#### **TYPHOON ISLAND**



1 x 49' STEREO, 16:9

The small, crowded, high-tech island of Taiwan has a remarkable wild side that few people beyond its shores are aware of. This spectacularly mountainous island off the coast of China was once known as Ilha Formosa, the beautiful island. It has long been buffeted by violent typhoons, shaken by destructive earthquakes, and has kept much of its wild beauty despite a recent storm of human progress. It is also one of the world's most surprising wildlife hotspots, with one of the highest concentrations of animal species anywhere. Its forested highlands are still home to bears, monkeys, anteaters, wild deer and a huge variety of little known creatures such as ferret badgers, flying squirrels and civets. The island has many unique species, including a monkey - the Formosan macaque - and a primitive wild goat - the Formosan serow- along with many smaller mammals, birds, insects and reptiles. This revelatory film brings Taiwan's many surprises to a worldwide audience for the first time. It captures the remarkable and distinctive beauty of its snow-topped mountains, spectacular river gorges and steamy forests. It also reveals how a unique mix of ancient cultures have transformed Taiwan over the last 6000 years and how so many intriguing animals have survived Taiwan's violent winds of change.

# THE LAND OF TYPHOON AND EARTHQUAKE

Taiwan lies in the path of the Pacific Ocean's "typhoon alley", and three or four typhoons batter the island every year between July and October. Savage winds and wild seas whipped up by passing typhoons create havoc along the coasts, while direct hits can cause scores of deaths and wide scale destruction across the island. Such violent weather is no recent phenomenon here, and one historian recorded that "T'ai fung" described wild swirling winds in Taiwan as far back as 1694.



Taiwan is also shaken repeatedly by forces deep below the island, and some 15000 earth tremors are recorded every year. Most are imperceptible, but many rock the whole island and twenty major earthquakes have struck in the last century. The last big earthquake measured 7.6 on the Richter scale, wrecked some 6000 buildings and killed over 2000 people. So much destructive energy is released as Taiwan's rugged landscape is still being thrust up like a ruck in the carpet of the earth's crust. The island's mountains are being pushed up a few millimetres a year from below as the Philippine sea plate grinds into the mainland of Eurasia. The island's high central spine, once an ancient seabed, has been thrust up thousands of meters in just 4 million years - a blink of the eye in geological terms. These young mountains are now nearly as high as the Alps. The tallest peak, Yu-Shan – the Jade mountain - reaches nearly 4000 meters, and over 200 peaks top 3000 meters. Taiwan's volcanoes last erupted around 200,000 years ago but the island's numerous hot springs, mud volcanoes and steam vents offer a hint of the brooding powers deep below the ground. Taiwan's violent geology and weather have created a dramatic mountainous landscape, scored by landslides and riven by spectacular river valleys. Taroko gorge is still being formed as the Liwu river carves its way down through rocks that are still being forced up from below. Sheer marble cliffs now tower up to 600 meters above the river.

# WILDLIFE RICHES

Taiwan lies on the edge of the tropics, straddling the Tropic of Cancer and is home to an extraordinary variety of animals for an island less than 400 kilometres north to south and around 140 east to west. The keys to such riches lie in Taiwan's mountainous profile and in ancient links with the mainland. Creatures with very different needs have been coming here ever since the island formed. Many have found ideal homes in a varied landscape that rises steeply from warm subtropical lowlands to high alpine peaks.



Today, Taiwan lies 160 kms off the coast of China, but it hasn't always been an island. Land bridges connected it to the mainland at various times in the past when sea levels were lower than today, allowing creatures from many different parts of Asia to cross over. Many have been isolated on Taiwan since sea levels rose at the end of ice ages over ten thousand years ago. Since then, many unique species have evolved, including huge numbers of insects, many reptiles, and around 15 endemic birds and 10 mammals. Taiwan is home to over seventy kinds of land mammal in total, about the same as Japan which is ten times as large. Taiwan boasts over 500 species of birds, one of the highest densities anywhere and it may have the world's highest concentration of butterflies with around 400 kinds, some 50 of them unique.

As temperatures have risen since the ice ages, tropical species have survived in the lowlands, while cold-loving creatures such as serows, mountain pit vipers and salamanders have moved up the mountains. The Formosan land-locked salmon's ancestors would have migrated to the coast as its close relative the masou salmon of Japan still does. The rare land-locked salmon, though, is now trapped above 1500 meters, living and spawning in one cool mountain stream, as Taiwan's lowland waters are now far too warm for it. Other fish do still migrate to the highlands in spectacular numbers. Millions of small gobies swim in from the sea on the darkest nights of the month and are known in Taiwan as "vulao" or "small moon". These tiny fish run the gauntlet of the lowlands where fishermen, terns and egrets plunder the vast shoals. The survivors overcome a series of rapids and waterfalls, crawling up wet boulders and swimming through films of cascading water as they fight their way as much as a hundred kilometres upriver to reach mountain steams where few fishermen follow.

# ARRIVAL OF TAIWAN'S UNIQUE PEOPLE



People have lived on Taiwan for at least 5000 years. Although their exact origins are uncertain, the ancestors of today's indigenous people probably came from Indonesia or Malaya rather than China, and are closely related to Polynesians. These people differ greatly in their looks and language from later Chinese immigrants, and lived mainly by hunting and fishing and by growing crops of millet. They came to dominate the mountains, and created dangerous no-go areas for outsiders for centuries. Some tribes protected their lands by hunting the heads of intruders, and heads were still taken until just 60 years ago. A tribal sport with dark origins is still performed today by the Lukai people, who compete to spear an object thrown high into the air. Once, they used a severed head, but a cabbage makes do today. These mountain people had close links with the lush forested landscape they inhabited. They respected the animals they hunted as they believed all forms of life had souls, and they told many tales about the creatures around them. The venomous hundred pace viper became the sacred symbol of the Paiwan tribe who regard this serpent as their ancestor. According to legend, once bitten by this snake, you walked just a hundred paces before dying. The indigenous people's way of life has changed much over the years, but many of their cultural traditions survive in ceremonial costume, song and storytelling. Though they hunted animals and cleared some forest, the impact of small populations of indigenous people was small, and the island and its wildlife survived largely intact.



#### THE WINDS OF CHANGE

Han people began arriving from mainland China over a thousand years ago, but the pace of colonisation accelerated some 400 years ago, when tens of thousands of Chinese families came to Taiwan in just a few decades. Since then, the island has been transformed in many ways. Much natural forest was cleared as rice was planted across the lowlands and bamboo and tea on many mountain slopes. As more people moved in, some wildlife still hung on. Bats were traditionally welcome in Chinese culture as they were viewed as bringers of health, happiness and good fortune, and they were allowed to roost on house beams. Egrets followed the rice harvesters, stalking flushed insects, while flocks of swallows hunted around them on the wing. Another opportunistic creature came to thrive in the stumps of harvested giant bamboo. Male Eiffingeri tree frogs acquire private pools in the rain-filled stumps and lure passing females with nocturnal serenades. The frogs spawn above the stagnant water on the inside of the bamboo stump. The males are wonderful fathers and stay to ward off slugs which try to eat the frogspawn, and they keep the eggs moist by wiping water over them with their feet. Father leaves once the eggs have hatched, but mother frog somehow finds her way back once a week to the same stump she spawned in. Remarkably, she lays unfertilised eggs for her growing tadpoles to eat. Such diligent care is very rare among frogs, but has helped make this tree frog a big success in Taiwan. It has its enemies though: venomous green bamboo vipers lie in wait for them, while the smooth green snake seeks its own quirky prey, earthworms. Once this small, steathy serpent grabs its slimy prey, a tug of war in miniature ensues as the snake battles to drag the worm from its burrow. The busy little Formosan ferret badger also sniffs out worms and anything else it can find on the forest floor.

While some wildlife adapted to human changes, many animals were driven from the lowlands as the numbers of people grew. The mountain forests became an increasingly



important sanctuary for numerous creatures. A few hundred Taiwan black bears still survive in the remote highlands where few hunters ventured. These powerful beasts stalk prey such as Formosan muntjac deer, but a rich crop of acorns is also a big draw for bears. As night falls in the remote forests, a pangolin emerges from its burrow to sniff out its favourite food, ants and termites. This toothless, clumsy-looking creature uses a prehensile tail to help it clamber up into the canopy. Here, it claws its way into a tree ant nest and feasts on the soft white grubs. The massed ranks of defending ants, though, bite the pangolin's nose and squirt acid in its eyes, and eventually force the scaly intruder into an undignified retreat. Nearby, a stealthy gem-faced civet, which is really a carnivore, is tempted into the trees to enjoy a midnight feast of ripe fruit. The formosan leaf nosed bat, meanwhile, hunts on its half-metre wingspan for large cicadas and beetles, which it soon dispatches with razor sharp teeth.

### SURVIVING THE STORM OF HUMAN DEVELOPEMENT

Taiwan's steep, unstable mountains resisted human development in the past and the few mountain roads that have been built suffer frequent collapses. In recent years, though Taiwan's remaining wilderness has come under increasing pressure. The island's human population has risen from around 7 million to 23 million in the last 50 years as Taiwan's "tiger" economy has taken off, driven by modern technology. As demand for living space, food and Chinese medicine from animals increased, all of Taiwan's wildlife was threatened, even in the remote forests. Many animals such as bear, pangolin and land-locked salmon declined hugely and the Formosan sika deer was driven to extinction in the wild. The elusive Formosan clouded leopard may also have disappeared forever, although the fate of this beautiful big cat remains shrouded in mystery. In the last 20 years, new hope for this and many other creatures has been building as a fifth of the island now receives some protection within parks and sanctuaries. With over half the island still forested, and stricter hunting laws imposed, many forms wildlife now have a



chance to recover. Kenting was the first National Park to be founded in 1984 to protect hordes of migrating birds. Tens of thousands of grey-faced buzzards and other raptors pass over twice a year and many drop down to roost overnight. Once hunted heavily, they are now far safer from poachers. Hundreds of thousands of butterflies migrate from all over the island to a few magical valleys in the south. Some of these winter havens have been unwittingly destroyed by development in the past, but others are now protected by the Lukai people for whom butterflies have always been special. Butterflies were believed to number among their ancestors, and butterfly patterns have long been worn as symbols of status. While such traditional links with nature survive, modern Taiwan is also now beginning to reverse the damage of the past. A breeding programme in Shei-Pa park has allowed many young land-locked salmon to be released to the wild and the population has risen from just 300 fish to over 3000 in the last five years. At Kenting park, Formosan Sika deer have been bred in captive herds and some have been set free in the forests. Scientists are now venturing into the high mountains more than ever before, to find out how forest creatures live and to monitor the recovery of wildlife. In the last 20 years, they have discovered a number of previously unknown species, including a weasel, a mole and several kinds of bat, along with countless smaller creatures. A network of automated trip cameras regularly photograph crab-eating mongoose, Siberian weasels, wild boars and sometimes rarer creatures such as bears and yellow-throated martens. The scientists have yet to capture a clouded leopard on camera, though, and this creature has not been recorded with any certainty for over ten years. It may have gone forever, but many experts believe it is still lurking deep in the remote forests. With the numbers of Formosan macaques and other prey species now recovering, this elusive big cat may yet return to some of its former haunts and show its face once more.



Despite the battering it has received from earthquakes and typhoons and from the recent storm of human progress, Taiwan remains a beautiful and endlessly surprising island. Its forested mountain heart, especially, remains a wild sanctuary for a fabulous variety of remarkable wildlife.

#### **MAKING OF**

When Producer Nick Upton began researching "Typhoon Island", he was told that some of the animals he hoped to include in the film were too rare to even glimpse, and that others might possibly be extinct. The dense, steep mountain forests where most animals lived were full of snakes and biting insects, and there were few places to shelter from the frequent bad weather. Used to tough conditions and shy animals, the production team went ahead with the project, but this advice came back to haunt them at times! The filming was fraught with challenges of many kinds, took nearly six months in total, but was ultimately a great success.

Getting around Taiwan's mountains proved slow and dangerous. The highland roads are narrow and twisting and were often blocked by landslides or littered with rocks fallen from overhanging cliffs, while scary drop-offs made meeting other vehicles a constant danger. Close encounters with large trucks racing down the mountains after dark nearly brought filming to an abrupt end on two occasions! Filming away from mountain roads involved hiking along dangerous trails and wading through huge rivers to reach the best locations, camping out when necessary. One trip into a remote mountain area by helicopter lasted a week longer than the ten days scheduled. A passing typhoon, followed by thick fog had forced the helicopter to delay its return. A brief window of clear weather allowed the helicopter to reach the crew just before their dwindling rations ran out. They only narrowly avoided having to hike out along 50 kilometres of landslide-ravaged trails with huge ravines below, while carrying 400 kilos of equipment!



The weather proved challenging in many ways. Temperatures reached 40 degrees Celsius and 100% humidity in the lowlands, and violent rainstorms were frequent, while in the mountains it often froze hard overnight. Visibility frequently changed from a hundred kilometres to a few metres within minutes as sudden mists swirled up from the forests. The crew also wanted to film the impact of destructive storms on the island, and raced to the coast on three occasions to meet approaching typhoons. Twice, they were disappointed when initially violent weather turned to sunshine and light breezes as the typhoons veered off. Taiwanese cameraman Chieh-Te Liang, though, did eventually manage to capture a typhoon's impact, and his camera somehow survived the drenching it received.

The crew stayed in Taiwan throughout the island's worrying SARS epidemic and also experienced 2 earthquakes registering around 6.5 on the Richter scale, one of which knocked them off their feet. When Nick Upton and cameraman Philip Lovel raced onto the street to escape the building they were in, several Taiwanese gave them pitying looks as if there was no reason to be alarmed at such a minor wobble!

Along the way, the crew consumed a mountain or rice and noodles, a forest of bamboo shoots, a river of tea and a trickle of rice wine. They were consistently made welcome in traditional Taiwanese style, given access to all the best filming sites and made many good friends in a remarkable and very surprising island.