

ACKNOWLEDGMENTS

I would especially like to thank the photographers who assisted me with images for this guide—Scott Baker, Irene Dy, Choy Wai Mun, Con Foley, Jon Hall, Sam Hopley, Neoh Hor, Rob Hutchinson, Pitchaya and Rattapon Kaichid, Kwan Choo, Ayuwat Jearwattanakanok, Jeremiah Loei, Bernie Master, Mohd Abdul Muin, Parinya Padungtin, Coke and Sam Smith, William Tan, Tom Tarrant, and Wong Tsu Shi. Thanks also to Will Russell, Greg Greene, Matt Brookes, Erin Olmstead, and Kathi McIvor of Wings Birding Tours for all their support. And to my family, friends, and my Akita—much love.

INTRODUCTION

Southeast Asia is one of the most biodiverse regions on the planet and a wonderful place to start exploring the natural world. This guide is intended to provide an introduction to the unique mammals, birds, reptiles, and other creatures that live on this fascinating continent. The guide does not provide complete coverage of all the wildlife of the region but rather a first taste of the many possibilities. It may be used on a visit to any of the countries of the region. In addition to the species covered, numerous others may be seen on any given visit. I mention a number of these in the section “Guide to the Best Spots for Viewing Wildlife in Southeast Asia,” below. For those who are enticed to explore on a more in-depth level, there are many more detailed volumes available; these are listed in the bibliography.

The species included have been selected on the basis of their relative abundance and/or significance. Each entry discusses the diagnostic features, including the size, color, and behavior of the species, as well as habitat and distribution. My hope is that this introductory volume will foster a wider and more in-depth appreciation of the wildlife of Southeast Asia.

GEOGRAPHIC COVERAGE

This general guide covers all the countries of mainland Southeast Asia but does not include Borneo and Indonesia, although people with a general interest can still use it in those regions too. The guide is designed to give readers an overview of the wildlife of Burma, Thailand, Laos, Cambodia, Vietnam, West Malaysia, and Singapore. The term Malay Peninsula refers to the region that comprises the southern “tail” of Burma, southern Thailand, and West Malaysia (Peninsular Malaysia).

MEASUREMENTS

Measurements given in the species accounts refer to the length of the animal from snout/bill/nose to tail tip.



Map of the region showing in green the area covered by the book.

BASIC TIPS FOR VISITORS

Wildlife documentaries on television may give the impression that finding and observing wildlife is easy, but in reality this is not the case. Most creatures are wary of humans and will disappear from sight well before most people have any inkling that the animal is close by. Following are some tips for observing wildlife— suggestions for ways to approach animals or move through the forest that will increase your chances of finding some of the amazing wildlife of this region.

Be prepared

- Choose a good location to see wildlife; national parks or reserves are always good, but even urban parks can harbor many bird and insect species.
- Study before you go; know about the behavior, what habitats the species is likely to be found in, and how to identify the species you are likely to see.
- Have the right equipment; good binoculars are invaluable, and you may wish to carry a camera to record your sightings.
- Wear clothing suitable for the environment; subdued colors are recommended as they blend better into the surroundings. Avoid perfume and scented products.
- Be prepared—pack water, food, hat, sunscreen, and insect repellent.



Birding at Van Long, near Cuc Phuong National Park in Vietnam.

Find and observe

- Don't talk loudly or wear clothing that makes excessive noise, such as some rain jackets. Tread lightly to avoid breaking sticks and alerting animals to your presence.
- Listen, pay attention, and look for tracks and other signs of wildlife. If you are alert to certain signs, animals can signal their presence. Look for scats (animal droppings), tracks, nests, scratch marks, and other clues. Such signs are very often peculiar to a specific species.
- Be patient; remain still and wait in one place or walk slowly and quietly, always staying alert to sounds and movements. Choose a place that may attract wildlife, such as a water hole or fruiting tree, and plan to spend time quietly waiting and observing. When wildlife does appear, resist the urge to point or shout to companions.
- Don't sleep in. Most animals, especially birds, are more active early in the morning. The evening, just before dusk, can also be a great time to observe wildlife.
- Keep notes—what you see, where, when, and details of the animal's behavior. You may want to make sketches of what you see for later reference.

Respect wildlife

- Most important, respect the animals and the habitat. Don't approach wildlife too closely, and don't try to catch or prod an animal.
- Don't disturb wildlife; animals can be unpredictable and potentially dangerous. And you may be potentially dangerous to the animal.
- Never feed wildlife. It can create a dangerous situation for both you and the animal.

Respect other people

- Don't trespass.
- Don't leave the trails or get lost in the forest.

What you'll need

- Binoculars and/or a spotting scope
- A field guide
- A map
- A hat
- A camera
- Water
- Food
- A flashlight
- Rain gear—a jacket, poncho, or umbrella. Remember, it can get very hot inside a jacket in the tropics. At lower elevations a poncho or umbrella is preferable over a jacket, which will be more useful in mountainous areas.
- Suitable footwear for the often warm, humid conditions. Consider carrying a spare pair of socks.

GUIDE TO THE BEST SPOTS FOR VIEWING WILDLIFE IN SOUTHEAST ASIA

Throughout Southeast Asia, with the exception of Malaysia, forest and wildlife reserves were declared only after 1900; most were established from the 1920s onward. Thailand did not declare its first national park until 1962, the last nation on mainland Southeast Asia to do so. Happily, an excellent network of national parks and reserves now exists throughout the region, albeit with varying degrees of protection, which is dependent upon budgets, levels of corruption, and many other factors.

Many of these protected areas are important sources of revenue in the form of tourism dollars for local communities and national economies alike. Visitors can generally travel independently or with guided tours to all the spots mentioned below, as well as to a number of other possibly lesser-known reserves. Many small businesses in all the countries of Southeast Asia provide excellent services to foreign and local visitors, including wildlife viewing opportunities; these can be found with a simple Internet search. Tourism dollars can benefit local people and serve as an impetus to the continued protection of the wonderful wildlife and wild places of Southeast Asia.

BURMA (MYANMAR)

Burma is mainland Southeast Asia's largest country, stretching 2,100 kilometers from north to south. Biogeographically it is a meeting point of the South Asia, North Asia, and Southeast Asia regions. In the north, the snow-capped mountains of the Himalayas feed the mighty Ayeyarwady (Irrawaddy) River and other rivers that fan down through the wide, central plains to the coastal deltas of the Bay of Bengal. The northern forests constitute one of the largest contiguous forests in Southeast Asia.

The climate is heavily influenced by two subcontinental monsoons. The southwest monsoon brings the majority of the country's rainfall and takes place from June through October. During this summer wet season, the coastal and mountain areas receive the majority of the rain. The northeast monsoon usually arrives in November, lingers until March, and brings far less precipitation. The coolest season is November through February, while March through May, in the lead-up to the southwest monsoon, can be extremely hot.

Burma harbors some of the richest biodiversity in the region—well over 11,000 species of flowering plants, including 841 species of orchids; over 1,000 species of butterflies; and 1,017 species of birds.

BAGAN

The historic site of one of the most important ancient kingdoms of the region, this widespread area of temples and citadels, many dating back more than a thousand years, also harbors a plethora of birdlife. Located on the east bank of the famous Ayeyarwady (Irrawaddy) River, Bagan is one of the richest archaeological sites in Southeast Asia. Birding among the ancient ruins can be very rewarding, yielding



A view of Bagan in Burma.

sightings of four of the five endemic birds of Burma—White-throated Babbler, Burmese Bushlark, Jerdon's Minivet, and Hooded Treepie, together with many other interesting birds. A short boat ride along the Ayeyarwady River is a good way to look for Indian Sand Lark, Indian Skimmer, River Tern, Black-bellied Tern, Pied Kingfisher, Laggar Falcon, and White-tailed Stonechat, as well as Small Pratincole, along with other waterbirds.

Best time to visit: November through February, when birdlife is at its most active and abundant.

MOUNT VICTORIA

Nat Ma Taung National Park is a large protected area about 130 kilometers from Bagan in Chin State. The park surrounds the 3,053-meter-high Mount Victoria and is comprised of dipterocarp, pine, oak, and oak-rhododendron forests. This is one of the best areas to view wildlife in Burma—populations of Western Hoolock Gibbon, Bengal Slow Loris, Clouded Leopard, and Gaur. It is especially rich in birdlife. The national park falls within the Eastern Himalayas Endemic Bird Area, and 254 bird species have been recorded, including White-browed Nuthatch, which is endemic to the park. Other birds of special interest include Himalayan Cutia, Hume's Pheasant, Brown-capped Laughingthrush, Streak-throated Barwing, Chin Hills Wren-Babbler, and Mount Victoria Babax. This is also an excellent area for butterflies; almost 80 species occur here, including the rare Bhutan Glory.

Best time to visit: October through mid-May is fine, but November through February is ideal.



The view from Mount Victoria, Burma.

KALAW AND INLE LAKE

These two destinations lie on the Shan Plateau, a highlands area of hills, river valleys, and plains in the northeast. Kalaw is a hill station, a town founded by the colonial powers as a refuge from the stifling summer heat of the plains. Around the town, one can see Spectacled Barwing and White-browed Laughingthrush. The nearby remnant evergreen broadleaf and pine forests support a diverse avifauna, and a trip to Yay Aye Kan lake may yield sightings of the near-endemic Burmese Yuhina, Silver-eared Laughingthrush, Dark-backed Sibia, Common Green Magpie, and Pin-tailed Green Pigeon.

Inle Lake is the second-largest lake in Burma and famed for its “leg rowers” (the boatmen operate their crafts by standing with one leg wrapped around the long oar). A boat ride on the lake is worthwhile as it will allow you to search for the rare and local Jerdon’s Bush Chat as well as a variety of waterbirds, including Ferruginous Duck and Pheasant-tailed Jacana. Groups of Brown-headed Gulls often follow the many boats on the lake, while Marsh Harriers regularly hunt over the lake edges and Striated Grassbirds call from the reed beds. Fascinating cultural traditions of numerous villages focus on the lake, and the distinctive houses, fishing boats, and floating vegetable gardens add to the unique experience of attending local events.

Best time to visit: October through April.



Wildlife watching on Inle Lake in Burma.

YANGON (RANGOON)

There are two good wildlife-watching sites near Yangon: Hlawga National Park and the Moeyungyi Wetland Wildlife Sanctuary.

Hlawga, located 35 kilometers north of the city, is a great introduction to the wildlife of Burma. In this 6-square-kilometer park of semi-evergreen and mixed deciduous forest surrounding several attractive small lakes, there is a healthy population of Rhesus Macaque as well as Hog Deer, Sambar, and Wild Boar. Almost 180 species of birds have been recorded, including Asian Openbill, Besra, Rosy Minivet, Racket-tailed Treepie, Black-naped Oriole, Greater Racket-tailed Drongo, Puff-throated Babbler, Lesser Necklaced Laughingthrush, Forest Wagtail, and Scarlet-backed Flowerpecker. Hlawga is also a good site for spotting the increasingly rare and elusive Pale-capped Pigeon. There is always a chance of seeing a Pangolin or Reticulated Python as well.

Moeyungyi lies 121 kilometers north of Yangon and encompasses an area of approximately 125 square kilometers. This reservoir was built during the British colonial period; the water is used for irrigating paddy fields. The wetlands include a large freshwater lake with extensive shallow margins, and one may see great rafts of ducks and large numbers of birds of prey. Some of the rich birdlife of the area includes Lesser Whistling-Duck, Cotton Pygmy Goose, Spot-billed Duck, the globally threatened Baer's Pochard, several species of egrets and herons, Indian and Chinese Pond-Herons, Cinnamon Bittern, White-breasted Waterhen, Pheasant and Bronze-winged Jacanas, Eastern and Western Marsh-Harriers, White-breasted Kingfisher, Blue-tailed Bee-eater, and Bluethroat.

Best time to visit: October through April.

THAILAND

Thailand is bordered to the north by Burma and Laos, to the southeast by Cambodia, and to the south by Malaysia. The north of the country is mountainous; the highest point is Doi Inthanon at 2,565 meters. The northeast flattens out into the Khorat Plateau, bordered to the east by the Mekong River. The Chao Phraya alluvial plain dominates the center of the country, and the south consists of the Isthmus of Kra, a narrow land bridge that connects to the Malay Peninsula.

The Thai avifauna comprises Sino-Himalayan, Indo-Burmese, Indo-Chinese, and Sundaic (Malaysian and Indonesian) elements, with large numbers of migrant visitors from the Palaearctic Region (northern Africa, Europe, the northern third of the Arabian Peninsula, and Asia north of the Himalayas). Thailand's extensive reserves and wild areas harbor some of the richest wildlife in Southeast Asia, including some of its most charismatic and endangered species, such as Tiger, Asian Elephant, Clouded Leopard, Gaur, White-winged Duck, and Green Peafowl. A very diverse range of habitats contributes to this rich fauna; in Thailand one can find montane and moist evergreen forests, deciduous and deciduous-pine forests, and swamps and mangroves. Thailand still faces many challenges in conservation, though, including habitat loss and fragmentation, as well as poaching.

Most of Thailand, including the north and west, has a savanna climate, with distinct wet and dry seasons, while the south and the east have a tropical monsoon climate. The dry season starts in November, with lower temperatures, which gradually climb until they rise dramatically in March, when the thermometer often reaches well over 38°C. The southwest monsoon arrives at some point between May and July, ushering in the rainy season, which lasts through October; this time of year is cooler but very humid.

DOI INTHANON NATIONAL PARK

One of the most exciting aspects of Doi Inthanon is that the central road transects the lowland dry dipterocarp forests and reaches moist evergreen forests and ultimately montane cloud forests. This allows observers to sample a wonderful variety of the wildlife of northern Southeast Asia. Starting at the top and working down, one can experience an array of habitats and the attendant wildlife. On the boardwalk at the Doi Inthanon summit, affectionately known as The Bog, one may encounter a number of skulking birds; as the sun rises, remarkable mixed flocks of birds take advantage of the warming rays. It is thrilling to experience the non-stop activity of Chestnut-tailed Minlas, Mrs. Gould's Sunbirds, Rufous-winged Fulvettas, Yellow-bellied Fantails, Blyth's Leaf Warblers, Dark-backed Sibias, and numerous other small, active birds. Moving down the mountain, you may find many species of barbet, forktail, babbler, bulbul, and plenty more, often accompanied by a background chorus of calling gibbons.

Best time to visit: May through November is the best time to see the many waterfalls here, but for wildlife watching March through June is ideal.



Entering Khao Yai National Park in Thailand.

KHAO YAI NATIONAL PARK

Well known for its abundance and diversity of birdlife, Khao Yai offers a fabulous representation of the Indochinese fauna, with arrays of small, mixed-flock bird species as well as many elusive ground-dwellers, not to mention raptors, hornbills, and nightbirds. The 300-square-kilometer area comprises dry deciduous and evergreen forests, tropical moist evergreen forests, hill evergreen forests, and grassland. A huge number of species has been recorded here—around 2,000 species of plants, over 300 bird species, 70 species of mammals, and 74 species of reptiles and amphibians. Thailand's third-largest national park, it is also the country's most popular. Its proximity to Bangkok makes it a popular destination for locals and foreigners alike. It is known for its waterfalls and forest trails, and wildlife-viewing opportunities abound. Two observation towers allow possibilities of encounters with Asian Elephant, Gaur, Golden Jackal, and Wild Pig. Gibbons are often heard, especially in the mornings; with luck, they can be found high in the treetops of the excellent forests here, maybe even in company with Great Hornbills.

Best time to visit: December through March, when it's a bit cooler.

KAENG KRACHAN NATIONAL PARK

Covering almost 3,000 square kilometers, Kaeng Krachan is the largest national park in Thailand and one of the most exciting nature reserves in Southeast Asia. It is contiguous with a forest reserve in southern Burma that covers an astounding 30,000 square kilometers. The only access to the park is via a 36-kilometer-long dirt road; it is in good repair, and the park provides jeep transport within the park. This huge area of evergreen forest on the southern Burmese border simply abounds with all sorts of exciting wildlife. The mixture of birds from the Sundaic region (Malaysia and Indonesia) and the Orient is one of the most exciting aspects of this superb reserve. Over 420 species of birds have been recorded here. The



reserve also holds many charismatic mammal species, including Leopard, Tiger, Asian Elephant, Gaur, and Banteng, as well as a number of primate, deer, and civet species, among others. It is also one of the best places in Southeast Asia for butterfly watching, with over 300 species.

Best time to visit: November through February, when it is cooler and drier.

LAOS

A landlocked country bordered by Burma, China, Thailand, and Vietnam, Laos could be described as the center of the Southeast Asia region. With a population of just over 7 million, it is also the least populated country in mainland Southeast Asia.

The country is largely mountainous; elevations are mostly above 500 meters. The terrain is characterized by steep valleys, which are generally poor for agriculture. There are extensive plains in the southeast, which is primarily used for rice cultivation and livestock, but flat areas make up only about 20% of the total surface area. The western border with Thailand is demarcated by the Mekong River, while the Annamite Mountains form the eastern border with Vietnam. Laos has over 40% forest cover, and the Lao government has designated 24 national forest protected areas, known as National Biodiversity Conservation Areas, to conserve biodiversity. But despite nearly 5 million hectares of land lying within these protected areas, forest cover in Laos has declined dramatically over the years. Only about 4% of the land area is considered arable, and there is extensive forest cover, but this has declined significantly since the 1970s, mainly due to commercial logging and slash-and-burn agriculture.

Over 80% of the population of Laos is rural, and the people rely to varying degrees on natural resources. In recent times, there has been increasing foreign investment focused on exploiting the country's rich mineral and forest resources. Sales of endangered wildlife have also increased, and Laos has gained notoriety as a haven for the trade in wildlife, apparently driven increasingly by domestic demand from affluent politicians and urban residents, as well as Chinese tourists, who seek animal parts and meat for personal consumption. It is also likely that many wildlife parts are used for traditional medicines.

The climate of Laos is influenced by the southwest and northeast monsoon air masses. It can be described as a tropical monsoon climate, with a pronounced rainy season—the southwest monsoon, from May through October—bringing 90% of the annual precipitation. The southwest monsoon is followed by a cool dry season from November through February, and a hot dry season in March and April.

With its extensive forest cover, Laos is host to a wealth of wildlife. But ecotourism is a new concept in this relatively poor country, and viewing opportunities are not widely available. That said, more and more tourists are visiting, and the opportunities are increasing. Many of the wildlife populations of Laos are depressed due to subsistence hunting, and growth in the ecotourism sphere can only benefit the wildlife, as well as the people.

Laos has around 700 species of bird species, including one endemic—Bare-faced Bulbul, which is found in the limestone karst forests of the Annamite Mountains

in the central part of the country. Other species of note include Limestone Leaf Warbler and Sooty Babbler, both of which are endemic to the Annamite Mountains and were described as recently as 2009. Laos also has the largest population of Asian Elephants in Southeast Asia.

NAM KADING NATIONAL PROTECTED AREA

This large reserve protects an area of rich biodiversity roughly in the center of the country. The vegetation here is dry evergreen and semi-evergreen forest; the terrain is rugged and mountainous, with large rock outcrops, limestone formations, and rugged, boulder-strewn canyons. The elevations range from 500 to 1,200 meters. Four main rivers cut through the Nam Kading, an important watershed and fish breeding ground. The largest of these is the Nam Kading, whose name means “water like a bell.” It is a major tributary to the Mekong River.

The park itself is largely inaccessible; there are no roads, and the rivers are impassable, so most visitors who wish to experience the area travel to the village of Na Hin, along Route 13 about 190 kilometers east of the capital of Vientiane, a journey of around three and a half hours. Route 13 skirts the southern boundary of the reserve, allowing some limited access, especially to the limestone pinnacles. For this reason, a visit to Nam Kading is recommended only for birders wishing to see the endemic bulbul and other specialties.

Forty-three species of mammals and 234 species of birds are found in the park. It is considered a highly important wildlife area with its populations of highly endangered animals, such as Tiger, Asian Elephant, and Gaur; however, these populations are not large. There are at least 13 globally and 12 regionally threatened mammals, including Gaur, Sun Bear, and both Northern and Southern White-cheeked Crested Gibbon. The Lao Langur is a range-restricted and increasingly rare primate; it is closely associated with forests in limestone karst environments, but also with non-limestone rock outcrops on steep or precipitous mountain slopes. It is folivorous (leaf-eating), both terrestrial and arboreal, and diurnal.



The limestone karsts of Nam Kading, Laos.



A view over Nam Kading Protected Area in Laos.

The endemic Bare-faced Bulbul can often be seen perched atop the pointed tips of the limestone pinnacles. Other birds include Moustached, Red-vented, and Green-eared Barbets; Red-headed and Orange-breasted Trogons; Limestone Wren-Babbler, and a variety of woodpeckers, maybe even the rare Red-collared and Pale-headed Woodpeckers.

Best time to visit: November through early March, when wintering species are present; starting in April it becomes increasingly hot, and the rainy season begins in May and continues through October.

CAMBODIA

This small country supports 24 threatened bird species—a remarkable testament to the extent and quality of the forests, grasslands, and wetlands. The landscape of the country consists of the lake and floodplains of the Tonle Sap Basin, the dry dipterocarp forests of the Northern Plains, the evergreen forests and grasslands of eastern Monduliri Province, and the rain forests of the Cardamom Mountains in the southwest.

About two-thirds of the country remains forested, but the land is increasingly being degraded by opportunistic slash-and-burn agriculture, logging, and poaching. Sadly, the rate of deforestation in Cambodia is now considered to be one of the highest in the world. Much of the Northern Plains is still covered with intact and extensive areas of deciduous dipterocarp forest, with scattered examples of the seasonal water holes called *trapeangs* in Khmer, dense riparian evergreen forests, and large grasslands. The forests of the Northern Plains once spread across much of the region and were home to an aggregation of large mammals and waterbirds that rivaled those of the savannas of Africa. These forests and their wildlife have largely disappeared, and the plains of Cambodia

now represent the largest remaining contiguous block of this unique and critically important habitat.

As elsewhere in Southeast Asia, the tropical climate is dominated by monsoons, and Cambodia has a wet and a dry season of roughly equal lengths. Temperatures and humidity are typically high throughout the year. The cooler wet season runs from May through October, while the dry season, which starts in November, sees temperatures soaring over 38°C by the end of April.

TONLE SAP

The remarkable Tonle Sap lake and its surrounds support large breeding populations of Greater Adjutant, Sarus Crane, Milky Stork, and Bengal Florican—birds that are approaching extinction elsewhere in Asia. The Tonle Sap Biosphere Reserve, encompassing the enormous lake and the surrounding areas, hosts one of the largest waterbird colonies in Asia. The Prek Toal Bird Sanctuary, a core zone of the reserve, is located on the lake's northwestern shore. Small boats allow visitors to travel quietly up the small streams to platforms overlooking the breeding colonies; from these vantage points, one can be treated to great views of rare Greater Adjutants or Milky Storks perched on trees in the inundated forest. The reserve has been described as one of the most important breeding grounds in Southeast Asia for threatened waterbirds.

Best time to visit: During the dry season from October through April, when large numbers of migratory and breeding birds congregate. Later in the dry season the low water levels can make the reserve difficult to access.

KRATIE

The small town of Kratie is located on the banks of the mighty Mekong River. Taking a boat out onto the river is the best way to enjoy views of the delightful Mekong Wagtail, the river's only known endemic bird, and pods of friendly Irrawaddy Dolphins quietly cavorting in the muddy waters. Sadly, fewer than 80 dolphins remain in the river.

Best time to visit: December through March.

TMATBOEY

This small and isolated village in the Kulen Promtep Wildlife Sanctuary in the Northern Plains of Cambodia is the site of a very successful community conservation project, spearheaded by the Wildlife Conservation Society, that aims to link bird-watching tourism, bird conservation, and community development. The Tmatboey Ibis Project helps birders visit this area in order to observe two very rare birds—Giant Ibis and White-shouldered Ibis. Visitors who see one of these birds pay a small conservation contribution, which is used for infrastructure improvement in this very poor community. In return, birders and naturalists can experience a rich and endangered landscape and fauna with possibilities of observing not only the ibises but also the scarce White-rumped Falcon, Black-headed Woodpecker, Greater Adjutant Stork, Pale-capped Pigeon, Alexandrine Parakeet, and Rufous-winged Buzzard.



Angkor Wat in Cambodia.

Best time to visit: The best time to see Giant Ibis is from January through April, when the *trapeangs* (water holes) attract the birds during the dry season. White-shouldered Ibis can be found with reasonable certainty all year, but flooding during the wet season may restrict access to its habitat.

VIETNAM

This long, thin country is located on the eastern Indochinese Peninsula. Stretching between latitudes 8° and 24°N, with over 3,260 kilometers of coastline, Vietnam exhibits a wide variety of habitats and seasons. At its narrowest point, in the middle of the country, it is only 50 kilometers wide. Vietnam's north is dominated by the highlands and the Red River Delta. The Annamite Range delineates the country, running north-south parallel to the coastline, dividing the Mekong Basin from Vietnam's narrow coastal plain along the South China Sea. The densely populated Mekong River Delta dominates the south.

According to the United Nations Environment Programme, Vietnam is the 20th most biologically diverse country, with 12,034 amphibian, bird, mammal, reptile, and vascular plant species. Of its 1,534 known species of amphibians, birds,

mammals, and reptiles, 8.2% are endemic. Sadly, the rate of forest loss in Vietnam is exceptionally high: between 1990 and 2005, the country lost a staggering 78% of its primary forests, leaving it with only 85,000 hectares of old-growth forest. Despite this, there are still excellent areas to observe wildlife, although these are now mostly confined to the numerous national parks. Vietnam also has a very rich culture and history, great ethnic diversity, and wonderful scenery, making this a very attractive destination.

Due to its wide latitudinal range, there is marked climatic variation throughout the country. Average annual temperatures are generally higher in the south than in the north. The winter (dry) season extends roughly from November through April, while the summer monsoon, from May through October, sees significant precipitation, especially in July and August. Seasonal variations in the mountains and in the north are more dramatic than in the south, with temperatures varying from 4°C in December and January to 38°C from July through August. The Mekong Delta exhibits a more stable range of temperatures from, 21°C to 28°C year-round. Because the climate varies so dramatically from region to region, there is really no overall best time to visit Vietnam.

CUC PHUONG NATIONAL PARK

The first national park to be established in Vietnam, Cuc Phuong is an area of limestone hills covered in primary rain forest and one of the most important sites for biodiversity in Vietnam. The park is located in the foothills of the Annamite Range, and its topography consists of karst mountains and valleys of subtropical forests. Almost 100 mammal species and well over 300 bird species have been recorded. Cuc Phuong holds some very special birds, including Bar-bellied, Blue-rumped, and Eared Pittas, Silver-breasted Broadbill, White-tailed Flycatcher, White-winged Magpie, Ratchet-tailed Treepie, Rufous-throated Fulvetta, Limestone Wren-Babbler, Fujian Niltava, and Pied Falconet. Sightings of mammals are relatively rare, but it is possible to visit the headquarters of three conservation projects located within the park boundaries near the entrance—the Endangered Primate Rescue Center, the Carnivore and Pangolin Conservation Program, and the Turtle Conservation Center. The park's proximity to Hanoi, a mere two-hour drive away, means the weekends are often very busy.

Best time to visit: Rainfall is generally high, so the dry season (from November through February) is the best time.

CAT TIEN NATIONAL PARK

Cat Tien contains the largest remaining area of lowland tropical forest in southern Vietnam and an incredible diversity of birds and mammals. Endangered birds found at Cat Tien include Germain's Peacock-pheasant, Green Peafowl, and the very elusive Orange-necked Partridge, while the mammal list includes Leopard Cat, Lesser Mousedeer, Sambar, Gaur, and two endangered primates: Black-shanked Douc Langur and Buff-cheeked Gibbon. Excellent trails start right at the park headquarters; for areas farther afield, such as Crocodile Lake, jeeps are used. The 5-kilometer walk through semi-evergreen forest to Crocodile Lake can be good

for sightings of the near-endemic Germain's Peacock-pheasant and Blue-rumped and Bar-bellied Pittas, while the beautiful Siamese Fireback can often be seen on an early-morning drive to the start of the Crocodile Lake trail. Among the many other avian treats to be found at Cat Tien are Scaly-breasted Partridge, Woolly-necked Stork, Lesser Adjutant, White-bellied, Great Slaty, Pale-headed, Black-and-buff, and Heart-spotted Woodpeckers, three species of broadbill, and the Indochinese-endemic Grey-faced Tit-Babbler.

Best time to visit: December through May, during the dry season.

DA LAT PLATEAU ENDEMIC BIRD AREA

In the cooler climes of the delightful city of Da Lat, one can enjoy the old French colonial buildings and numerous outdoor cafés, restaurants, and markets. But the Da Lat Plateau is also one of three Endemic Bird Areas in Vietnam identified by BirdLife International. The area is home to a number of interesting endemics, including Collared Laughingthrush, Vietnamese Greenfinch, and Grey-crowned Crocias.

The two best places to find wildlife are Ta Nung Valley, a small but bird-filled area of remnant evergreen forest 10 kilometers from Da Lat, and Mount Lang Bian, a 2,167-meter peak about 20 minutes by road from Da Lat. The rare Grey-crowned Crocias, White-cheeked Laughingthrush, and the recently split Black-crowned Parrotbill can be found in the Ta Nung Valley, along with very distinctive subspecies of Blue-winged Minla, Rufous-backed and Black-headed Sibias, and Black-throated Sunbird. Target species on Mount Lang Bian may include wintering Mugimaki Flycatcher, Gray-crowned Tit, Vietnamese Cutia, Black-crowned Fulvetta, and Vietnamese Greenfinch. The most sought-after species at Lang Bian, however, is the beautiful and very secretive, endemic Collared Laughingthrush. Another site, Ho Tuyen Lam, is a man-made lake just 3.5 kilometers from the center of town. The pines here are home to Burmese Shrike, Slender-billed Oriole, Indochinese Cucooshrike, and Vietnamese Crossbill, among many other species.

The flora of the Da Lat Plateau is also of interest, with two endemic pines—Vietnamese White Pine and Krempf's Pine, unique for its flat needles.

Best time to visit: Da Lat's temperatures range, on average, between a pleasant minimum of 15°C to 24°C. There are two seasons—dry from December through March, and wet from April through November, but neither of these is very pronounced.

WEST MALAYSIA

West Malaysia (also known as Peninsular Malaysia) is the part of the nation of Malaysia that lies on the Malay Peninsula and surrounding islands (the states of Sarawak and Sabah are located on the island of Borneo, which is outside the scope of this book). West Malaysia is bordered to the north by Thailand. To the south lies the island of Singapore. The region features coastal plains rising to hills and mountains, and extends 740 kilometers from north to south, with a maximum width of 322 kilometers. The Titiwangsa Mountains, with a high point



The rainforests of Southeast Asia are rich in mammal life that is often frustratingly difficult to find.

of 2,183 meters at Mount Korbu, extend north–south, forming the backbone of the peninsula. The highest mountain is Mount Tahan at 2,187 meters. Peninsular Malaysia retains an extensive forest cover and is dominated by lowland tropical rain forest; other forest types include montane, hill, mangrove, and swamp forests.

The Malay Peninsula is considered to be a megadiverse region, with over 10,000 plant species (compared with around 1,500 species, for example, in the United Kingdom), over 200 species of mammals, including 81 bats, 665 species of birds, 110 species of snakes, and many thousands of insect species. This is one of the last sites in all of Asia where Tiger, Asian Elephant, and rhinoceros still coexist.

The characteristic features of the climate of Malaysia are uniform temperature, high humidity, and copious rainfall. The climate, classified as equatorial, is characterized by two monsoons—the southwest from April through September, and the northeast from October through February. In the eastern states November to January are the months with maximum rainfall, while June and July are the driest months. Over the rest of the peninsula, the maximum rainfall occurs in October and November and in April and May. It is extremely rare to have a full day with a completely clear sky.

TAMAN NEGARA

A rather long and windy road trip takes one from Malaysia's capital, Kuala Lumpur, to the jetty for the boat trip up the Tembeling River to Taman Negara—the name means “national park,” and it is Malaysia's largest. There are morning and afternoon departures; the morning boat is probably the best for seeing birds. Blue-throated Bee-eater, Common Sandpiper, Black-capped Kingfisher, Common Kingfisher, and

others are usually easily seen; there is also the possibility of Black-and-red Broadbill and Small-clawed Otter.

A few days spent searching this spectacular lowland rain forest and its waterways for glimpses of the secretive and marvelous wildlife to be found here can be one of Asia's great wildlife experiences. An afternoon boat trip up the Tahan River may be one of the high points of your trip. Not only can one enjoy the stunningly beautiful riparian rain forest, but a number of sought-after species may be seen, including Blue-banded Kingfisher, Black-and-Red Broadbill, the endangered Straw-headed Bulbul, and the gorgeous Chestnut-naped Forktail. The trails around the accommodation repay numerous visits with possible sightings of Scarlet-rumped Trogon, Rufous-winged Philentoma, and Green Broadbill, among others. Some fruiting trees in the vicinity of the resort provide plenty of entertainment—lots of pigeons, hornbills, barbets, and bulbuls.

Best time to visit: February through September; the peak tourist season is from April through August.

FRASER'S HILL

The beautiful montane forests of Fraser's Hill harbor a wealth of high-elevation species, including the bizarre Fire-tufted Barbet, the elegant Red-headed Trogon, and the cheeky Chestnut-capped Laughingthrush. During the colonial era, the British would go to Fraser's Hill in order to escape the heat of the lowlands. The atmosphere is still one of laid-back relaxation; the pace of life is much more sedate here than down in the lowlands. The climate is considerably cooler and less humid; in the evening you may even need a sweater. The elevation is 1,300 meters, so the avifauna differs markedly from that at Taman Negara. One may encounter the bewildering but exciting-to-see mixed feeding flocks that characterize the Asian region; mixed flocks of Golden Babbler, Blue-winged Minla, Mountain Fulvetta, Bronzed Drongo, and others are often accompanied by Black-and-crimson Oriole, Blue Nuthatch, and other goodies. In the roadside vegetation one may find Lesser Shortwing, Streaked Wren-Babbler, and the simply fabulous Sultan Tit.

Best time to visit: Any time of year, though the best time is from March through May; note that the weather is always unpredictable.

KUALA SELANGOR NATURE PARK

Kuala Selangor is a reserve situated on the central-west coast of Peninsular Malaysia overlooking the Melaka Straits. An excellent park privately run by the Malaysian Nature Society, it is very popular with local and visiting naturalists and birders. It now harbors one of the last remaining tracts of relatively intact mangrove forest in Peninsular Malaysia and a large man-made lagoon encompassing 200 hectares. It is an important area for migratory waders and other waterbirds. Birds that may be found here include Grey Heron, the amazing Stork-billed Kingfisher, Coppersmith Barbet, and Laced Woodpecker. It is also a great place to get close-up looks at Silvered Leaf-Monkey. A nighttime boat trip on the Selangor River offers the unique opportunity to witness huge colonies of fireflies flashing by the thousands in synchrony.

Best time to visit: August through April, during the winter migration.

SINGAPORE

This ultra-modern island country lies off the southern tip of the Malay Peninsula just 137 kilometers north of the equator. While it is highly urbanized, close to 10% of Singapore's land has been set aside as parks and nature reserves—a network of reserves, parks, park connectors, nature ways, and tree-lined roads. Despite a 95% loss of forest cover in the past 180 years, Singapore retains a surprising diversity of fauna and flora. It is thought that over 28% of Singapore's plant and animal species have gone extinct, but there are still approximately 80 species of mammals, 395 species of birds, and almost 1,400 species of plants.

Singapore's climate is much the same as that of West Malaysia, with temperatures averaging from 22°C to 35°C and relative humidity around 75%.

BUKIT TIMAH NATURE RESERVE

Bukit Timah means "Tin Hill," and this small, 162-hectare nature reserve located near the geographic center of Singapore is the city-state's highest hill, standing at a height of 164 meters. This reserve represents one of the largest patches of primary rain forest remaining in Singapore. People use it for hiking, running, mountain biking, and other activities, but it also houses at least 840 species of flowering plants and over 500 species of fauna. The forest is lowland tropical rain forest dominated by 18 species of dipterocarp, as well as a number of species of palms, rattans, lianas, and ferns, of which there are still over 100 species. Commonly encountered birds may include Short-tailed Babbler on the forest floor, while Pin-striped Tit-Babbler, Olive-winged Bulbul, Cream-vented Bulbul, and Greater Racket-tailed Drongo dwell in the mid-levels. Yellow-vented Bulbul is common in the open areas. Happily, the endangered Straw-headed Bulbul still persists in small numbers.

Long-tailed Macaque is the most common mammal in the reserve, but Malayan Pangolin, Malayan Colugo, and Slender Squirrel also occur. Bukit Timah is now the only place in Singapore where the Red-cheeked Flying Squirrel can be found. Beware, though: The penalty for feeding the monkeys in Singapore is a \$500 fine!

SUNGEI BULOH WETLAND RESERVE

This small, 129.5-hectare reserve in northwest Singapore is of global importance as a stop-over point for migratory shorebirds on the East Asian Flyway. Shorebirds such as Whimbrel, Common Greenshank, Common Redshank, Curlew Sandpiper, and Marsh Sandpiper, as well as other wetland species, like Striated Heron, Little Egret, and Yellow Bittern, utilize the extensive mudflats, freshwater ponds, and mangrove forests of the reserve. There are breeding colonies of Gray and Purple Herons. In the tidal zones, crabs and strange mudskippers are abundant. Water Monitors, up to 1.8 meters in length, patrol the area for crabs, frogs, carrion, and even small unwary birds. Fishlife is abundant; one may find Mullet, Halfbeak (so called for its elongated lower jaw), and the remarkable Archer Fish, which hunts land-based invertebrates by shooting them down (squirting them with water from its specialized mouthparts). Smooth Otters have been sighted here too, so keep an eye out.