

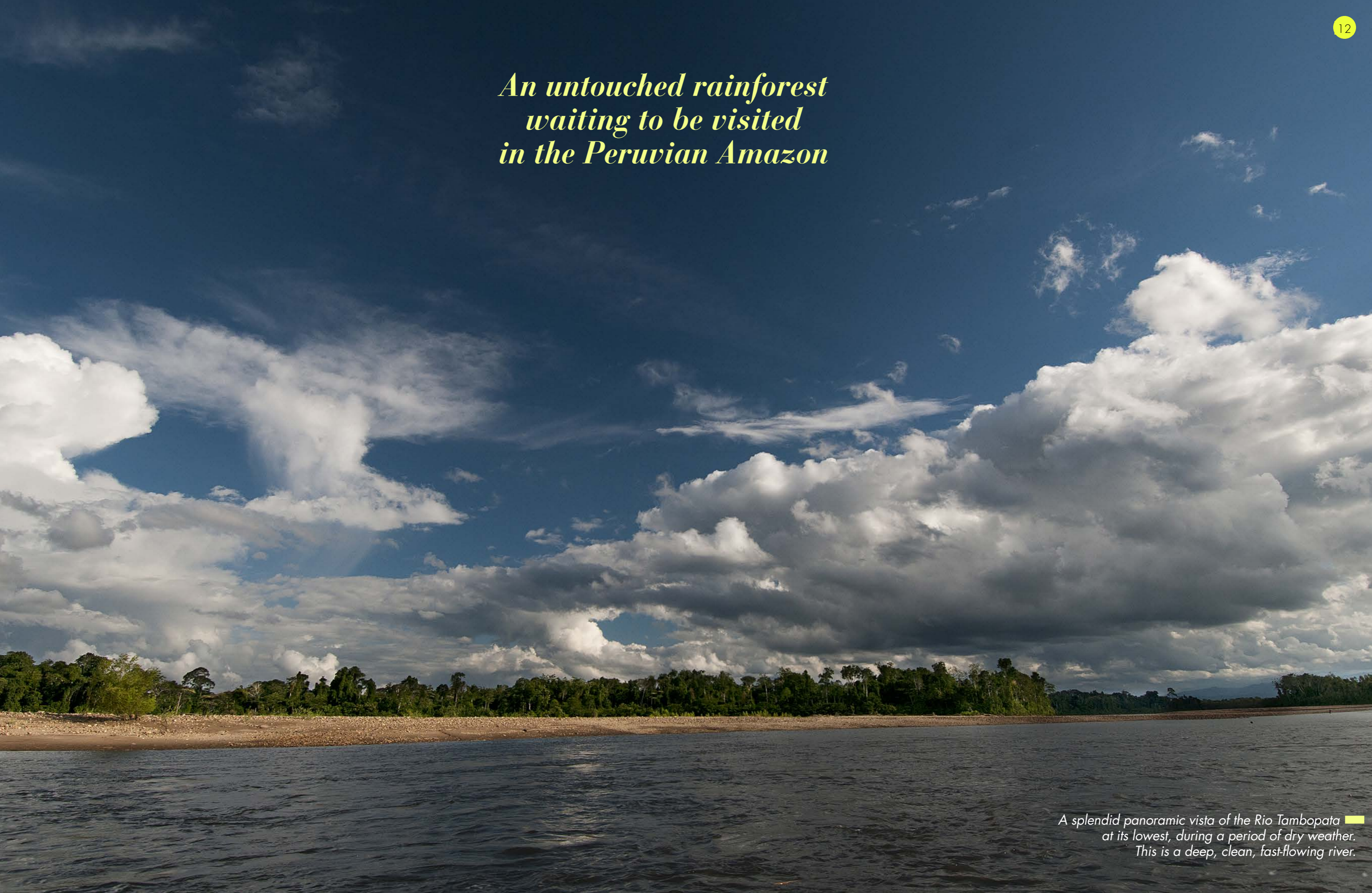
PERU'S TAMBOPATA NATIONAL RESERVE

THE EMERALD FOREST

Exploring in safety and comfort a pristine protected area of the Peruvian Amazon - an immense tract of virgin rainforest which is both easily accessible and exceptionally rich in spectacular wildlife



*An untouched rainforest
waiting to be visited
in the Peruvian Amazon*



*A splendid panoramic vista of the Rio Tambopata
at its lowest, during a period of dry weather.
This is a deep, clean, fast-flowing river.*

TEXT BY ANDREA FERRARI
PHOTOS BY ANDREA & ANTONELLA FERRARI

*M*adre de Dios, Peru is a large department (or state) in the wild, southeastern part of the country. Its name means "Mother of God" and is a common Spanish synonym for "the Virgin Mary". The rather generic name given to the Madre de Dios department in Peru is a reflection of how little was known about the region during the Spanish colonial era. Whereas some departments were assigned the same name used by the Incans, neither Incan people nor Spanish colonists settled in the southeastern Amazonian lowlands so the department was simply named in honor of one of the most revered

figures in Roman Catholicism (the principle religion of the Spanish colonists). In a sense, this name befits a wild, untamed wilderness of dense rainforests, trackless swamps, and meandering rivers flanked by unforgiving jungle as it was believed that outsiders only survived in such a place by the grace of God. In modern times, the Madre de Dios department has become much more accessible while still retaining its wild character. Huge tracts of unbroken rainforest are protected in National Parks, reserves, and by several Peruvian rainforest lodges. The lack of roads and low

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Two-striped Amazon palm viper Bothriopsis bilineata. This small venomous species is often found coiled on branch forks.



A flock of Red-and-green Macaw *Ara chloropterus* practices a routine mass take-off from a clay lick to confuse would-be predators.

Black river waters coming alive at night



■ A Spectacled caiman *Caiman crocodilus* silently floats on the surface of the still shore waters of the Rio Tambopata at night.

population also keeps many parts of Madre de Dios intact and devoid of development. Nevertheless, a recently constructed road that connects routes to the Pacific with routes to the Atlantic Ocean has brought more colonists to the region along with associated deforestation, hunting, and mining activities that could pose a threat to the rainforests of Madre de Dios. There are three main provinces within the department of Madre de Dios. Tambopata, bordering Bolivia to the east, is the most populated of the three Madre de Dios provinces. Its capital, Puerto Maldonado, is also the capital city of Madre de Dios. It is the largest city in the department and in the Amazonian lowlands of southeastern Peru, with a population of nearly 100,000 as thousands of people from highland regions have moved to the city. Most are drawn to Puerto

Maldonado in search of jobs and a better life. Tambopata is also home to extensive areas of lowland rainforests that host some of the highest biodiversity indices in the world, and that is why we decided to visit it thanks to **Rainforest Expeditions**, an ecotourism company which owns and manages three exceedingly comfortable lodges along the steep shores of the rio Tambopata. The other two provinces are Tahuamanu and Manu. Located in the northern reaches of Madre de Dios, Tahuamanu borders Brazil to the north and Bolivia to the east. It's a wild, frontier zone of rainforests, thick bamboo groves, and has just 7,000 inhabitants. Manu is located in the westernmost Madre de Dios province and its name is associated much more with the National Park of the same name rather than the province itself. This is due to

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■ A pair of adult Red-and-green Macaw *Ara chloropterus* flies above the tree canopy of the Tambopata Reserve. This is the largest of the macaw species found here and the easiest to observe.

Manu National Park's fame as being one of the top biodiversity hotspots on Earth. A massive biosphere reserve that protects habitats ranging from treeline vegetation to lush cloud forests and dense, lowland jungles, the wildlife of Manu has been featured in many documentaries and magazines. Despite the wild, untamed nature of Manu province, around 17,000 people make their home there. These include a number of indigenous people (some of whom make very little contact with western peoples), farmers, miners, and ecotourism operators. People have been living in the Amazon rainforests of Madre de Dios for thousands of years. Due to the remote nature of southeastern Peru, most of these peoples lived in isolation from Spanish colonists until the latter part of the nineteenth century. Some indigenous cultures of Madre de Dios had occasional contact with the Incan empire but even that was very limited as the Incans primarily kept to higher elevations in the Andean mountains.

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*The forest at night
abounds with tree frogs.
This is a Gunther's
banded tree frog
Hypsiboas fasciatus.*



Tambopata is extraordinarily rich in bird species. Left, Rufous Motmot *Baryphengus ruficapillus*; top right, Bat Falcon *Falco ruficularis*; bottom right, Capped Heron *Ptilerodius pileatus* in breeding livery.





The wondrous spectacle of
Scarlet Macaws *Ara macao* and
Red-and-Green Macaws *Ara chloropterus*
taking off en masse
from a clay lick.

Two-striped
Amazon palm vipers
Bothriopsis bilineata
occasionally show a
stunning blue tinge.



The Ese-Eja is the main indigenous group in Tambopata province. Living in a few communities along the Tambopata River and its tributaries, most Ese-Eja have farms near the river although there is at least one, rather isolated community in Tambopata that lives in a more traditional manner. Many Ese-Eja people also work with Rainforest Expeditions as guides, boat drivers, and cooks. Those from the community of Infierno actually own Posada Amazonas lodge. Seventeen other groups of indigenous peoples live in the rainforests of Madre de Dios - many of these people have little or no contact with non-Amazonian peoples and continue to live in the rainforest just as their ancestors did for thousands of years. There are believed to be several hundred "uncontacted persons" in Madre de Dios that belong to tribes such as the Machiguenga and Mashco Piro.

AN UNTOUCHED RAINFOREST HABITAT

The Madre de Dios region is renowned for being one of the top biodiversity hotspots on Earth. The huge tracts of lowland rainforest and high-elevation cloud forests harbor more than 1,000 bird species, several thousand plant

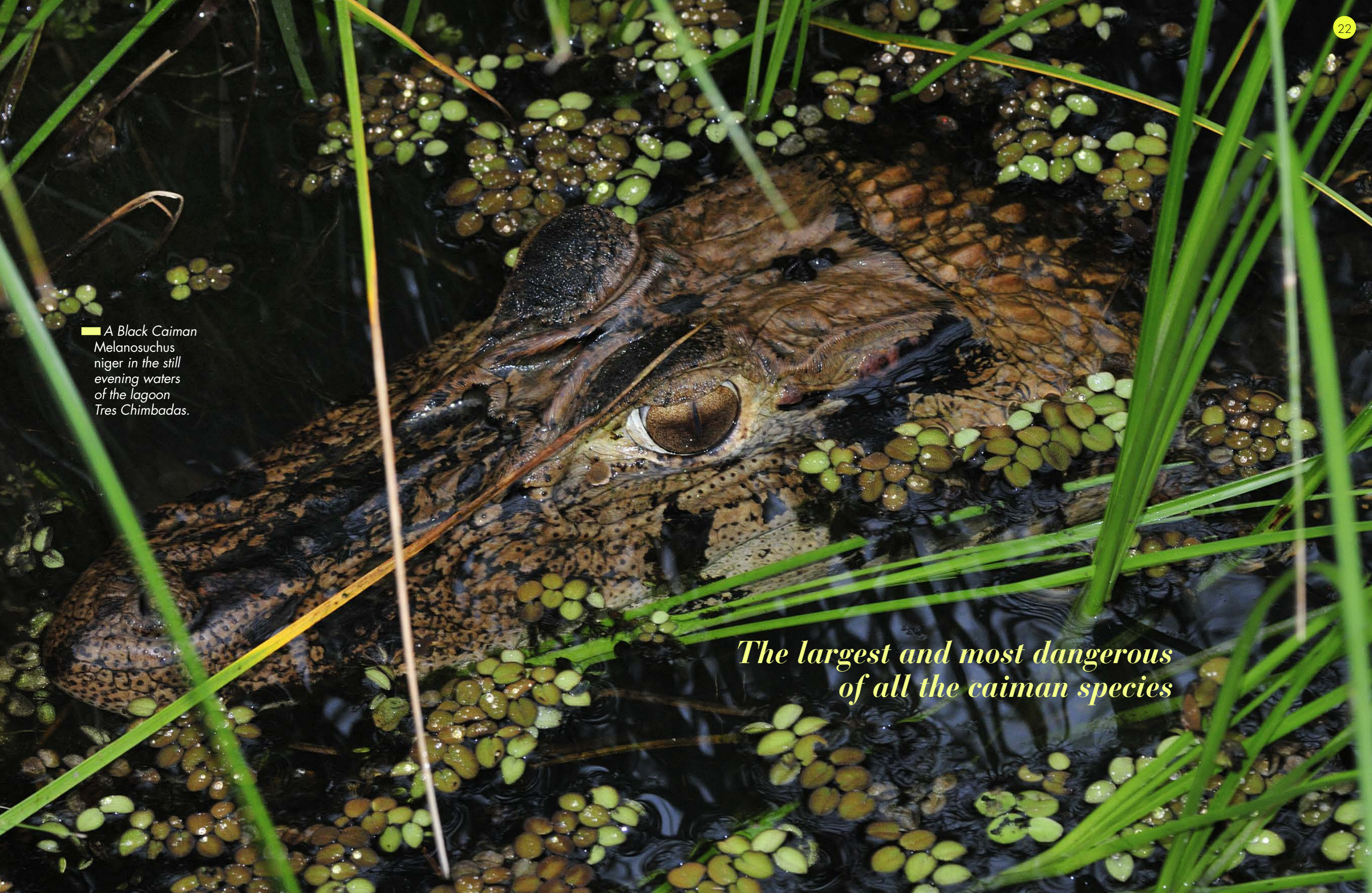
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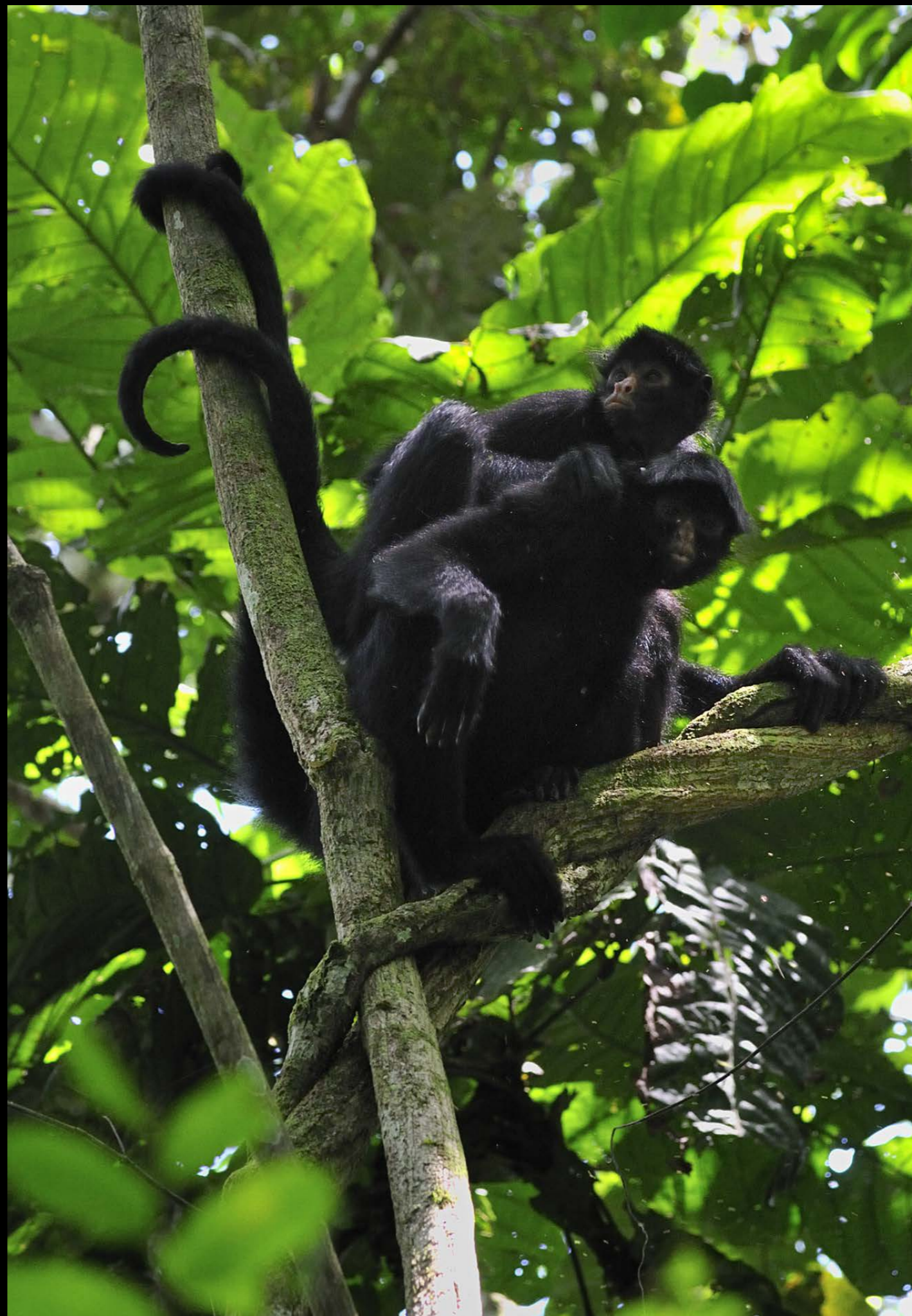
Left, a flight of Chestnut-fronted Macaw or Severe Macaw *Ara severus*. Right, a White-throated Toucan *Ramphastos tucanus*.



■ A Black Caiman
Melanosuchus niger in the still evening waters of the lagoon Tres Chimbas.

The largest and most dangerous of all the caiman species





Far left, a Rainbow Boa *Epicrates cenchria cenchria* coiled in ambush on a branch overhanging a forest trail. Left, a pair of Peruvian spider monkey *Ateles chamek*.

species, untold numbers of insects, and more than 100 mammal species. The incredible variety of life that occurs in southeastern Peru is explained by the environment of tropical rainforests. These complex habitats harbor the highest levels of terrestrial biodiversity on the planet and are the prominent habitat in Madre de Dios. The forests of Madre de Dios have acted as natural refuges: in the past, the Amazon rainforest has gone through dry periods where the forest was separated into "islands" of humid forest surrounded by drier grasslands. The province of Madre de Dios (and much of eastern Peru) is believed to have been one of these islands of rainforest habitat and thus acted as a natural refuge for rainforest animals and plants. Since the forests of Tambopata, Manu, and Tahuamanu remained intact for millions of years, there was more time for wildlife in Tambopata to evolve into a greater variety of species. The biodiversity of Madre de Dios has become a huge draw for tourists and people come from all over the world to experience the beautiful rainforests of Tambopata and Manu. The high number of visitors that include Peruvian jungle excursions into their itineraries has spawned a thriving ecotourism industry in Madre de Dios. Eco-lodges in Manu and Tambopata are the two main destinations. Thousands of solo travelers, tour groups, and families visit Tambopata in particular due to its

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Scarlet Macaws Ara macao and Blue-and-Yellow Macaws Ara ararauna will occasionally fly together.



■ Scarlet Macaws *Ara macao*,
Red-and-Green Macaws *Ara chloropterus* and Blue-and-
Yellow Macaws *Ara ararauna*
on a Tambopata clay lick.



A photo sequence showing - in clockwork order - a Tschudi's false coral snake *Oxyrhopus melanogenys* feeding on a forest rat.

■ The untouched, pristine Amazon rainforest fringing the Rio Tambopata shores. With some luck jaguars can occasionally be seen here.





■ A Blue-and-yellow Macaw *Ara ararauna* flies away from a clay lick. Note the chunk of clay in its powerful beak, ingested to neutralize the poisonous alkaloids lacing the seeds and nuts macaws feed on.

accessibility. Puerto Maldonado can be reached by a quick flight from Lima or Cuzco and most of the lodges are just as quickly reached by a boat trip on the Tambopata River. The award winning Posada Amazonas lodge is a frequent destination as is Refugio Amazonas. The more remote (and for wildlife photographers probably more interesting) Tambopata Research Center is also a highlight for parrot lovers and ecotourists hoping to experience the Amazonian wilderness.

THE AMAZING BIODIVERSITY OF TAMBOPATA

Tambopata is a river, a National Reserve and a province in Madre de Dios state. It harbors some of the most biodiverse rainforest in the country (and possibly the entire Amazon basin), huge protected areas, and is home to several thousand people. Remote, wild, but still easily accessible, this contrasting combination has helped it to become one of the global hotspots for ecotourism. "Tambopata" is derived from two Quechua words that mean "inn" or "place of accommodation" (*tambo*) and "high point" (*pata*). The reason why the rather flat, lowland rainforests of Tambopata received this name is not forthcoming but may reflect Andean foothill areas of Tambopata that were visited by Incan peoples. Despite its Quechua name, the region wasn't really used by the Incans for much of

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Top left, Yellow-rumped Cacique *Cacicus cela*; top right, Rufous Motmot *Baryphengus ruficapillus martii*. Bottom left, Pale-Winged Trumpeter *Psophia leucoptera*; bottom right, Orinoco Goose *Neochen jubata*.





Scarlet Macaw █
Ara macao.
Note the leg ring
applied by researchers.

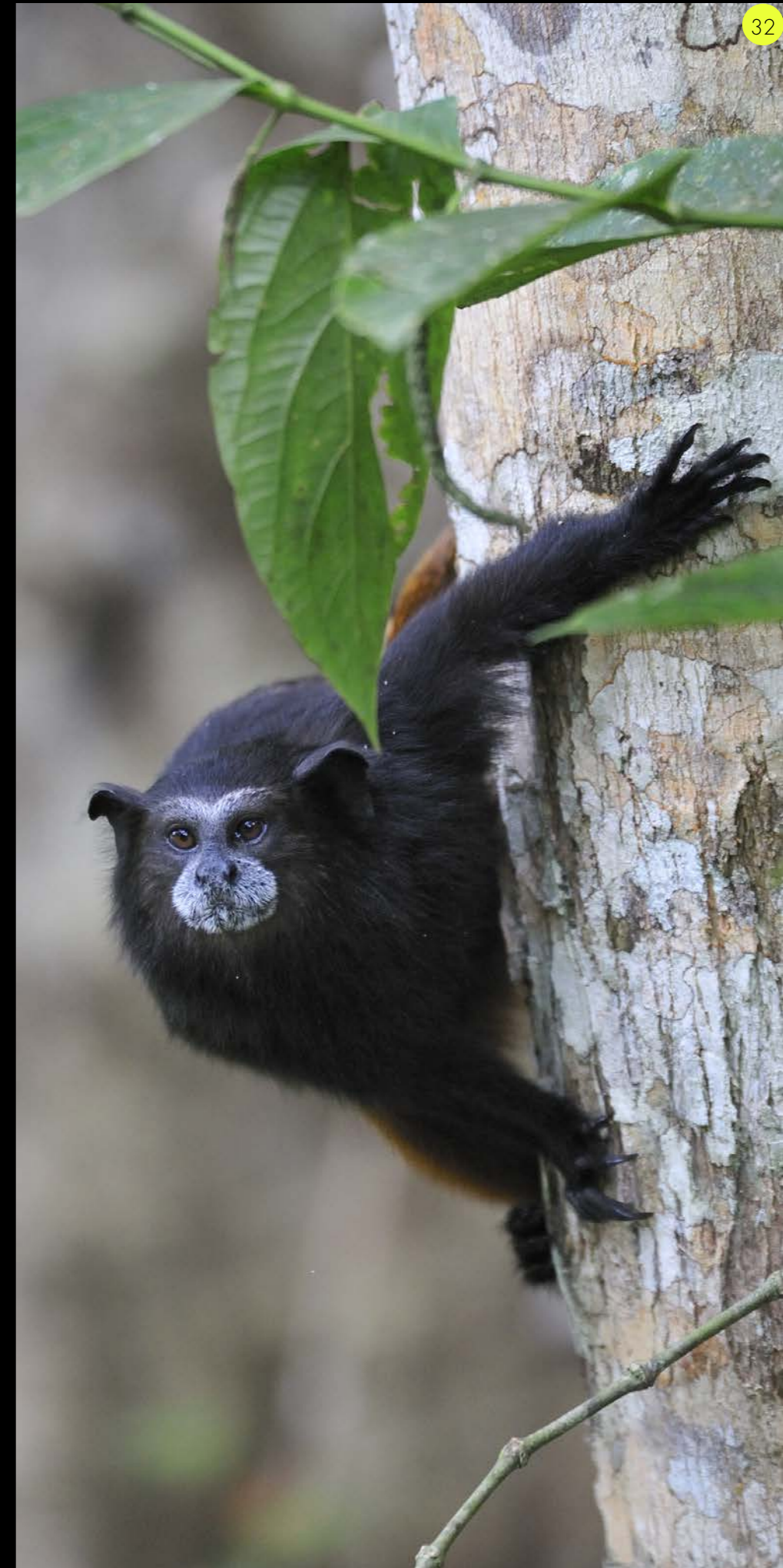
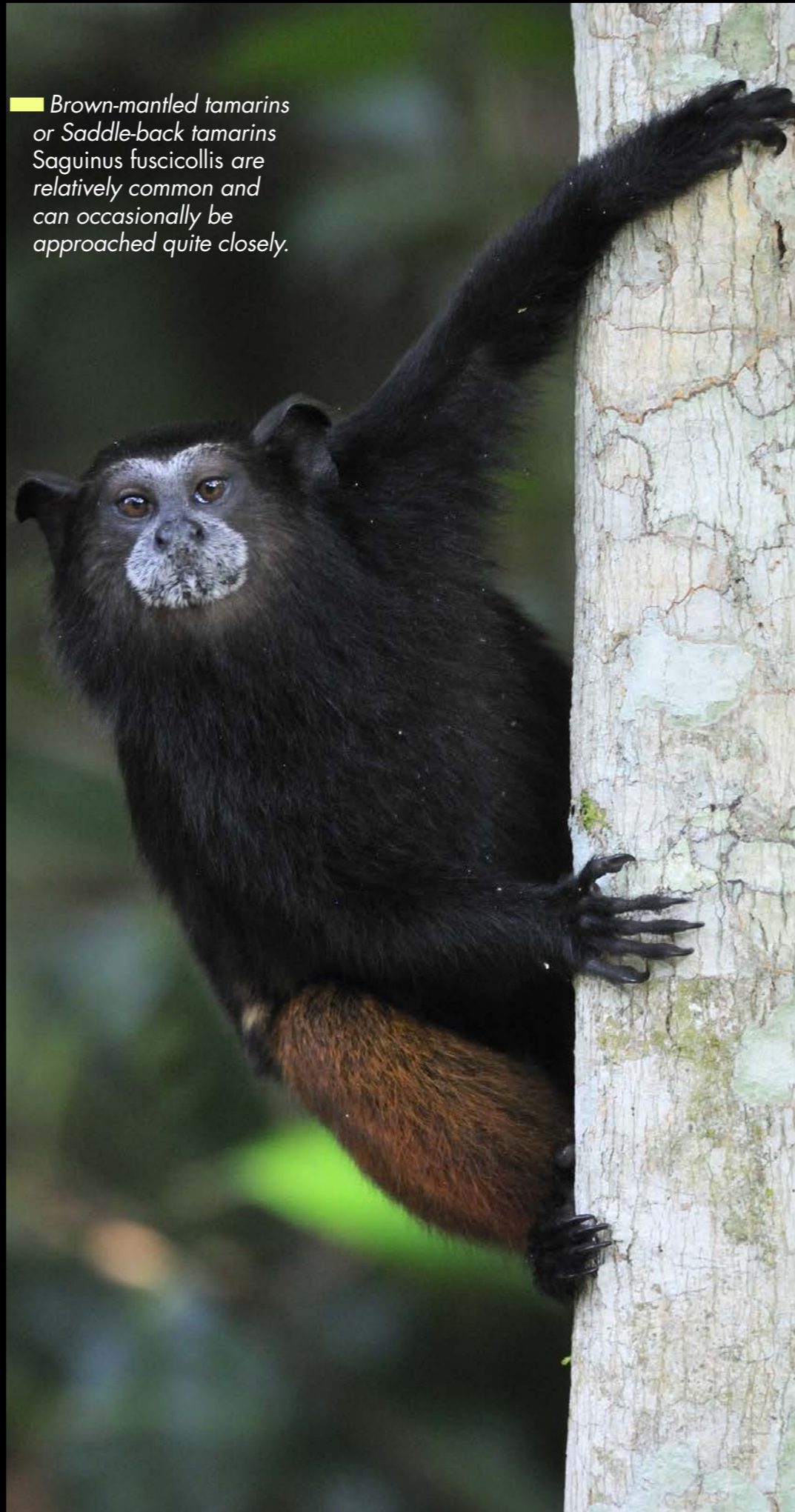
their history. Tambopata was first settled thousands of years ago by indigenous, Amazonian ethnies such as the Ese-Eja. Living in small villages, they cultivated yuca and hunted in the surrounding forests. The plants of the rainforests also provided them with building materials and a wide variety of medicine. During the Spanish colonial period, access to the Tambopata region was so difficult that it was largely ignored and left to its own devices. This changed at the beginning of the twentieth century during the Peruvian rubber boom. As people from outside the region searched Tambopata and many other areas in southeastern Peru for rubber trees, they frequently came into conflict with indigenous groups. Many locals were enslaved and perished from diseases brought by the new colonists. Although the rubber boom didn't last long, it made a big impact on indigenous groups of the Tambopata region and their populations declined as a result. Decades later, colonists to Tambopata began to arrive from the highlands in search of a better life and gold that had been found in the rivers. Shortly thereafter, the first eco-lodge was built in the area and tourists slowly began to make their way to Tambopata. As word spread about the diversity of the Tambopata region, it grew in popularity as a destination and became one of the most popular sites to visit in Peru after the year 2000. Tambopata continues to be a

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Rufescent Tiger Heron ■
Tigrisoma lineatum
 by a sluggish forest stream.


■ *Brown-mantled tamarins or Saddle-back tamarins Saguinus fuscicollis are relatively common and can occasionally be approached quite closely.*





Blue-and-Yellow Macaw *Ara ararauna*, Scarlet Macaw *Ara macao*, Red-bellied Macaw *Ara manilata*, Chestnut-fronted Macaw *Ara severus* and Mealy Parrot *Amazona farinosa* share a clay lick.



Left,  Brown Capuchin *Cebus apella*; right, Hoffmann's two-toed sloth *Choloepus hoffmanni*.



■ A silvery rainforest butterfly *Callithomia lenea*.

destination of choice for thousands of people experiencing Peru. Increasing numbers of colonists and pressure on the rainforests from mining and a new road linking the Pacific and Atlantic Oceans have been challenges to conservation, but large protected areas and the importance of ecotourism help to buffer these threats.

A HISTORY OF CONSERVATION

The first protected area in Tambopata was the Tambopata Reserved Zone. Established in 1977, it encompassed over 5,000 hectares of lowland rainforest and palm swamps near Explorer's Inn. In 1990, this protected zone was expanded to include the watersheds of the Tambopata and Candamo Rivers and thus grew in size to a massive 271,000 hectares. Shortly thereafter, the name of this protected area was also changed to the Tambopata National Reserve. Combined with the adjacent Bahuaja Sonene National Park and the Madidi National Park in Bolivia, these sister reserves protect a scarcely inhabited tropical rain forest the size of Belgium (over 3,000,000 hectares, or 30,000 square kilometers). Situated on the southern side of the Tambopata River, this huge area of beautiful lowland rainforests harbors an equally

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Top left, Rainbow katydid *Poecilocloeus* cf. *lepidus*; top right, *Moncheca bisulca kuythyi* katydid. Bottom left, Monkey face Grasshopper *Eumastax* sp.; bottom right, unidentified grasshopper nymph.





A rare sighting in the rainforest canopy - the spectacular King Vulture *Sarcoramphus papa*.

The most beautiful and colorful among vulture species



Left, social wasps *Polistes goeldii* feeding larvae on their paper nest; center, close-up portrait of a Stick grasshopper or Jumping stick *Paraproscopia* sp, family Proscopiidae; far right, Leaf-footed bug, family Coreidae.





Scarlet Macaws
Ara macao and Blue-
and-Yellow Macaws
Ara ararauna share
a Cecropia tree
near a clay lick.



Right, a fulgid Lantern Bug *Phrictus auromaculatus*, a rare species and the first record of it in the field; right, Black Caracara *Daptrius ater*.

impressive array of biodiversity. The numbers of species that make their homes in these rainforests demonstrates why the Tambopata region is often referred to as the most biodiverse place on Earth. It harbors more than 10,000 species of plants, over 600 species of birds, 200 species of mammals, more than 1,000 butterfly species, literally thousands of species of insects and well over 100 species of amphibians and reptiles. Staying - as we did - at the Rainforest Expeditions lodges offers the chance to experience firsthand and on a daily basis this biodiversity because lodges such as Refugio Amazonas and Posada Amazonas are located adjacent to the Tambopata National Reserve. The wild nature of the Tambopata National Reserve is further protected by the presence of the one million hectare Bahuaja Sonene National Park that abuts the reserve to the south. This is also where the Tambopata Research Center is located. But what is it like to actually explore the Tambopata rainforest in search of photographic subjects? A day-to-day chronicle of our trip there will follow up in the second part of our trip report. ●

DON'T MISS THE SECOND INSTALLMENT OF OUR TAMBOPATA STORY – COMING IN MARCH 2015 ON ISSUE 18 OF ANIMA MUNDI – ADVENTURES IN WILDLIFE PHOTOGRAPHY!





■ Spix's Guan Penelope jacquacu. This is a rather shy, large and relatively common species which is best seen at or near clay licks.



Left, Hoatzin *Opisthocomus hoazin* at the water's edge in Tres Chimbas; right, a pair of Red-and-green Macaw *Ara chloropterus*.





Left, Fulgorid Waxtail Lantern Bug *Pterodictya reticularis*; right, butterfly *Caeruleptychia lobelia*.



*An endless variety
of tiny, strange and
colorful insect species*



A face-on portrait of a Monkey face Grasshopper *Eumastax* sp. shows the typical position of its hind legs.



Top left, Black-throated Toucanet *Aulacorhynchus atrogularis*; top right, Chestnut-eared Aracari *Pteroglossus castanotis*. Bottom left, Golden-collared Toucanet *Selenidera reinwardtii*; bottom right, Olive Oropendola *Psarocolius bifasciatus*.



A family group of *Capybara Hydrochoerus hydrochaeris* takes a bath in the muddy backwaters of the Rio Tambopata.

The Tambopata Reserve offers excellent opportunities to observe and photograph the Dusky Titi *Callicebus moloch*.





A group of Giant River Otter *Pteronura brasiliensis* at the Tres Chimbas lagoon.

Left, Glasswing
Nymphalid butterfly
(family Ithomiinae);
center, Wasps
Angiopolybia pallens
colony and nest;
right, planthopper
Phyllotropis cingulata,
family Membracidae.



*Death lies quietly coiled
in the fork of a forest branch*



Close-up portrait of a  Two-striped Amazon palm viper *Bothriopsis bilineata*.

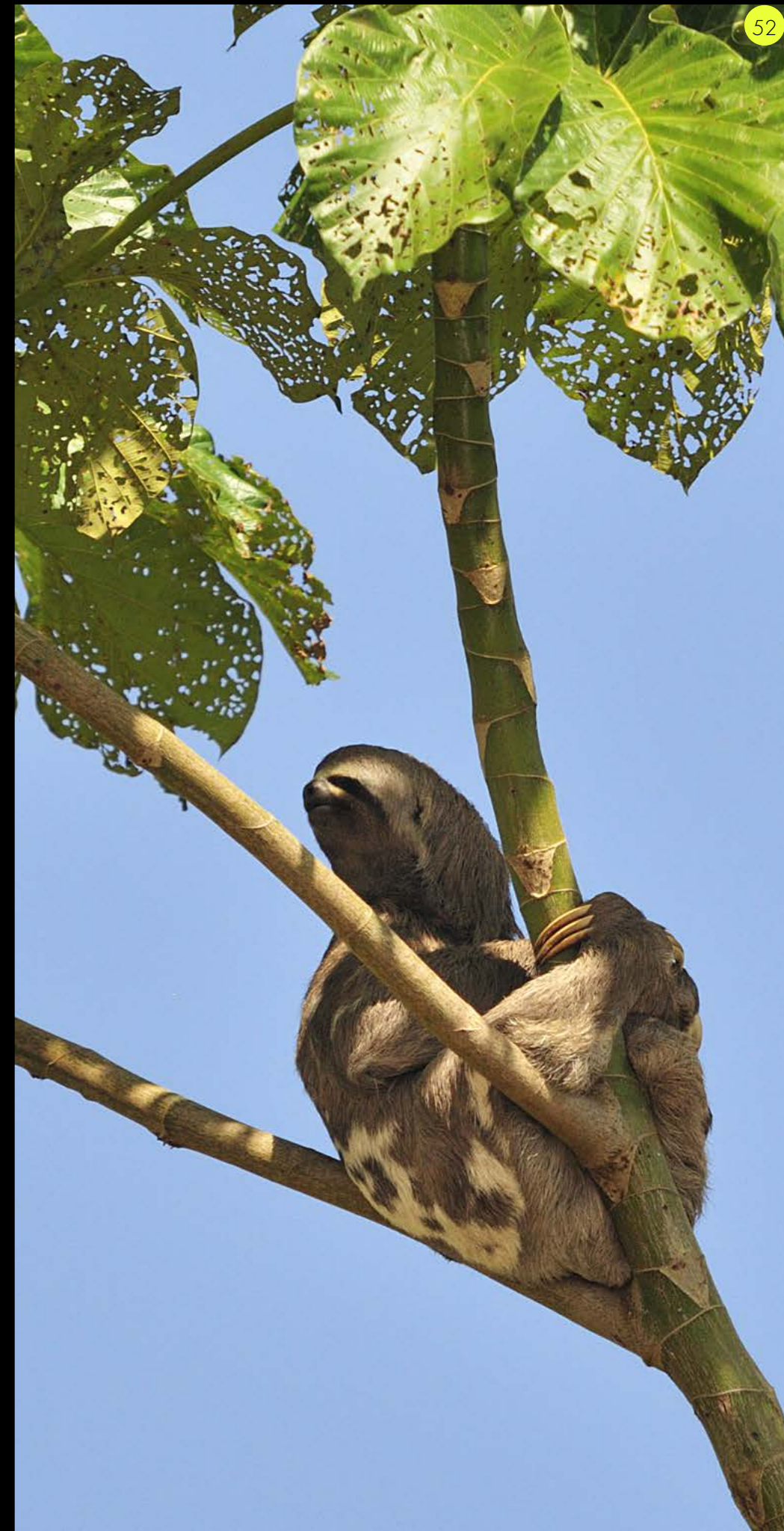


Left, a female Red Howler Monkey *Alouatta seniculus* with her baby; right, a noisy, fast-flying flock of Cobalt-winged Parakeet *Brotogeris cyanoptera*.





■ Left, Mealy Amazon or Mealy Parrot *Amazona farinosa* on clay lick; center, Collared Tree Runner *Tropidurus plica*; right, Brown-throated three-toed sloth *Bradypus variegatus*.





Scarlet Macaws *Ara macao*, Red-and-Green Macaws *Ara chloropterus* and Blue-and-Yellow Macaws *Ara ararauna* on clay lick.



■ Left, close-up portrait of Horned wood lizard *Enyalioides palpebralis*. Right, Rainbow Boa *Epicrates cenchria cenchria*, a stunningly iridescent species.





■ The arboreal Barred Leaf Monkey Frog *Phyllomedusa tomopterna* is relatively common and usually seen at night.



■ Three-striped Poison Dart Frog
Ameerega trivittata, carrying fully developed tadpoles on its back.



Far left, Rainforest scorpion *Tityus* sp.; center, Spiny Lichen katydid *Championica peruana*; right, Green Leaf Mantis *Choeradodis stalii*.

An abundance of remote beautiful landscapes at the feet of the Andes

■ Tambopata Reserve, rio Tambopata backwaters. Steep cliffs such as these often offer clay licks to the local fauna.





Left, a pair of colorful Leaf-footed bugs, family Coreidae, in courtship ritual; right, a large Huntsman Spider *Olios* sp., family Sparassidae, preying on moth at night.

