Averages 60-130cm (2-4ft) with a thick brown or brownish olive body, sometimes blotched & a yellowish, also blotched belly; the

inside of the mouth is white. Aquatic, in and by fresh water in the Southern USA. Belligerent. Do not annoy.

NORTH & SOUTH AMERICAN SNAKES:

TROPICAL RATTLESNAKE: (*Crotalus durissus*)

Average 1.5-2m (5-6ft) with diamond shaped marks, two dark stripes on the neck and a rattle on the tail, nocturnal. Found in drier areas from South America north to Mexico. Large aggressive.
VERY DANGEROUS.

FER DE LANCE: (*Bothrops atrox*)

Is brownish with paler geometric markings and averages 1.3m-2m (4-6ft) causes many deaths. Its many relatives vary from grey to brown or reddish with similar markings. Bothrops vipers occur in South America north to Mexico; some are arboreal (live in trees). All loop their body before striking.

BUSHMASTER: (*Lachesis muta*)

Is large headed, pinkish-brown marked with large dark brown triangles and average 2-2.5m (6-8ft) or more nocturnal. Found in lowland forests, often using burrows and holes, in Central and South America.

VICIOUS IF CORNERED; THE MOST FEARED OF ALL NEW WORLD SNAKES.

CORAL SNAKES:

Average 45-90cm (1 1/2-3ft) are slender & strikingly coloured in bands of black & red separated by bands of yellow or white; from the southern USA into South America. Similar kinds occur in South east Asia. Small mouthed, reluctant to bite but DEADLY.

NO RULES AND NO ID:

THERE ARE NO RULES FOR IDENTIFYING POISONOUS SNAKES.

Cobras usually show hoods & rattlesnake rattle on their tail, but these are NOT reliable guides.

Poisonous snakes MUST be learned individually. If in doubt treat every snake as poisonous.

EUROPE:

ADDER: (*Viper berus*)

Averages 30-75cm (12-30in) varying from olive-grey to reddish-brown with a zigzag pattern of darker colouring. Found especially on **heaths, moors and open areas into mountains. The only poisonous snake of northern Europe, hardly ever fatal, but with larger and more dangerous relatives in southern Europe.

AFRICA & ASIA:

PUFF ADDER: (*Bitis arietans*)

Is thick-bodied, short tailed and large headed, straw brown with darker marking and averages 90-130cm (3-4ft). Found in semi-arid areas often near water, of Africa and the Arabian Peninsula.

Similar relatives occur in other habitats. Many different vipers are found in all parts of Africa & Eurasia, from sandy areas to thick jungle.

SAW-SCALED VIPER: (*Echis carinatus*)

Is rough scaled, pale reddish to sandy-brown with darker markings and white blotches, and averages 40-55cm (12-26in). Found in arid areas from North America West to India. Vicious, common, causes many fatalities.

RUSSELL'S VIPER: (*Vipera russelli*)

Averages 1-1.25m (40-50 in) Brownish, with three rows of spots formed of white bordered black rings with a reddish-brown center. In most areas except thick forest from Pakistan East to Taiwan. Responsible for most viper bites in the area.

MALAY PIT VIPER OR MOCCASIN: (*Calloselasma rhodostoma*)

Averages 60-80cm (24-32in) and is fawn, reddish or grey marked with geometric patterns, the belly yellowish or spotted greenish brown. Found in light growth in South east Asia & parts of Indonesia. A frequent cause of bites and with many relatives in the area. AVOID any that resemble it.

COBRAS:

Occur from Africa east through India to Indonesia and the Philippines. They usually average 1.50-2m (5-6ft) and when alarmed are recognisable by the raised head & spreading often marked hood. Found common in some areas especially Rocky and Semi-Arid regions. THEY ARE DEADLY.

MAMBAS: (*Dendroaspis*)

Are small headed, very slender, typically with large green or greyish scales & averaging 1.5-2m (5-7ft). Found in Africa south of the Sahara usually in trees, but the large Black Mamba (*D. polylepis*) is largely terrestrial.

Often quick to strike; FATAL IN ALMOST ALL UNTREATED CASES.

BOOMSLANG: (*Dispholidus typus*)

Averages 1.3-1.5m (4-5ft) very slender, varying from greenish to brownish or blackish. Found in trees & very hard to spot, in savannah parts of Africa south of the Sahara. HIGHLY VENOMOUS; it inflates its throat when alarmed.

KRAITS: (*Bungarus*)

Average 90-150cm (3.5ft)* are small-headed and some have black and white or black and yellow bands down the body. Found in both open and forested areas from India to Indonesia. Nocturnal inoffensive but BITES ARE OFTEN FATAL.

SPITTING SNAKES: (NOT SINGING?)

A few cobras, including the Ringhals* of Southern Africa, spit poison as well as bite.

This is purely defensive measure and is not dangerous unless the poison reaches open cut or the eyes. If it does, wash out immediately with water or in emergency with urine.

DEATH ADDER: (*Acanthophis antarcticus*)

Is brownish, reddish or grey with darker banding, thick bodied and averages 45-60cm (18-24in). Found in sandy areas of much of Australia, Papua New Guinea and some nearby islands. Well camouflaged.

HIGHLY VENOMOUS, but not so dangerous as the Tiger Snake and Taipan.

AUSTRALIAN BLACK SNAKE: (*Pseudechis porphyriacus*)

Averages 1.5-2m (5-6ft), slender bluish-black with a bright red belly. Found in or near fresh water over much of Australia. There are several different kinds. Very rarely fatal, it flattens its neck when aroused.

AUSTRALIAN BROWN SNAKE: (*Pseudonaja textilis*)

Is slender, yellowish-grey to brown with a pale belly and averages 1.5-2m (5-6ft). Found in drier parts of Australia & Papua New Guinea. There is more than one kind. AGGRESSIVE AND VERY POISONOUS.

TIGER SNAKE: (*Notechis scutalus*)

Averages 1.3m-1.6m (4-4.5ft) thick bodied, large-headed, tawny-ochre banded with greenish -yellow, grey or orange -brown. Found in semi arid areas of Australia and in Tasmania.

AGGRESSIVE, VERY POISONOUS, the principal cause of fatal bites.

TAIPAN: (*Oxuranus scutellatus*)

Is uniformly light to dark brown with yellowish brown on the sides and belly, and may grow to 3.5m (11ft). Found in open and forested areas of Northern Australia. Ferocious when provoked, DEADLY POISONOUS.

SNAKES AS FOOD = YES:

Pilots crashing in the jungle, once they had eaten a snake could not praise the flesh high enough. It was as tender as a young chicken. An airman in Borneo lived for a whole week on snakes which he caught in wire nooses.

SNAKE FREE COUNTRIES:

There are NO poisonous snakes in New Zealand, Cuba, Haiti, Jamaica, Puerto Rico, Ireland, Polynesia & the Polar regions.

MOTHERUS-IN-LAWUS:

A deadly snake worst than IRS boys! It comes in all size & shapes usually along with the bride or the groom even the pride and the gloom.

SEA SNAKES:

Occur in the Indian and Pacific Oceans; some are partly terrestrial, in estuaries and coastal swamps.

They vary in colour and size, averaging 1.3-1.5m (4-5ft) with a flattened, paddle-like tail. Their scales distinguish them from eels.

NOT AGGRESSIVE, BUT SOME ARE THE MOST VENOMOUS SNAKES OF ALL.

LIZARDS:

GILA MONSTER: (*Heloderma suspectum*)*

Is a lizard found ONLY in the deserts of Arizona, Mexico and nearby areas. A large rounded head, thick chunky body, short stumpy tail and brightly patterned in yellow, it averages 37-45cm (15- 18in).

The bite is poisonous but likely only when handled.

BEADED LIZARD: (*Heloderma horridum*)

Resembles the Gila monster but is darker and larger, with a slenderer tail and spots rather than a mottling of colour. Found in a few arid parts of Mexico and Central America. Docile but the bite is poisonous. Do not handle.

JUNGLE FOOD POISONS & REMEDY:

A Basic Rule from experts: which also derives partly from the customs of natives in Tropics Islands.:

NEVER EAT BLACK SEEDS FROM EARS AND GRASSES.

AVOID PLANTS WITH MILKY SAP Except for; Wild Figs Breadfruit and Papayas & Coconuts.

NEVER eat large quantities of a strange fruit before you have tested it for 24 hours minimum.

TASTING TEST EDIBILITY:

Here is what another survivor did after crashing in Jungle. He found a fruit on a tree which look like a potato. First he cut a piece of it and boiled it, then he chewed a bit and kept it in his mouth for about 5 minutes, as it still tasted good, he swallowed it. Had it been bitter or too sour, he would have spat it out.

ALSO A BURNING TASTE WHICH CAUSES NAUSEA IS ALWAYS A DANGER SIGNAL.

He then waited a day and as he did not feel ill, he ate the rest of the fruit, on which he finally subsisted for 3 days.

This pre-tasting is no good for fungi however, only experts can tell which of them are edible. Best caution; AVOID ALL FUNGI.

OTHER SURVIVORS EXPERIENCES TASTING TEST:

Survivors in the Tropics have safely eaten all fruit and parts of plants which were fed on by birds and mammals. Many have watched mice, rats, hares, beavers or apes feeding and then eaten the same food. To be on the safe side said one man "I cooked the plant thoroughly.

I first cut the roots into thin slices and let them soak for a few days in river water, thereby washing out the possible poisons." "The Indians of American jungle do the same with poisonous tubers." There is an abundance of food in the tropics, you only have to know how to find it and in many cases to overcome your repugnance.

There are 700 different kinds of YAMS.*** (The South sea potato basic food.)

PALM TREE:

The best know tropical plant of course is the palm described by the botanist as the princess of the plant world and by survivors as a Gift of GOD. There are 1500 species of Palm but the most popular is the coconut palm. ***

ITS FRUIT IS EDIBLE at almost every stage of ripeness and legions of castaways who their life to it.

The hard fibrous husk of the unripe coconut is the fruit's only disadvantage and opening it with a bush knife is quite a problem.

HOW TO OPEN COCONUT EASILY:

This is why Stead trainers tell them to use the wedge method, you ram a stake into the ground and grind the top end to a wedge (sharp), grasping the coconut in both hands, you can bring it down on the wedge until the green husk is pared off.

COCONUT OTHER ADVANTAGES:

South sea Islanders use the coco oil against sunburn, insects, parasites or they rub their legs with it up to the hips before standing in the water for hours with their fishing lines, this stops the salt water affecting their skins.

A survivor report says; the simplest way to get this oil was by boiling the coco flesh, this brought the oil to the surface of the water, when it had only to be scooped. Survivors have use the oil for frying, cooking, as lamp oil for earthenware lamps & this is still done regularly today in Africa and South Pacific. A South saying is that palm is used in 1001 ways.

A party of Japanese soldiers stranded on a South Sea Island for 4 months had not only lived the whole time entirely on palms but had made the following things from the fibbers and kernels. Sandals, loin-cloth, hammocks and floor mats, shelters, a raft with floats from kernels sucked dry, water containers and climbing rope. Their rescue was celebrated with palm wine.

TROPIC FOOD # 2:

About less appetizing food, in New Guinea some airmen lived for weeks on flower blossoms. We did not like them much raw but in the end we had the idea of baking them and then the taste was excellent. Others survivors have eaten bamboo shoots, even using them for a goulash with the meat of a monkey they had killed.

Just as the natives of the Tropics are berry gatherers and mainly vegetarians, most survivors in the tropics have to get used to a vegetarian diet, since meat is hard to come by.

In New Guinea the biggest game for the Pygmies is the size of a rat. They chiefly live on Caterpillars, Beetles, Larvae & Maggots. So can survivors. What does this sort of food taste like? I soon ceased to think about it, said a survivor rescued from the Burmese jungle after 22 days.

At first I made up my mind to starve rather than eat such vermin. But I soon conquered these foolish inhibitions and started feverishly hunting for these things. I caught tree-insects large and small. After pulling off their legs and feelers I gripped them by the wings and cheerfully bit off their bodies. I did just the same for grasshoppers.

I ate larvae & butterflies whole. The butterflies bodies had a slight aroma of meat and were best of all. The larvae alas were hard to find or I should have eaten more of them. Beurk! Without ketchup!

SURVIVOR TROPIC FOOD # 3:

In New Guinea survivors have eaten larvae raw or baked, in ashes, lived on ants. One pilot said after his rescue; I scoured old tree trunks & anthills where the ants were positively swarming. So I could be choosy and look only for the biggest specimens

Another said: "Instead of snipping off the ants which crawled up my legs, I ate them. I enjoyed getting my own back for their greediness." Eat them before they eat you!

THERE IS SCARCELY ANY KIND OF INSECT WHICH A SURVIVOR COULD NOT SAFELY EAT.

TRICK TO EAT INSECTS ETC.:

By closing your eyes, pinching your nose you can easily eat whatever seems too much to eat. And in the countries of the FAR EAST it has been said many of them are considered distinct delicacies.

On the coast of China fried Water Beetles and Water Lice are as nourishing and as much enjoyed as peanuts with us. A crew who had crashed in Burma hills lived for several days on water beetles which they fished out of a pool and roasted.

Then to vary the style they did as natives with roasted bees. In India some soldiers got lost and were served by a mountain tribe with a dish of rice sprinkled with chopped Cockchafers. **

Roast Grasshoppers are much appreciated in Thailand and many parts of Africa.

Cicadas* are generally boiled, bees and wasp fried, ants and flying termites pickled and some kinds of spiders roasted others eaten raw. Locusts are also a delicacies.* Of course insects are not much for filling stomachs, and should be more of a survivor "hors-d'oeuvre" (try it at your next party?)

MONKEYS:

A good roasted monkey can provide you food for 2 or 3 days. Here is how the Aucas prepare it according to Elizabeth Eliot; Monkeys are singed whole and cooked with the skin on, so that the thin layer of fat under the skin is not lost.

The tail is roasted and heads are eaten with brains, eyes, ears and all. Sometimes the teeth are carefully pulled and carefully sucked before being thrown away.

Dogs flesh as been eaten by survivors in Arctic, Antarctic, N. American Indians & also served as a delicacy to survivors in the tropics by their native rescuers. (Hot dogs!)

TROPICS FOOD # 4:

Starving survivors have eaten nearly hatched birds eggs as long as the embryo had not started to grow feathers. A British soldier in the rain forest of Burma loosened the many leeches on his legs with a cigarette, shuts his eyes and swallowed them raw.

After all he said, I did want to get back the blood they had sucked off me, he said to his rescuer apparently the leeches were very tasty. (Chip of the old block?) So finding food and drink in Tropics is no insoluble problem.

TROPICS TRAVELLING: ???

In Tropics whenever help can not be expected from outside, it is best say the survival experts to leave the scene of the crash quickly and try to walk to the nearest settlement generally the coast. This according to the survival experts is easier than most people think.

The uninitiated have the wrong ideas about this. They imagine a journey on foot through tropical terrain to be harder than it really is. For one thing the average castaways is usually stranded only on the edge of tropical country, on the coast.

Of course there are those who bail out deep in the jungle, where the coast is often hundreds of miles away. But even in those circumstances he has great chances of survival according to Stead trainers. A search is almost ALWAYS made for him and he can bring it to a successful conclusion if he gives distress signal to these rescuers as missing people should do.

SIGNALS IN JUNGLE: (Call 911?)

For instance some USA pilots had bailed out in the Burmese Jungle in 1944. Their approximate position was known but no search plane had been able to spot them because of the dense foliage of the tree tops. Nor would any pilots have seen their signal fire.

The men knew this and began to clear a patch of wood with swords and axes from their emergency kit. They lighted a fire there and were promptly sighted. 2 weeks later a patrol reached them & led them back to the coast.

Another party who had done the same thing, also waited for the search patrol, but soon became afraid the patrol would not find them. This fear reduced the moral more and more, until they had the idea of attracting the rescuers by shrill whistles.

They cut off some bamboo stems & made them into flutes. Then the man on watch had to send out continuous SOS calls on the flute. Finally with 3 more flutes they all blew together. The shrill tones carried well. It attracted the attention of the rescuers who were just about to pass the clearing where the missing men were.

TROPIC TRAVELLING # 2:

Wrongly people picture the tropics as largely impenetrable jungle. The Tropics are by no means all jungle (ask Tarzan) & not all jungle is impenetrable. (Ask Jane?). In every jungle there are rivers and every river leads somewhere safe to sea. To find them, many survivors have followed game track.

In Burma 2 pilots having discovered a river, builded a raft, loaded with roast monkey and drifted on it safely to the coast. (Rafts are your best bet) (Ask your travel Tarzan)

Certainly there are zones which can be penetrated with great difficulties and loss of time. It is ALWAYS best to pass them by even if it means a detour of several days.

SKIRTING IS BEST:

For ex. A party of airmen after a crash landing struggled for 5 days to get through a bamboo forest which they could comfortably have skirted in 4 hours. In the jungle as elsewhere, the easiest is the best.

TROPICAL FORESTS:*

The land between the Tropics includes areas of cultivation and extremes of swamp and desert but 1/3 is undeveloped forest. Equatorial rain forest, sub-tropical rain forest and mountain forest. All feature high rainfall & rugged mountains which drain into large swift flowing rivers with coastal & other low-lying regions often as swampland.

SAVANNAH: *

This is Tropical grassland, lying usually between the desert and the tropical forest. Near the forests the grass is tall, up to 3 metres (10ft) high, and trees more frequent. Temperature is high the whole year round. More than one third of Africa is savannah and large areas of Australia which are dotted with Eucalyptus trees.

Similar areas are the llanos of Venezuela & Columbia & the *Campos in Brazil. Often water is not easily available but where it is found, there will be lushes vegetation and plenty of wildlife. In Africa large herds of animals can be found.

TROPICAL REGIONS:

Everything in the jungles thrives, including disease-germs breed at an alarming rate & parasites. Nature provides water, food & plenty

of materials for making shelters. Indigenous & native people have lived for millennia from hunting and gathering, but for the outsider it can take a long time to get used to the conditions and the non stop activity.

Native people wear little, except as ornament but the newcomer inured to insects & leeches & unaccustomed to moving through dense jungle growth, needs to keep as covered as possible. Clothing may become saturated by perspiration but it is better than being stung, scratched and bitten all over.

Do not remove clothing until you halt and then with humidity at 80-90% there is no point hanging it up to dry except in the sun or by a fire. Clothes saturated regularly with perspiration will rot. Except at high altitudes, both equatorial & subtropical regions are characterised by high temperatures, heavy rainfall & oppressive humidity.

At low altitudes temperatures variation is seldom more than 10C. (50F) & is often 37C (98F). At altitudes over 1,500 m (5,000ft) ice often forms at night. The rain has a slightly cooling effect, but when it stops the temperatures soars.

Rainfall is heavy, often with thunder and lightning. Sudden rain beats on the tree canopy, turning trickles into raging torrents and rivers rise an alarming rate, but just as suddenly it is gone. Violent storms may occur, usually towards the end of the summer months. Typhoons, hurricanes, cyclones, develop over the sea and rush inland causing tidal waves and devastation.

IN CHOOSING CAMP SITE MAKE SURE YOU ARE ABOVE ANY POTENTIAL FLOODING.

Prevailing winds create variation between winter and summer with dry season (rain once a day.) and the monsoon (continuous rain).

In Southeast ASIA winds from the Indian Ocean bring monsoon, but it is dry when the wind blows from the landmass of China. Tropical day and night are of equal length, darkness falls quickly and daybreak is equally sudden.

EQUATORIAL RAIN FORESTS:

The climate varies very little in these forests, spread over the Equator in the Amazon & Congo Basins, parts of Indonesia & several Pacific Islands. RAIN of 1-5 to 3-5m (60-149cm) is distributed evenly throughout the year. Temperatures range from 30C (86 F) to 20C or (68 F) at night.

Where untouched by man, jungle trees rise from buttress roots to 60m (200ft) bursting into a mushroom of leaves. Below them, smaller trees produce a canopy so thick that little light reaches the jungle floor. Seeding struggle beneath them to reach light and masses of vines and lianas twine up to the sun.

Ferns, mosses & herbaceous plants push through a thick carpet of leaves and a great variety of fungi grow on leaves and fallen trunks. It is fairly cool in this PRIMARY JUNGLE, with little undergrowth to hamper movement, but visibility is limited to about 50m (170ft). It is easy to lose a sense of direction and also difficult to spot anyone from the air.

RESCUE SIGNALS:

Smoke is diffused by the tree canopy and may not be seen, especially if there is mist about as well.

SET SIGNALS IN CLEARING, more often found near river bends, or better-out on rafts on the river itself.

SECONDARY JUNGLE:

Growth is prolific where sunlight goes penetrate to the jungle floor-mainly along river banks, on jungle fringes and where primary jungles have been cleared by man for slash and burn farming. When abandoned, this is reclaimed by a tangle mass of vegetation-look out for cultivated food plants which may survive among the others.

Grasses, ferns, shrubs and vines of secondary jungle, reach heights of 2-3m (7-10ft) in a single year. Moving is slow often hacking a way with a machete or parang-hot work with visibility only a few meters.

Jungle vegetation seems to be covered with thorns and spikes and bamboo thickets can be impenetrable barriers. Sometimes, as in Belize in Central America, the jungle trees are low. Light does reach the fertile ground, producing abundant undergrowth even in primary jungle.

SUB-TROPICAL RAIN FORESTS:

Found within 10 degrees of Equator, in Central and South America, Madagascar, Burma, Western India, Vietnam, southeast Asia & Philippines. These forests have a season of reduced rainfall, even drought, with the rain coming in cycles-monsoons. With more marked seasons there are more deciduous trees so that more light reaches the forest floor and undergrowth is dense.

MOUNTAIN FORESTS:

When altitudes reach about 1,000m (3,000ft) in the Tropics and the areas bordering them, Tropical forest begins to give way to Mountain forest. It becomes true mountain at about 1240m (4900 feet) as in the Monts Goutier in Cameroon, the Amhara Plateau of Ethiopia or the Ruwenzori Range of Central Africa.

The Ruwenzori the Mountains of the Moon are typical; sharply contoured slopes making a crater-like landscape covered in moss between ice-capped peaks.

Plant growth is sparse, trees stunted and distorted, their branches low & difficult to walk beneath.

Nights are cold, day temperatures high with lots of mist and long periods of cloud cover. Survival is difficult in this terrain. Leave it and make your way down the mountainside to the tropical rain forest.

SALTWATER SWAMPS:

Where coastal areas are subject to tidal flooding, mangrove trees thrive. They can reach heights of 12m (40feet) and their tangled roots are an obstacle both above and below the waterline.

Visibility is poor and passage difficult. It may take 12 hours to cover 900m (3,000feet). Sometimes channels are wide enough to raft, but generally progress is on foot. There are mangrove swamps in West Africa, Madagascar, Malaysia & the Pacific Island, Central and South America and at the mouth of the Ganges.

The swamps at the mouths of the Orinoco, Amazon and rivers of Guyana consist of stinking mud and trees which offer little shade. Tides can rise as much as 12m (40m). Everything in the mangrove swamps seems hostile, from water leeches & insects, to Cayman and crocodiles. Avoid them if you can.

If forced there by mishap look for a way out. Where there are river channels intersecting the swamp you may be able to make a raft.

YOU WON'T STARVE AMONG THE MANGROVES.

There is plenty of fish and vegetation. At low water crabs, mollusc, catfish and mudfish can be found. Arboreal and aquatic animals include water opossum, otter, tapir, armadillo and, on firmer ground peccaries.

Inland of the mangroves, nipa palm swamp is common. ALL THE PALM'S

GROWING POINTS ARE EDIBLE. If forced to stay in swamp, determine the high-tide level by the line of salt and debris on the trees and fit up a raised bed above it.

Cover yourself for protection against ants and mosquitoes.

In any swamp a fire will have to be built on a platform. Use standing deadwood for fuel. Decay is rapid in a swamp. Choose wood that is not far decayed.

FRESHWATER SWAMPS:

Found in low-lying inland areas, their mass of thorny undergrowth reeds, grasses and occasional short palms makes going difficult and reduces visibility to only a few metres- but wildlife abounds and survival is easy.

A freshwater swamp is not such a bad place once you get used to it. It will often be dotted with islands and you are not chest-deep in the water ALL the time. There are often navigable channels and raw materials available from which to build a raft.

SHELTER: SAS 52

There are ample materials for buildings shelter in most Tropical regions. Where temperatures are very high, and shelters directly exposed to the sun, make roofs in 2 layers with an airspace in between to aid cooling. (KOOL IDEA NO!)

Much of the heat will dissipate on striking the upper layer and with the air passing between this lowers the temperature of the layer beneath. The distance between should be 20-30cm (8-12in) Double layers of even permeable cloth will help keep out the rain if well angled.

FIRE:

Everything is likely to be damp. Take standing wood and shave off the outside. Use that to start your fire. Dry bamboo makes excellent tinder (store some) so does a termite nest.

FOOD:

A large variety of fruits & leaves are available. Mango, figs, banana, papaya, are easily recognized.

PAPAYA IS ONE OF THE FEW PLANTS WITH WHITE SAP THAT IS EDIBLE.

The large and thorny fruit of the Durian* of the Southeast Asia,

smells disgusting but is good to eat.

Palms provide an Edible growing point and manioc produces massive tubers-though they MUST be washed and cooked before eating. Taro, wild potato and some kinds of yam MUST also be prepared to remove Poison before they are eaten. You may find the wealth of tropical food hard to identify, if you are not sure use the test described in Food, before risking eating them.

ANIMAL FOODS:

Deer, pigs, monkeys and a wide range of animals can be hunted and trapped according to location. In primary jungle, birds spend most of their time in the trees canopy among the fruit and berries. Place traps in clearings and lure birds with fruit.

Some such as the * ASIAN HORNBILL also feeds on lizards and snakes. Near rivers traps (see traps**) can be baited with fish or offal for fish Eagles and similar species which patrol rivers for prey.

Parrots & their relatives abound in the tropics-their mad screeching makes their presence known from early morning. They are cunning, get them used to taking bait before setting the trap. Snakes are easy to catch go for the non-poisonous constrictors & very tasty. Catch them using a forked stick.

FOOD FROM RIVERS:

Rivers support all kinds of life: fish, plants, animal, insects. If you have no fishing tackle, small pools can be dammed and then emptied with a bailer.

FISH AND TURTLES IN SURPRISING NUMBERS CAN BE FOUND IN THE MUD.

Try constructing traps or crushing certain roots and vines to stupefy the fish. Fish are easily digested and have good protein content. Many jungle people depend on them for nourishment, but in the Tropics they spoil quickly.

Clean thoroughly, discard entrails and eat as soon as possible, do not preserve them by smoking or drying. Fish from slow moving waters are more likely to be infested with parasites. If suspect boil in water for 10 minutes. In areas where locals use the water as their sanitation system. Fish may carry tapeworms & other human parasites and the water itself could be infected with amoebas which cause dysentery.

ALWAYS BOIL WATER FOR 10 MINUTES.

Rivers can bring DANGERS too. Piranha may be found in the Amazon, Orinoco, & Paraguay river system of South America.

A smaller fish is found in BURMA. Electric eels are slow-moving and not aggressive but they can grow very large & discharge 500 volts or more. Sting rays also occur in some tropical South American & West African rivers.

Look out for crocodiles or alligators & water snakes and take care in handling catfish which have sharp dorsal fins & spines on their gill covers, the Electric Catfish can also deliver a powerful shock.

DANGERS!:

COVER YOUR FEET:

Good footwear and protection for the feet is ESSENTIAL.

They are most exposed to leeches, chigoe & centipedes. Wrap bark or cloth around the legs & tie it to make puttees.

INSECT ATTACK!: (RAIDDD!)

Slashing your way through jungle you may disturb bee, wasp or hornet nests. They may attack especially hornets, whose sting can be especially painful. Anywhere left bare including your face is vulnerable to attack. Run! Don't drop anything, you won't want to go back for it. Goggles would help protect your eyes.

As you work up perspiration there are insects, desperate for salt that will fly to the wettest parts of your body. Unfortunately they also sting. Protect armpits and groin.

BEWARE INVADERS: (UFO?)

Keep clothing & footwear off the ground. Then scorpions, snakes and other nasties are less likely to invade them.

ALWAYS SHAKE OUT CLOTHING AND CHECK BOOTS BEFORE PUTTING THEM ON,

and be wary when putting hands in pockets. On waking up take care. Centipedes tend to curl for warmth in some of the more private body regions.

MOSQUITO PROTECTION:

Wear a net over your head or tie a tee-shirt or singlet over it, especially at dawn and dusk.

Better, take a strip of cloth long enough to tie around your head and about 45cm (18in) deep & cut it to make a fringe of vertical strips hanging from a band that will hang around your face and over your neck.

At night keep covered, including your hands. Use bamboo or a sapling to support a little tent of clothing plus large leaves rigged over your upper half. Oil, fat or even mud spread on hands and face may help to repel mosquitoes. In camp a smoky fire will help keep insects at bay.

LEECHES: (Good to eat too!)

Leeches lie on the ground or on vegetation, especially in damp places, waiting to attach themselves to an animal or person to take a meal of blood. Their bite is not painful but they secrete a natural anti-coagulant that makes it messy.

Left alone, they drop off when they had their fill- but if you are covered in them you MUST do something! Don't pull them off!

There is a risk that the head will come off leaving the jaws in the bite which could turn septic. (Poisonous) Remove with a dab of salt alcohol or the burning end of a cigarette, an ember or a flame.

BEWARE THE CANDIRU!:

This minute Amazonian catfish about 2-5mm (1 in.) long very slender & almost transparent suck blood from the gills of other fish. It is reported to be able to swim up the urethra of a person urinating in the water-where it gets stuck by its dorsal spine. The chances of this happening are remote but the consequences could be dire. Cover your genitals and don't urinate in the water

HEALTH RISKS IN JUNGLE: *

To live in the jungle, you MUST keep in good health. Even under the best conditions all becomes difficult.

IT IS ESSENTIAL IN ORDER TO INCREASE YOUR SURVIVAL CHANCES TO FOLLOW THESE RULES:

- 1) Stay CALM, you will NEVER conquer the jungle by rushing it is Impossible, even Tarzan slows down!
- 2) Don't climb in the height to orient yourself, better to do a long round about way on flat land.

TESTS HAVE SHOWN THAT IT IS LESS TIRING AND ENERGY CONSUMING TO GO AROUND A STEEP HILL ETC. THAN TO CLIMB OVER IT.

- 3) Take WELL care of your feet in changing and washing your socks very often. Protect your boots by greasing them often.
- 4) When you have a fever, WAIT till it disappears before getting back on the road. Drink A LOT of water, MAKE SURE it is good, STERILIZED!
- 5) Ticks, leeches, bugs, insects of all kind threaten your health & security. So use insecticide or mud if nothing else, & stay away from places where there are abundant Swamps.
- 6) Guard well from any infections. In the heat and humidity of tropics, any wounds infect rapidly. You MUST cover them with a sterile dressing home made or not.
- 7) Prevent exhaustion, cramps and sunstroke by drinking a lot of water to replace lost liquid from perspiration. If heat is too much, relax take a rest in a shady place.

TROPICAL DISEASES:

Malaria, Dengue, Yellow Fever & Encephalitis * All of them are caused by mosquitoes bites carrying these germs. Violent chills & high temperature are the symptoms. If you believe you have any of these, rest and drink plenty of liquid.

DYSENTERY:

It is caused by water and polluted food.

SANDFLY FEVER:

Presents the same symptoms as malaria. Drink a lot of water or other liquids and rest till fever drops down.

TYPHUS:

In Tropical regions, Typhus designs many infectious diseases. Louses and flees carry the germs of many of them. Headaches, weakness, fever and general pains are usual symptoms.

The victim has a pale colour and can develop skin eruption. Some forms of Typhus are deadly if not treated, in a proportion up to 40%.

It is ESSENTIAL to develop a very strict body hygiene and to avoid all contact with louse, fleas as well as all rodents which are infested of them as well as herbs carrying maggots. It is very wise to get a vaccine regularly when possible.

EXHAUSTION:

In Tropics, the heat and humidity combined will drain your energy faster than anywhere else in the world. Slow down your activities and take a lot of rest. Drink a lot of water.

Dilute if possible 2 salt pills per quart of water. If you suffer from heat stroke, rest in shadow and drink 1/2 of this quart of salted water every 15 min. Keep doing it until you are back on your feet.

CHILBLAIN OR TRENCH FOOT: (Not French foot)

In Vietnam this type of infection has taken more toll on the soldiers than all the mines, snares etc. The "trench foot" looks much like frostbite but the cause is very different.

It appears when the feet are kept in water or dampness during a period of more than 12 hours. There are 2 types of "trench foot" one comes from "immersion in hot water" limits itself to the foot sole.

This infection comes after having crossed creek, small streams, drains and swamps cut off by dry lands and terrain. About 3 days after the thick layer inside the foot sole becomes white & wrinkly. Some of these wrinkles on the sole becomes very sensitive and bothers walking. In the 2 or 3 following days the pain increases considerably and the feet start to swell.

If you take off your shoes then it is impossible to put them back on because of the swelling and the pain it gives. The pain is even then more accentuated at the heels & to #eminence metatarsiennes#, the victim has the feeling that he walks on tight ropes stocked inside his shoes.

The only treatment consists in taking off your socks and shoes and to rest. The skin MUST be dried & stay that way. The wrinkling, #whitering# and dampness will disappear in about 24 hours but the sensitivity of the foot sole will stay for a few days, then the thick layer of the underfoot will come off bit by bit.

RICE FIELD FOOT:

The other type of "Trench foot" also called "Rice field foot"

attacks the upper part of the feet and legs. This disease affects people who walk in muddy rice field, swamps, creeks and water ways.

It is far more frequent when the water temperature or mud maintains itself to 30C. and more. This infection wounds the feet, the ankles, and legs at the height of the boots. In 2 or 3 days, the skin turns to red, covers itself of #cellulite# & swells up. The pain increases more & more as the skin tightens up & hardens then the skin bruises & scratches.

The boot friction causes the skin to peel off and brings the skin at raw state. 50% of the victim suffer from #nodules lymphatics# up to the groin with fever up to 40C. The treatment consists in taking off your socks and shoes and to rest in a dry area while keeping your feet up. In 6 hours the #oedema# becomes soft.

It swells under pressure of the fingers. The pains, swelling and fevers disappear after a few days of good resting. (Time for a break, lucky you!)

SURVIVAL WAR EXPERIENCE:

2 Japanese soldiers spent 16 years in the Guam Jungle, one of the toughest jungle in the worlds and were found very healthy. "They supplemented this "Liberated" food with bamboo shoots, coconuts, lizards, #breadfruit#, snails, snakes, plus sea food from the nearby sea coast, seaweed, lobsters, fat nut crabs, an abundance of other fishes.

The Guamise say that there are so many fish that you can catch them with bare hands if you are not too lazy to bend down for them. After a few months, the 2 Japanese had gotten use to living like natives of the jungle, even their senses became adapted to this existence.

"Although we were both smokers and missed tobacco, we took care to pick up the stubs thrown away by USA soldiers. We were afraid if we smoked ourselves that we would loose our sense of smelling others smoke from a distance."

Our sense of smell became so sensitive that we often smelled the hair oil of USA soldiers before we heard them talking. It was vital for us to discover other people before them. Both men and others they were with from time to time went foraging only at night, always walking in a single file.

The first man tested the ground ahead before putting his foot down (like cats and tigers), it was the last man business to see that all tracks were wiped out. Taking care not to tear off any grass or

thread it down in a conspicuous way or to break off branches of any weight where no animal could have done it.

If they took fruits from a tree, they would only take a few so that it would not be notice afterwards. Upon making a fire they always buried the ashes or scattered them in the ocean. If they lost a tool or a piece of clothing they went searching until they had found it again so as not to leave any tokens that might betray them.

And through 16 years only talked in whispers. They would also catch more game in simple wire nooses. Or they would sit on a tree above a game track and wait till a deer ran past they are plenty of them in Guam then drop on it and stab it. Deer were imported to Guam, few islands are that lucky. After the first months they felt safe enough to roast the meat instead of eating it raw.

FIRE MAKING #1:

Almost every day they lit a fire. They had no matches so when the sun shone the bottom of a bottle served as a burning glass.

FIRE MAKING #2: *

When it was raining they would use a simpler way by forcing open a cartridge and mixed some powder from it with paper, dry leaves and wood shavings. Then one of us rubbed a piece of wire along a piece of hardwood until it was red hot and simply pushes it into the tinder. The powder fired at once & set the shaving alight.

NATURAL REMEDIES:

Worrying a lot about the chances of illness they set about finding natural remedies. When they killed animals, they would cut open its stomach collected the gastric juice and dried this in the sun. They ground the solidified mass into a greenish-white powder & kept it in a bottle, it proved an excellent gastric tonic.

They also made charcoal from animals bones ground it to powder & used it as a remedy for dysentery, diarrhoea & other stomach troubles.

Other survival schools tell us of the common COLTSFOOT * to use the leaves to reduce the swelling of a sprained ankle or wrist.

FIGHTING FEVER:

To fight fever including MALARIA with an infusion from the bark of willow branches from 4 to 6 years old and effective gargle for

throat troubles, a few mouthfuls will alleviate abdominal or intestinal chills.