



This Indian pipistrelle was captured in one of the mist-nets the expedition set up at Tamanthi.



Gordon Buchanan and the rest of the survey team worked with local Karen people to track down key species.

# EXPLORING ASIA'S FINAL FRONTIER

## THE AUTHOR

**ROSS PIPER** is a TV presenter, author and zoologist. His latest book, *Animal Earth*, is available now.

The dense forests of Burma, long closed to outsiders, harbour wild elephants, elusive cats and countless species never before described. **Ross Piper joins a BBC survey expedition on a groundbreaking journey into the unknown.**

Investigating the burrow of an elephant dung beetle involves certain risks. Hoping to locate the insect's brood chamber, I plunged my arm deep into the cavity; it swallowed my forearm, up to the elbow and above. As I probed around blindly, I felt a stab to my index finger, followed by a searing pain; I yanked my hand from the burrow and was alarmed to see two puncture marks on my throbbing digit. Clearly a bite – but from what?

My mind raced. I was a day's walk from base camp, so if the bite had been inflicted by a venomous snake I could be in big trouble. I needed to catch the culprit – and fast – so that I could take a better look at it.

I began to dig frantically. Within seconds a small, very fast tarantula scuttled out, its escape foiled by a big specimen pot I had to hand. I breathed a sigh of relief: the bites of these spiders, though painful, are not dangerous. I'd live to tell the tale, I reflected, as I began the long walk back to base camp.

## JOURNEY INTO MYSTERY

This encounter was my rather alarming introduction to Burma (Myanmar), a country that has been largely off-limits to foreign scientists for more than five decades. I had joined a two-month expedition – a collaboration between zoologists and a team of BBC film-makers – to document the wildlife of this long-isolated country. We were accompanied by a retinue of Burmese people who guided, cooked and helped us move our equipment from one location to the next, and government observers to ensure that we didn't stray from the approved itinerary.

Burma sits between the Indian subcontinent, China's Himalayan plateau and South-East Asia; geographically it's a transition zone between the three, a fact reflected in its

Some of the locations that the team visited could only be reached by river.





Burma is considered one of the last strongholds for wild Asian elephants, though fewer than 2,000 may survive here.

flora and fauna. It encompasses some of the most extensive swathes of forest surviving in mainland South-East Asia, and our main objective was to build a case for the long-term protection of these precious habitats.

Our first destination was the remote mountain range of Rakhine Yoma, rumoured to harbour significant populations of Asian elephants. Providing proof that family groups of elephants do thrive here was a key aim – but the odds were against us in the short time that we had.

Locating and tracking them in the blazing sun among the maze of steep ridges was a tough challenge; elephants, though large, melt into the jungle at the first sign of humans. Indeed, the forest was so dense and the elephants so stealthy that, our local guides warned, we could be just 5m from one yet be unaware of its presence. In fact Chris Wemmer, one of our party and a zoologist who has visited Burma numerous times over the past 25 years, had never seen a wild elephant.

Expectations suitably dampened, we split up to explore the area. I joined one film crew around the village of Taung

Lay where, according to recent reports, elephants were raiding crops. The villagers pointed us in the direction of forested ridges above the dry paddy fields; there, they assured us, we'd find our quarry.

We followed a riverbed for several hours before, to our delight, we discovered a

## THE TRANQUILLITY OF THE FOREST WAS SHATTERED BY AN ALMIGHTY THRASHING AND TEARING OF VEGETATION AS A HERD OF ELEPHANTS CHARGED AT US.

trail – recent prints, then fresh dung. The tracks headed up steeply through a dense stand of wild banana trees, then into incredibly thick forest bristling with all manner of spines, thorns and tangled vines.

Before long the air was heavy with the scent of elephants and buzzing with the clouds of flies that always accompany them. We knew we were close – but not just how close, till the tranquillity of the dark forest was shattered by an almighty thrashing and tearing of vegetation.

A herd of elephants charged straight for us, and we threw ourselves behind whatever cover we could find – in my case, a buttress root – before five of the huge beasts crashed past. Then, as fast as they had appeared, they were gone, dancing swarms of flies the only echo of our close encounter.

### MISSION: UNCOMFORTABLE

That nerve-racking run-in had at least provided concrete evidence of one family group of elephants, so I returned to camp to continue with other aspects of our survey. A range of tools – binoculars, camera-traps, cage traps, pitfall lines



and an array of nets – were employed as we systematically recorded mammals, birds, insects and spiders in the forests surrounding our base.

Some creatures made it easy for us by scampering between our tents. A lovely *Scolopendra* centipede, just a little shorter than my forearm and packing a nasty bite, scuttled through in broad daylight.

After a couple of weeks, we moved on to another location within the Rakhine Yoma Mountains, a drier deciduous and semi-evergreen forest along the Salu River. The spot was even less accessible than our previous base, with only one way in: a two-day hike along a riverbed, lugging all of our gear.

My mission here was to lay my hands on as many invertebrates as possible. Knowing that many insects swarm to light, I built a treetop trap with a lamp and a white sheet. As night fell, a dazzling array of insects converged on the sheet, including some incredible wasp-mimicking moths and the biggest, most odorous burying beetles I have ever seen.

### TRAGIC TRADE

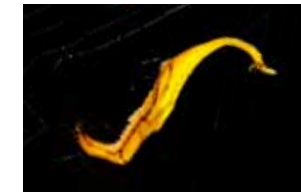
Even in these remote forests we found evidence of human activity. Many areas had been burned recently, while larger animals were notably absent – particularly near rivers.

To investigate the trade in wildlife, cameraman Gordon Buchanan visited Mong La, a town in the north-east on the Chinese border. Here he found just about every large Burmese forest animal (and parts from them) for sale in an open-air market. He also saw lorises and other small arboreal mammals in cages, destined for the pet trade.

Large cat skins, pangolin scales and bear gallbladders

Top: weather systems moving in from the Indian Ocean dump their rain on the high ground in western Burma, feeding the many rivers in the area (here, the Nam Khan River). Below: another flying treasure discovered in a mist-net – the beautiful blue-eared kingfisher.

## BURMESE BUG SPOTTER WHAT THE TEAM DISCOVERED



### ARACHNURA SP.

The range of spiders we saw was amazing. This *Arachnura* sp., found at our Salu River base, mimics a bit of withered vegetation.



### LONGHORN BEETLE

These insects provided great amusement as they careered out of the darkness towards our lights. We found this *Batocera* sp. in Tamanthi.



### BLIND SNAKE

These tiny, enigmatic reptiles are rarely seen. Two of these *Typhlops* sp. ended up in the pitfall traps near our Salu River base camp.



### CLEARWING MOTH

Some of the clearwing moths are incredible wasp mimics. We trapped this day-flying one in Tamanthi, but didn't know the species.



### JEWEL BEETLE

After several years as wood-eating larvae, adult beetles emerge en masse. This impressive *Catoxantha* sp. was also captured in Tamanthi.



### CONOPID FLY

Another Tamanthi discovery, this parasite lays its eggs in stinging insects, and is a dead ringer for certain wasps – it even flies like them.



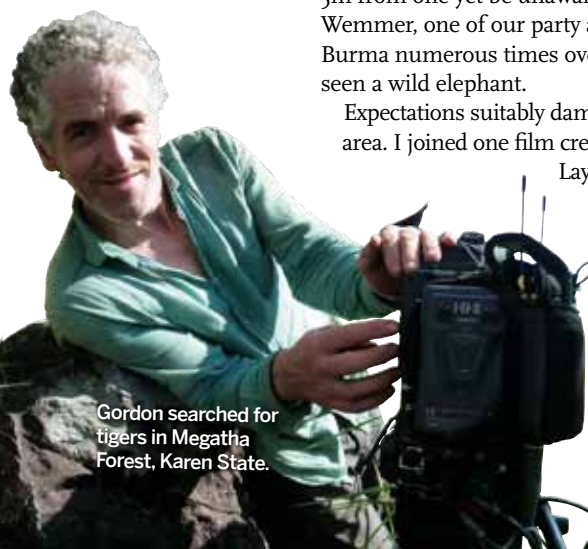
### MANTIS-FLY

This lace-winged insect flew straight into my face during a foray into Tamanthi Forest. It is a new species and, probably, a new genus.



### LEAF-BEETLES

This unidentified species of tortoise beetle, found in the Rakhine Yoma Mountains, is one of many leaf-beetles that abound in the tropics.



Gordon searched for tigers in Megatha Forest, Karen State.



## YOU KNOW YOU'RE IN THE BACK OF BEYOND WHEN THE ONLY MAPS AVAILABLE WERE PRODUCED BY BRITISH FORCES IN WORLD WAR II.



Above: an infra-red camera-trap photographed this clouded leopard slinking across a track. Poachers target the species for its pelt.

Right, above: this longhorn beetle hurtled into camp, attracted by the team's lights. Right, below: observation platforms high up in the trees gave the expedition excellent views over the forest.

were arranged alongside a veritable field guide of other creatures, most of which had been hacked up ready for the dining table. This tragic display could be a portent of what's in store for Burma's wildlife as the country opens up to international trade and local incomes rise.

Back at camp, more forest creatures started to put in appearances. Snakes had so far proved elusive, but in the village of Salu we spotted a juvenile king cobra – still over 2m long – that slithered up into a tangle of vines harbouring a number of birds' nests. Harried by the residents, it beat a hasty retreat back to the ground, rearing up to take a good look at us before disappearing into the undergrowth.

Larger animals were thin on the ground around camp but we made some important finds farther afield: evidence of sun bears with cubs, clouded leopards, even the elusive Asiatic golden cat. It was an uplifting end to our whirlwind survey of Salu, a final boost as we prepared for the long journey to our final – and most intriguing – destination.

### PURSUE THE FUNKY GIBBON

Tamanthi Wildlife Reserve is a sprawling forest in northern Burma. Even compared with our previous isolated camps, it's truly remote; as we approached, I felt as if we were venturing into *terra incognita*. Our journey took us through frontier settlements where cash is unknown; even daily necessities are bought with gold directly from the numerous mines in the area. You know you're in the back of beyond when the only maps available were produced by British forces in World War II – and even those dismiss huge

swathes as simply "Dense Jungle".

Tigers have been recorded in the reserve, but the reports date back several years. Our core mission was to establish whether they are still present or – like the local populations of Javan and Sumatran rhinoceros – poached to extinction. You can watch the series to learn what we found!



Over three nights this light-trap in Tamanthi attracted about 500 moth species.

## NOW YOU DO IT

### GETTING THERE

► There are no direct flights from the UK to Burma. Several airlines serve Yangon (Rangoon) via South-East Asia, including **THAI Airways** (0844 561 0911; www.thaiairways.co.uk) from London Heathrow via Bangkok, and **Malaysia Airlines** (0871 423 9090; www.malaysiaairlines.com) from Heathrow via Kuala Lumpur.



### TOURS

► **Naturetrek's** (01962 733051; www.naturetrek.co.uk) 'Burma Highlights' wildlife and cultural tour visits Yangon (including the Shwedagon Pagoda, above), Hlawga National Park, Inle Lake, Kalaw, Mandalay and Bagan, with an optional Nat Ma Taung (Mt Victoria) extension to spot montane bird specialities.

► **Greentours'** (01298 83563; www.greentours.co.uk) itinerary covers similar spots plus Mt Popa.

### FURTHER INFO

► **Myanmar (Burma)** by Lonely Planet (RRP £15.99, ISBN 9781741794694).

► Buy on p91 for £XX.XX, quoting code W1213/XX.

### WHEN TO VISIT

► **Winter** (December–February), when it is cool and dry, is best. **October, November and March to mid-May** are mostly dry but much hotter. In the **monsoon season**, from late May to September, roads become impassable.

### VISAS

► A 28-day **tourist visa** costs £14 from the embassy in London (www.myanmarembassy-london.com).

## ETHICAL TRAVEL



Some markets sell products from poached species

Tourists, particularly those travelling independently, can help locals; Burma's people badly need tourism jobs and income, and welcome contact with foreigners. To reduce government revenue and make your visit a positive one, follow these tips:

- Stay at privately owned hotels and guesthouses.
- Travel independently or in a small tour group.
- Spread your money widely – eat and shop in small, family-owned venues.
- Contribute to local charitable causes.
- Buy handicrafts direct from artisans.

- Don't buy wildlife products that may derive from protected species.
- Talk to local people, and allow them to lead the conversation – don't ask questions about politics.
- If travelling in a group, question your tour operator about their suppliers.
- Be aware that some money inevitably reaches the government, in the form of taxes and entry fees to tourist hotspots such as the Shwedagon Pagoda.
- Consider avoiding the domestic airlines (especially state-owned Myanmar Airways) and the government-owned railway.



# THE INFORMATION

**BURMA** Nestling between India, China and Thailand, Burma hosts species shared with all three, plus many endemics.

## THE NAVIGATOR



### Nat Ma Taung (Mt Victoria)

Burma's second-tallest peak (3,053m) offers the chance to explore montane habitat and watch profuse bird life among rhododendrons and bamboo. Highlights include the white-browed nuthatch, which is endemic to the Chin Hills.

### Bagan

This vast plain littered with temples dating from the 11th to the 13th centuries offers the chance to spot endemic birds such as the white-throated babbler, and butterflies including the leopard lacewing and magpie crow.

### Inle Lake

Famed for the leg-rowing style of its fishermen, Burma's second-largest lake is home to profuse bird life. Watch for purple heron and pheasant-tailed jacana, plus local specialities such as Jerdon's bushchat and collared myna.

Big cats weren't our only focus, though, and the team soon got busy scouring the forest for other animals. Shortly after our arrival a group of hoolock gibbons was spotted, and a small team of us set off to capture footage of these extremely rare apes. The result was a farcical game of musical statues. While the gibbons sang their long, piercing calls we followed hot on their heels, tearing through the undergrowth – but stopping dead-still whenever they fell silent. This strategy got us to within 50m of the apes, but they're incredibly sharp-eyed and -eared; if we strayed any closer then they went crashing off through the trees.

During one pause a large insect fluttered into my face. I was delighted to recognise a mantis-fly, a member of a rarely encountered family with a gruesome life-cycle: the larvae of some of these species develop in the egg sacs of spiders, feasting on the arachnids within (see sidebar, p77).

### FEARS FOR THE FUTURE

Such finds make any expedition worthwhile. They show us just how much of the living world remains to be discovered, and that the age of exploration is far from over. During our trip we documented some amazing animals, but most of the territory on those old maps remains unexplored. I hope that others will follow in our footsteps, but the clock is ticking. As Burma's doors open wider, its natural resources are ever more vulnerable. We can only hope that its government will think carefully about the long-term future of its wild places and the wildlife inhabiting them. 🐾

### FIND OUT MORE

**CRASH TWO** *Wild Burma: Nature's Lost Kingdom*, a series in three episodes, is due to air late November. Check *Radio Times* for details.