

ECUADOR'S YASUNI  
NATIONAL PARK

# BACK TO THE GREEN MANSIONS

Part Two of our extensive  
trip report on one  
of the world's most beautiful  
and threatened  
biodiversity hotspots

■ An adult male Humboldt's Woolly Monkey *Lagothrix lagotricha* - one of the few large mammal species which can be reliably observed in Yasuni.

■ A tiny *Typophyllum* sp. Dead leaf-mimic katydid (Tettigoniidae). Many species found in the Amazon show amazingly cryptic colorations, patterns and body shapes to avoid predation - or to be successful predators.

### *Living leaves slowly moving on the rainforest floor*



TEXT BY ANDREA FERRARI  
PHOTOS BY ANDREA & ANTONELLA FERRARI

*F*or those who missed it, let us briefly recap here what we have already written of Ecuador's Yasuni National Park in the first half of our extensive, two-part feature on this amazing South American destination, published in the previous issue of *ANIMA MUNDI - Adventures in Wildlife Photography* (no. 7, July 2012) - the numbers are so staggering, they're very well worth repeating. Established in 1979 and declared a Biosphere

Reserve in 1989, the Yasuni National Park covers an area of 962,000 hectares in the basin of the upper Napo River in the western Amazon region. There are at least 2,274 species of trees and shrubs, and in a single hectare have been found up to 655 species - this is more than the total number of tree species in the United States, Canada and Mexico combined. There are 593 species of birds, 80 species of bats, 150 species

of amphibians, 120 species of reptiles, and more than 4,000 species of vascular plants. Researchers have estimated that the insect population could be as high as 100,000 species. The Yasuni National Park is likely the most biologically diverse spot on the planet - an extraordinary travel destination for wildlife and nature photographers. The Park is also known for its indigenous population. The Amazonian Quichua or Napurunas

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The banks of the        rio Tiputini are shrouded in thick vegetation, often heavily damaged and torn down by sudden, powerful floods. This is a constantly shifting habitat.

*A floating log lies  
in ambush, dragonflies  
laying eggs on it*

Large, bright orange dragonflies hover above a perfectly camouflaged Spectacled Caiman *Caiman crocodilus*.



Left, an adult Saddle-back Tamarin *Saguinus fuscicollis* - this is a very active, fast-moving, shy species which is not easily approached. Above, two mating Fungus beetles (*Erotylidae*).

people, the Waorani people, and two groups in voluntary isolation, the Tagaeri and Taromenane all reside here. The Waorani people occupy most of its area - their reputation as fierce warriors is widely known. To sum up the obvious, the Park is essential to the protection of all the cultures and species that dwell within. Yet, the Yasuni National Park faces many threats to its preservation. The impact of oil wells within the Park, the opening of roads for oil exploration, and the installation of oil wells have been damaging. Other threats to its very existence include illegal timber extraction, overexploitation of wildlife by indigenous tribes and climate change. An exceptionally detailed and highly specialized scientific analysis of Yasuni National Park, its environment, its fauna and its enormous ecological

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■ A Giant Broad-headed Treefrog *Osteocephalus taurinus*, one of Yasuni's most impressive and easily observed amphibians. This species can be easily identified in the field by its bright green, beautifully patterned eyes.





■ Above, a South American Tapir *Tapirus terrestris*. Right, a tabanid horsefly (top) and a large tick (bottom) photographed on its hide as they feed on it. Incidence of parasitism in Yasuni's equatorial, moist environment is evident everywhere.

importance can be found [here](#), but for most of our readers what we have related above will probably be more than enough. From a more practical, visit-related point of view, many readers will probably find of some interest reading instead about the many difficulties encountered when photographing wildlife in this demanding, hostile environment - the equipment we use, the problems we

have occasionally faced, the solutions we have adopted.

### TRAVEL LIGHT TO ENSURE SUCCESS

Hot, humid lowland rainforests such as this one are usually quite impenetrable to casual visitors, and can only be explored on foot, making good use of the extensive

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■ A South American Common Toad *Rhinella margaritifera* perches on a fallen tree trunk by the banks of the rio Tiputini. This is a very cryptic but commonly observed species.

*Sitting undetected by the slow-flowing river*





An enormous number of Leafhoppers (all belonging to the Family Cicadellidae) inhabit Yasuni's rainforest. Most are very small but all are exceptionally colorful and usually very brightly patterned.



network of well-marked trails opened and maintained by the Estacion Cientifica Yasuni. The gravel road leading to the Research Station can also be occasionally used for some night driving in the hope of sighting some nocturnal reptiles or mammals, but this is not normally done. So walking - for hours, by day or by night, under a scorching sun or in a pouring rain and on muddy, slippery rainforest trails - is basically the only feasible option. This naturally poses the first and possibly most important of many questions - what lenses should one carry? Experience has taught us that carrying heavily laden backpacks is not really advisable (or even feasible) in such extreme climates, so we limit ourselves to a macro lens (Nikon 105mm), a medium tele zoom (Nikon 18-200mm) and a longer zoom (Nikon 80-400mm). The macro lens is

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A very colorful Acridiidae grasshopper, possibly *Nautia* sp. Identification of rainforest species can be often very complex.



The sinuous curves of a harmless, pencil-thin Blunthead Tree Snake *Imantodes cenchoa* (left) seem to echo the stiffer ones shown by a *Bauhinia ladder liana* (right). Notice the flies on the former and the wasp nests on the latter.



Walking in Yasuni presents one with the very real risk of stepping on a Lancehead pit-viper *Bothrops atrox*, Latin America's most dangerous snake and certainly one of the most cryptic ones.





■ Yasuni's beetles are legion - countless, usually very colorful and coming in all shapes and sizes. Above, a Tortoise Beetle belonging to the family Chrysomelidae; left, two Erotylidae Fungus beetles.

obviously an absolute must - most are small and quite light, and the absolute majority of the subjects one can encounter in the rainforest belong to the macro universe. The medium zoom could actually be dispensed with (but it's good to have a spare) while the longer zoom is a much-debated and not always successful compromise between focal length, weight and usefulness. The venerable Nikon 80-

400mm sports an agonizingly slow autofocus and needs a lot of light to give good results, but it's of a very high optical quality, it can be easily carried for long distances and it offers an unbeatable flexibility with its wide-ranging focal lengths. A longer and faster lens (such as our Sigma 500mm) would clearly be preferable, but carrying one in this environment is inviting disaster, and the occasions to

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■ If done properly - ie without noise and with subdued lights - night walks in the rainforest occasionally offer the opportunity to closely approach sleeping birds. This is a stunning Blue-crowned Manakin *Lepidothrix coronata*.



use it are few and far between, as monkeys and birds are usually too shy or too far up in the canopy to be photographed while on the walk. Longer and heavier lenses - such as a 500mm or a 600mm - are better kept aside to be used from fixed positions nearby the lodge or by the river. A set of flash units is mandatory, as light levels in the lower storeys of the rainforest are usually quite low; others might want to shoot in natural light, but carrying a heavy, strong tripod for six hours in a row is another recipe for trouble, and most small macro subjects won't stay still long enough to make its use reasonable, anyway. Static, slow-moving or very dangerous macro subjects are best photographed *in situ* (easier said than done, as most often they'll be found hiding in more or less

inaccessible places!) while harmless but active species such as small, non-venomous snakes or amphibians can be occasionally collected to be photographed later on in more manageable conditions (it goes without saying that each and every one will be returned unharmed to its original place immediately after). Most rainforest photographers, in fact, will readily build a simple tabletop natural-looking set-up at their base camp which will be used to shoot macro subjects in relative comfort - to learn about the set-up used by Piotr Naskrecki, celebrated entomologist, book author and recognized Grand Master of insect macrophotography, we suggest you to click [here](#). We have occasionally done the same, but we are too lazy and disorganized to do it on a consistent

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***Sleeping in fear, always ready to flee at the slightest sign of danger***

*Colorful codes  
and signals speaking  
an unknown language*



Yasuni hosts a great number of beautiful amphibian species. This is a Painted Antnest Frog *Leptodactylus lineatus*.



Successful camouflage is the key to survival for many predators of the Amazon rainforest. Left, a beautiful adult Lancehead pit-viper *Bothrops atrox* sits in ambush by a forest trail; right, the mind-boggling impersonation of a dead leaf displayed by the Dead leaf-mimic Praying Mantis *Acanthops royi* - we owe the identification of the latter to Dr. Piotr Naskrecki of Harvard University.





Top left, a Leafhopper (Cicadellidae);  
top right, a Ghost Assassin Bug (Reduviidae);  
bottom right, an unidentified golden fly (Diptera);  
bottom left, an unidentified ant showing bright, eye-like aposematic markings on its abdomen, which make it look like a spider when seen from behind.

■ The brightly marked Reticulated Poison Frog *Ranitomeya ventrimaculata* is one of Yasuni's most colorful and conspicuous amphibians. This tiny, poisonous species is active during the day.





Well █ camouflaged and barely visible, the slit pupils of the Two-striped forest pitviper or Amazonian palm viper *Bothriopsis bilineata* (left) betray its nocturnal habits and an ambushing style of predation, while the big round eyes of the Brown Sipo *Chironius fuscus* (right) indicate diurnal habits and an active mode of hunting.



A pair of **Saddle-back Tamarin** *Saguinus fuscicollis*. This is a very uncommon encounter due to human disturbance and predation.

*Playful, restless goblins of the rainforest canopy*



basis - sometimes a couple of sticks or a few dead leaves will suffice (provided one is very careful with the background when composing the image). In any case, a good macro lens with its attendant strobes is the single most important piece of equipment one should take on a rainforest walk - never leave it behind! When the presence of larger subjects within reach is well-known and almost guaranteed (a visiting troop of monkeys, for example, or a large nesting bird) a long tele (such as our Sigma 500mm) is worth carrying - but be extremely careful, as slipping, falling and getting badly scratched/wounded by thorns or splinters can be extraordinarily, embarrassingly and disconcertingly easy when carrying a big expensive lens along a muddy, slippery and occasionally steep rainforest trail. In these cases we suggest to carry the long lens in a small, lightweight backpack and mount it on the camera

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Showing a distinct sexual dimorphism, these are *Oreophoetes topoense* Stick Insects (Phasmidae), mating at night.



*Ancient water-dwelling  
reptiles of the  
mysterious Amazon*

A group of  Yellow-spotted river turtle *Podocnemis unifilis* is basking on a half-submerged log. This species is severely threatened by hunting.





■ Top right, Sarayacu Tree Frog *Dendropsophus parviceps*; top left, *Rana granosa* *Hypsiboas cinerascens*; bottom left, Crump Tree Frog *Dendropsophus brevifrons*.

body only when ready. We are very happy with our LowePros - strong, truly waterproof and quite comfortable camera backpacks which have saved our equipment (and at least once ourselves too) from severe physical damage. Let us repeat once more that Yasuni National Park is pure undiluted heaven for macro photographers - so, to state the obvious again, a good set of LED headlamps for nocturnal

explorations and a pair of lightweight gloves for the capture/manipulation of small subjects of dubious nature and even more dubious temperament are mandatory. In the end, of course, it's the photographer's eyes and personal vision which make the difference - and in this respect the environment of Yasuni, with its stunning wealth of subjects, can be ideal for those willing to stretch their creativity. ●



■ The arboreal habits of the *Rana granosa* *Hypsiboas cinerascens* allow free reins to a photographer's creativity.





Left, adult male  Humboldt's Woolly Monkey *Lagothrix lagotricha*, a very vocal, rather large and quite unmistakable species. Right, adult Saddle-back Tamarin *Saguinus fuscicollis*. Both species are sadly heavily persecuted and hunted for food by Waorani natives and are becoming very difficult to see.



Right, an adult South American Squirrel Monkey *Saimiri sciureus*. Far right, top, a Yellow-rumped Cacique *Cacicus cela* perching by its hanging nest; far right, bottom, a Taira *Eira barbara*. All three species can be occasionally observed in the vicinity of the most important tourist lodges of Yasuni.





Two more   extraordinary examples of the successful camouflage strategies adopted by several species of the Amazon. Left, a Two-striped forest-pitviper or Amazonian palm viper *Bothriopsis bilineata*; right, a Leaf katydid *Pterachroza ocellata*.





More stunningly    
cryptic species from  
the Amazon  
rainforest.  
Left, a bright green  
Leaf mimic katydid  
Typophyllum  
mortuifolium;  
right, another  
fascinating image  
of the Dead leaf-  
mimic Mantis  
Acanthops royi,  
one of our trip's  
most enchanting  
and surprising  
encounters.





Neatly coiled and immobile on the forest soil among rotting wood and dead leaves, a juvenile Lancehead pit-viper *Bothrops atrox* is almost invisible to the casual observer. The cryptic livery, powerful venom and uncertain temper of this species make it a very real danger in the South American rainforest.

*Patiently waiting  
in the night  
of the Amazon*



■ A close-up of the head of a Two-striped forest-pitviper or Amazonian palm viper *Bothriopsis bilineata* shows very clearly the heat-sensing pits of this arboreal, highly cryptic Crotalid species.



Yasuni is a frog lover's dream come true! Left, a Tiger-striped Leaf Frog *Phyllomedusa tomopterna*; right, a *Rana granosa* or Tree Frog *Hypsiboas cinerascens*. Both species can make wonderful camera subjects.





Top left, Ecuadorian Poison Frog *Ameerega bilinguis*;  
top right, Amazon Green Frog *Lithobates palmipes*.  
Bottom right, Tiger-striped Leaf Frog *Phyllomedusa tomopterna*;  
bottom left, Dendrobatid Poison Arrow Frog *Ameerega hahneli*.



■ *Rana granosa* or Tree Frog *Hypsiboas cinerascens*. With its popped-out eyes and wide grin, this is possibly one of Yasuni's most lovable tree frog species.





Another of Yasuni's most photogenic and endearing tree frog species is the White-lined leaf frog *Phyllomedusa vaillantii*. This is a very colorful, arboreal, nocturnal and relatively common species.





*A silent statement of power and grace*



Far left, top, a Tree Frog *Hypsiboas cinerascens* emerging from a bromeliad; far left, bottom, a Peter's Dwarf Frog *Engystomops petersi*. Left, the structural unfurling of a young fern leaf in the damp rainforest understorey makes for a strong visual statement.



The majority of caterpillars encountered in Yasuni's rainforest feature bright, aposematic colorations and fearsome arrays of spikes and/or severely urticating bristles. Inadvertently brushing against one can lead to a severe allergic reaction - a good reason to wear long-sleeved shirts when walking in the forest.



More caterpillars from Yasuni - identification of most is difficult for the layman as several species are quite esoteric, and highly specialized field researchers themselves are often left stumped. All should be strictly left alone, however - those bristles and spikes can be severely urticating if touched.





Correct identification of Yasuni's katydids can be frustratingly difficult for the uninitiated. Top and bottom, left, two different Acridiidae grasshoppers; top and bottom, right, two different Leaf-mimic katydids (Tettigoniidae), with *Parableta* sp above and *Pycnopalpa* sp. below.





Predator and prey play a daily (or rather nightly) and deadly game of hide and seek in Yasuni's rainforest. A large Wandering Spider (Ctenidae), left, has been successful and is feeding on its already half-dismantled/half-liquified beetle prey; the colorful Crayola katydid *Vestria* sp. (right) will live another day.





As we have    
already written  
elsewhere, Yasuni  
is incredibly rich in  
spider and allied  
species.  
Left, the dazzling  
colors and patterns  
shown by a huge  
Harvestman or  
Opilionid,  
*Santinezia* sp.,  
(Cranidae).  
Right, the  
contrasting  
coloration of a  
Wandering Spider  
(Ctenidae) found  
at night on  
the forest floor.





Top left, the   ground-dwelling, red-bodied spider *Aglaoctenus castaneus* is unmistakable. Bottom left, an unidentified but striking moth; left, a colony of treehopper nymphs is being carefully tended by their ant "farmers".



Top right, a   Riodiniidae butterfly (possibly *Lasaia* sp.) feeding on soil minerals; top right, a birdwing butterfly (Papilionidae) doing the same. Bottom right, a Paradise Skipper, *Phocides belus* (Pyrginae); bottom left, a *Parides* sp. butterfly, also feeding on soil minerals.





Macro detail of the wing of a Giant moth *Ascalapha odorata* (Noctuidae).



Top left, an   unidentified Skipper butterfly (Hesperiidae); top right, a group of *Itabalia* butterflies (Pieridae) feeding on soil minerals. Bottom right, an unidentified forest species; bottom left, *Julia* Butterflies *Dryas julia* also feeding on soil minerals.





*Perched on a twig like  
a miniature Quasimodo*

■ The gargoyle-like stance of a Longhorn beetle (Cerambycidae) belies its diminutive size.



Survival in the   rainforest is not easy and certainly not granted. Left top, a cricket; right top, a Curculionid beetle; left bottom, an ant - all three have been infected, colonized and finally killed by the Cordyceps parasitic fungus, which can now be seen sprouting from their body joints. Right bottom, a Geometrid caterpillar has been instead parasitized by wasp larvae, which are now pupating.

■ The end - and the beginning:  
a dead leaf rots away and is  
transformed in nutrients, which  
will be used by the new growth  
of the Yasuni rainforest.



*The intricate tapestry  
of an endless  
transformation*

# At-a-glance travel guide

COUNTRY OF DESTINATION: **ECUADOR**



## USEFUL TIPS FOR YOUR EXPEDITION

**Some simple, common sense, field-tested advice and information to make the best out of your trip and avoid hassles, worries and problems**

**ROUTE:** Your international flight will land at Mariscal Sucre International Airport, smack in the middle of Ecuador's high-altitude capital Quito. From there it's a day-long drive to the town of Coca. The following morning you'll drive to the crossing of the Rio Napo, and after that you'll have to go through the strict entrance procedures set by the oil companies before driving through the forest all the way to the **Estacion Cientifica Yasuni**. Getting to the lodges may require slightly different itineraries.

**MEANS OF TRANSPORT:** Visiting Yasuni without local help is quite problematic. For a well-organized and successful trip we can heartily recommend the

services of our friends Lucas Bustamante-Enriquez and Alejandro Arteaga of **Tropical Herping** - two young, enthusiastic Quito biologists with a keen interest in nature, wildlife and photography.

**CURRENCY:** Since the year 2000 Ecuador has opted not to have a national currency of its own - all transactions are done in US dollars.

**ACCOMODATION:** Yasuni offers several beautiful and well-appointed tourist lodges, usually set in strategic locations and offering reliable wildlife sightings in their own private reserves inside the Park. The best-known ones include **Sani Lodge**,

**Sacha Lodge** and the **Napo Wildlife Center**, but they are usually very expensive and are best chosen for a 2-3 days luxurious stay - perfect for the casual visitor but hardly ideal for the serious wildlife photographer in need of a longer visit. Several Waorani communities in the area are now also offering basic, relatively inexpensive accomodation.

**FOOD:** Simple but basically healthy and filling. Ecuadorians love soups (try the delicious *Locro de Queso* - potatoes, cheese and avocado), meats and fish, and are blessed all-year round with fantastic vegetables and fruit. The type of food you'll be having in Yasuni really depends however on the type

## The perfect chance to explore at will the real Amazon rainforest



of accomodation you have chosen - that of the Yasuni Research Station is abundant, healthy and - most importantly in this kind of environment - perfectly sanitized. No health worries there!

**LANGUAGE:** Ecuadorian Spanish and English.

**WORRIES:** Ecuador used to have a pretty bad (and rather well-deserved) reputation regarding street muggings and tourist-related crimes. Things are much better now, but - like in so many other big cities worldwide - it's always better to be accompanied by local friends when visiting Quito's beautiful historical areas. When in Yasuni - as in any other truly wild equatorial/tropical rainforest environment - you'll have to be really careful with venomous snakes and stinging insects such as wasps and ants. Ticks and mites can also be very bothersome. In any case, never wander alone in the forest, especially at night.

**HEALTH:** This is a sticky subject, as Yasuni - like the rest of the Amazon Basin - is a hotbed of tropical diseases and dangerous parasitic ailments. You never know what you can catch in the Amazon as some diseases haven't even been named yet, but to enter the Park you'll need a Yellow Fever certificate, and the danger of catching Leishmaniosis (a very serious, disfiguring disease transmitted by phlebotomine sandflies) is quite real, especially in waterlogged areas. Never forget to use insect repellent and remember to wear long-legged trousers and long-sleeved shirts, always! Landing in Quito (2.800 meters, 9000 feet) upon one's arrival might also cause altitude sickness to the unaccustomed, so it's advisable to plan spending a couple of days there to better acclimatize. Food is generally quite safe, but when touring the Country avoid street-stalls snacks and always make sure your drinks have been concocted with bottled water.

**CLIMATE:** Ecuador - especially at altitude - is blessed with an eternal spring, and they say one can experience the four seasons in a single day in Quito. Climate in Yasuni however is very hot and humid, with frequent torrential downpours and strong sunlight.

**BESIDES:** Don't forget to visit the historical center of the capital Quito, which has been extensively and lovingly restored and features some spectacular examples of colonial architecture from the Spanish domination. Ecuador is a rather small but exceptionally diverse Country, and it's almost impossible summarizing it in a few lines - a few hours's travelling across it will have one passing through high-altitude plateaus and valleys, stunning Andean landscapes and elfin cloud forests - descending to the dry Pacific coast (and the Galapagos Islands) if going West and to the Amazon rainforest - including Yasuni - if going East. ●