From the bromeliads, ferns, and orchids that cover a kapok tree 160 feet above the forest floor to the jaguars that prowl below, Ecuador’s Yasuní National Park is home to countless plant and animal species. All of them now face threats from oil development.

Demand for oil is squeezing the life out of one of the world’s wildest places.
Cobalt-winged parakeets flock to a pool. Scientists have identified nearly 600 species of birds in the park. Insects are so diverse that there may be 100,000 species in the space of two and a half acres, including those shown here with other creatures (gatefold flaps).
Ten monkey species—all pictured here—live in Yasuní. Two more have been reported, but scientists have yet to confirm their presence.
A jaguar on the hunt trips a camera trap at a spot frequented by piglike peccaries, a favored prey. To the Waorani, one of the native groups in this area, jaguars are ancestral spirits that visit shamans in dreams to tell them where game is plentiful in the forest.

Steve Winter
The pheasant-size hoatzin fans its feathers, often while strutting along a branch, but flaps its wings clumsily when it takes to the air. It lives near swamps, digests food by fermentation like a cow, and is so odd that scientists can't decide how to classify it.

Tim Laman
Armed with spear, shotgun, and machete, Minhua Huani (at left) and Omayuhue Babua search for animals near the Waorani community of Boanamo. Villagers are allowed to hunt in the park, their ancestral territory. Many still do to provide food for their families.
Author Scott Wallace and a team of photographers journey into the heart of the Amazon, where big oil is threatening one of the last wild frontiers.

THE LEAVES ARE STILL dripping from an overnight downpour when Andrés Link slings on his day pack and heads out into the damp morning chill. It’s just after daybreak, and already the forest is alive with hoots and chatter—the deep-throated roar of a howler monkey, the hollow rat-a-tat-tat of a woodpecker, the squeal of squirrel monkeys chasing each other from branch to branch. A strange, ululating chant starts up in the distance, fades out, then builds again.

“Listen!” says Link, grabbing my arm and cocking an ear. “Titi monkeys. Can you hear? There are two of them, singing a duet.” He imitates the high-pitched, rhythmic cry of one of the monkeys, then the other. Only then can I distinguish the two separate strains that make up the counterpoint chorus.

This raucous celebration is the daily background music for Link as he heads out on his morning commute through what may be the most biodiverse spot on Earth. Link, a primatologist from Universidad de los Andes, is researching the white-bellied spider monkey, and he’s on his way to a salt lick a half hour’s walk away, where a group often congregates.

Giant kapok and ficus trees with sprawling buttress roots soar like Roman columns straight into the canopy, their bifurcating branches draped with orchids and bromeliads that sustain entire communities of insects, amphibians, birds, and mammals. Strangler figs coil around their trunks in a tightening embrace. There is so much life here that tiny killifish are wriggling in a shallow puddle created by animal tracks.

We turn down a slope into a forest studded with bizarre-looking Socratea trees, commonly called walking palms, with four-foot-high stilt roots that allow the trees to shift location slightly in a quest for light and nutrients. It’s one of the untold millions of evolutionary adaptations unfolding all around the Tiputini Biodiversity Station (TBS), a facility operated by the Universidad San Francisco de Quito on 1,600 acres.
(650 hectares) of pristine jungle on the edge of Yasuní National Park, which encompasses nearly 3,800 square miles (9,800 square kilometers) of prime rain forest habitat in eastern Ecuador. “You could spend your entire life here and be surprised by something every day,” Link says. There are ten primate species in the forest around TBS, and a greater variety of birds, bats, and frogs than almost anywhere else in South America. There are as many insect species in a single hectare of the rain forest here as are known in all of the U.S. and Canada combined.

Yasuní’s location nurtures this abundance. The park sits at the intersection of the Andes, the Equator, and the Amazon region, an ecological bull’s-eye where extremely rich communities of plants, amphibians, birds, and mammals in South America converge. Downpours are a nearly daily occurrence throughout the year, and there are few discernible changes of season. Sunlight, warmth, and moisture are constants. This part of the Amazon is also home to two indigenous nations, the Kichwa and the Waorani, who live in settlements scattered along the roads and rivers. The first peaceable contact between the Waorani and Protestant missionaries took place in the late 1950s. Today most Waorani communities participate in trade and even tourism with the outside world, as do their former tribal enemies, the Kichwa. But two groups of Waorani have turned their backs on such contact, preferring to wander the upland forest in a so-called Zona Intangible—Untouchable Zone—set up to protect them. Unfortunately, this zone, which overlaps the southern sector of Yasuní, does not include the entirety of their traditional range, and the nomadic warriors have attacked settlers and loggers both inside and outside the zone, some as recently as 2009.

Far beneath the ground, Yasuní harbors yet another treasure that poses an urgent challenge to the precious web of life on the surface: hundreds of millions of barrels of untapped Amazon crude. Over the years, oil concessions have been drawn over the same territory as the park, as economic interests have trumped conservation in the struggle over (Continued on page 108)
More than 12 miles of a road being built by the Petroamazonas oil company have been cleared inside the park. Conservationists are concerned because the road is meant to move oil workers and machinery into ecologically vulnerable Block 31. It may also eventually reach—and spoil—the still pristine block to the east.
Men from the community of Rumipamba, in the background, clean up the remnants of a 1976 oil spill. They’re glad for the work, which pays $450 a month, but they and their families suffer health problems like chronic skin rashes, possibly caused by exposure to the oil. Many people fear such pollution could occur in Yasuní if developers drill for oil.

Karla Gachet
Like many Waorani today, these two families blend old and new. Returning home to Bameno, their community on the Cononaco River, they bring the fruits of a traditional hunt: peccary, monkey, and deer. But the clothing and boats come from the outside world.

KARLA GACHET
President Correa has offered to leave untouched an estimated 850 million barrels of oil inside Yasuni’s ITT Block **in return for $3.6 billion** from the rest of the world.

(Continued from page 100) Yasuni’s fate. At least five active concessions blanket the park’s northern section, and for a poor country like Ecuador the pressure to drill has been almost irresistible. Half of the nation’s export earnings already come from oil, nearly all of it from its eastern provinces in the Amazon.

In a proposal first put forward in 2007, President Rafael Correa has offered to leave indefinitely untouched an estimated 850 million barrels of oil inside Yasuni’s northeastern corner in a tract known as the ITT Block (named for the three oil fields it contains: Ishpingo, Tambo-cocha, and Tiputini). As payment for preserving the wilderness and preventing an estimated 410 million metric tons of fossil fuel-generated carbon emissions from entering the atmosphere, Correa has asked the world to ante up in the form of $3.6 billion in compensation, roughly half of what Ecuador would have realized in revenues from exploiting the resource at 2007 prices. The money would be used, he says, to finance alternative energy and community development projects.

Hailed by supporters as a milestone in the climate change debate when it was first proposed, the so-called Yasuni-ITT Initiative has been hugely popular in Ecuador. National polls consistently show a growing awareness of Yasuni as an ecological treasure that should be protected. But the international response to the initiative has been tepid. By mid-2012 only about $200 million had been pledged. In response Correa has issued a succession of angry ultimatums, leading detractors to liken his proposal to blackmail. With the initiative stalled and Correa warning that time is running out, activity on the oil frontier continues to advance through eastern Ecuador, even within Yasuni’s limits. Every day, another bit of the wilderness succumbs to the bulldozers and backhoes.

A half hour after setting out from the TBS laboratory, Andrés Link reaches the mouth of a low cave at the bottom of a steep ravine. This is the salt lick he was looking for, but there are no monkeys here this morning. “They are afraid of predators,” he says, looking up through the canopy at the milky white sky. “When it’s overcast like this, they don’t like to come down.” The monkeys may be wary of jaguars or harpy eagles. But Link’s mind is on a more long-term and potentially definitive threat to the animals: the advancing oil frontier.

“You can see there is great interest in finding the oil,” he says. “The fear I have is that you need very little to get something started, and then…” His voice trails off, as if the thought were too painful to articulate.

**Back at the TBS Laboratory** that evening, I sit on the deck with founding director Kelly Swing to talk about the changes he’s seen as the oil frontier closes in. “We definitely feel the pressure,” Swing says, looking out into the darkening forest. “It’s close enough to make us nervous.”

The nearest production facilities are only eight miles to the northeast in a concession operated by the state oil company, Petroamazonas. The scientists tell him they often hear the hum of generators while out in the forest, and low-flying helicopters scatter their study animals in panic with increasing frequency. The faint light from gas flares tarnishes an otherwise breathtaking view of the nighttime sky from the station’s observation tower, perched 120 feet off the ground in the branches of a majestic kapok.

The success or failure of the Yasuni-ITT Initiative will likely have no direct impact on this immediate patch of forest, he says. But Swing fears the initiative’s collapse could deal a body blow to conservation efforts and unleash a tide of oil development that could sweep into the southern half of Yasuni, perhaps even into the Untouchable Zone itself.

“Over time the oil concessions have become like stepping-stones,” he says. “As each one is developed, there’s mounting pressure to develop the remaining blocks farther east and south.” Ecuadorian officials insist that oil extraction can be done responsibly, even in sensitive habitats. They say current practices mark a vast improvement over the highly polluting methods that prevailed in the 1970s and ’80s, when U.S. oil giant Texaco allegedly left behind contaminated sites that have embroiled Chevron, Texaco’s parent company, in a multibillion-dollar lawsuit with indigenous communities. But development has far greater consequences for species-rich environs like Yasuni, Swing says, starting with countless millions of insects, many undoubtedly unknown to science, scorched each night in undulating gas flares.

In forests impacted by oil development, perhaps 90 percent of the species around denuded sites die, he says. “You have to ask: Is that acceptable? To whom is that acceptable?”

**A few days later I join a team of biologists with the Wildlife Conservation Society (WCS) as we board a boat in a light drizzle to journey eastward down the Tiputini River.**

White-bark Cecropia line the twisting river, which follows part of the northern boundary of the backward-C-shaped national park. Above us the high branches of massive kapok trees are dripping with oropendola nests.

Excerpt from the brane of our own outboard, the river appears to be entirely free of human presence. Or so it seems, until we round a bend and come upon a long motorized barge pulled up against the riverbank. The place is swarmi with workers in hard hats and high boots, the exposed earth red and raw, pocked with the treads of earthmovers. A similar gash on the opposite bank—broad and blood red—creates the impression that the road has jumped the river as if by magic, entering the national park of its own accord. I lift my camera to snap a picture, prompting a pair of soldiers aboard the barge to shout: “Forbidden to take photos!”

Officials in blue coveralls and helmets are tight-lipped when we clamber through the boot-sucking ooze and climb aboard the barge. But a tall man of broad girth offers me a beefy paw and a warm welcome. “I’m one of the bad guys,” he says in English with a laugh, before I even get his name. Robin Draper, 56, seems as surprised by our sudden appearance as we are by this entire operation. “We’ve been here for weeks, and you’re the first boat that’s come down this river,” he says.

Draper, a native of Sacramento, California, and a veteran of the Prudhoe Bay oil fields in Alaska, is the owner-operator of the barge, named Alicia, and is working on contract for Petroamazonas. Operating largely outside the public eye, the state oil company is evidently moving at full throttle into Block 31. Environmentalists celebrated a few years ago when they stopped another oil company, Petrolbras, from drilling on the same tract. That concession has since reverted to Petroamazonas, and now the nine-mile road south from the Napo to the Tiputini Rivers is finished, Draper says. What’s more, bulldozers have already advanced deep into the forest on the other side of the Tiputini.

It’s a move that’s bound to stir controversy, because it represents a fresh intrusion into the park. Critics have also contended that Block 31’s known reserves of 45 million barrels are too small to justify a massive investment in the concession. The real reason for going into Block 31, they say, would be to lay the infrastructure for an eventual move into the ITT Block next door, making it as much a menace to the credibility of the initiative as it is to the wildlife and to the isolated indigenous groups that wander its upland forests. Recent reports point to the possible presence in the area of such groups, which the government is duty-bound to protect.

Though Draper has no opinion about that, he says the company is doing its best to minimize disturbance in the area, starting with the use of...
his barge. "They aren’t going to build a bridge across this river," he tells us over a cup of coffee in Alicia’s wheelhouse. "There will be a barge here forever." Draper describes a “completely new roadbuilding process” under way on the far side of the river, where workers are laying down a synthetic material over swampland and forest that could eventually be rolled up and removed. His Ecuadorian colleagues refer to the road as a sendero ecológico—an ecological path—when they speak to local natives hired on as manual laborers. “The idea is that someday you can turn the road back to nature.”

But Draper isn’t convinced. “Their heart’s in the right place,” he says. “But the way I see it, we shouldn’t even be here.”

BACK ON THE RIVER, I ask Galo Zapata, one of the WCS biologists on our boat, how this new road is likely to affect the rain forest. “I’m sure the company will do its best to control access to the road,” he says. “But they’re not going to stop the Kichwa and Waorani from settling on it.”

This has all happened before, he explains. When oil companies built the Maxus Road (named after Maxus Energy Corporation, a U.S. oil exploration firm) into Yasuni in the 1990s, measures were taken to block access to outsiders, but natives living within the park moved their villages to the road and began hunting animals to sell on the black market. “With all the people who will move here, there will be a big demand for bush meat. It will be bad for the large birds and animals. The social impacts will be bad. The story will repeat itself.”

As we proceed downriver, the landscape levels out until it resembles a vast lowland swamp studded with açaí palms. Our GPS indicates we’ve crossed into the ITT Block, ground zero of the oil controversy. We pull ashore at a low bank, where a hand-painted billboard marks the small Kichwa community of Yana Yaku.

Community leader César Alvarado emerges from under the low thatching of his house and tells us about the time, when he was a young child, that the oil companies arrived. The first men came in helicopters that buzzed the tall morete palms beyond the village before touching down, he says. Then came barges laden with housing units for the workers and tractors that mowed down the forest and hauled in the big rigs. “There was an entire town of workers,” he remembers, sweeping his hand out toward the tangled undergrowth. “They were friendly. They shared their food with me.”

Now 49, Alvarado, barefoot and thin in a loose-fitting tracksuit, leads us down a muddy path past Yana Yaku’s rough-hewn shacks. He wants to show us what all those workers came here to do so long ago, and the solitary monument they left behind. We enter a shady clearing and behold an astonishing sight. It appears to be some kind of sculpture, an abstract crucifix assembled from pipes, valves, and elbow joints. Standing nearly 15 feet high, it’s tarnished and moss covered, like a lost idol from a Steven Spielberg movie. But it’s hardly forgotten. This is the story that has haunted the Yanomami here for years. One by one, the oil workers were taken away. None of them knew how to survive in the forest. Some starved to death. But most remember the stories. A story of the Kichwa and Waorani, and the great cats they worshiped as their protectors.
After a day’s work, Waorani gather in a communal house to share a meal and tell stories. Omayuhea Baihua, seated beneath the radio, has brought home a monkey from a hunt. His wife, Tepare Kemperi, is stewing it over a fire for dinner.
How many oil workers did Kemperi and his comrades kill that day? HE COUNTS ON HIS FINGERS. Five, maybe six. “We killed them so they would never come back,” he says.

For most Waorani, by contrast, such a future does not look nearly as inviting. On a sticky, overcast morning, I set off from the city of Coca with native guides in a truck to journey south down the so-called Auca Road. Built by Texaco in the 1970s to move drill rigs to the south down the so-called Auca Road. Built by Texaco, the road split former Waorani territory straight down the middle. Adding insult to the injury, the company christened the road Auca, the name of his applied to the Waorani by their enemies, meaning ‘savage.’ We’re bound for the bridge at the Shiripuno River, the gateway to the Untouchable Zone, where at least two Waorani groups, the Taromenane and Tagaeri, live in voluntary isolation from the rest of the world.

Careering down the winding asphalt, we pass a landscape of denuded hillsides and ranchos that bear witness to the uncontained rush of land-hungry settlers that followed the road’s construction 40 years ago. Several impoverished Kichwa and mestizo communities lie strewn along feeder tracks branching off the Auca.

At a place where the road bends sharply to the right and disappears in a spray of foliage, we jog left and follow tire tracks up a steep hill. I’ve heard that uncontacted Indians have recently turned up outside the exclusion zone, in an area where oil development is in full swing.

Soon we’re navigating a labyrinth of back roads serving a growing sprawl of oil wells and pumping stations. We fishtail around a hairpin turn and come face-to-face with a high wall of jungle, where the road abruptly ends. Ahead to the right, a new drill rig rises behind a chain-link fence. A sign on the gate identifies the site as the Nantu E oil well. Off to the left, a knot of thatched shack sits back in the woods—the Waorani village of Yawepare.

Tapping mongrels surround us as we hop down from the truck. A muscular man in shorts and a tight T-shirt wants to know my business. Satisfied that I am not from the oil company, he suggests we talk in the open-air communal hut nearby. His name is Nenquimo Nihua, he says in fluent Spanish, and he’s currently serving a two-year term as the community chief.

“This is a dangerous area,” Nihua warns. Tensions have been on the rise since oil workers arrived a few months ago to work on the well next door. Villagers here are worried that the racket created by heavy vehicles and machinery could provoke a violent response from uncontacted groups in the surrounding jungle. The isolated groups feel their land is shrinking.

“We’re being flushed out of the forest,” he says. “They’re being flushed out of the forest;” Nihua adds. By the next morning the warriors were gone.

Despite their family ties, many civilized Waorani fear attack by the Taromenane and Tagaeri. Yet the nomadic clans are also a source of pride, a potent symbol of tribal resistance, and a reminder of their ancestral traditions. Nihua says he and his family leave axes and machetes in the woods for their relatives to take. They plant gardens to feed them and run armed patrols to guard their harvests and wooden huts flank a 1,800-foot-long (560-meter) grass airstrip. There we find Penti Baihua, Otobo’s cousin and a community leader, locked in vigorous discussion with a gathering of villagers near the airstrip. He’s barefoot and bare-chested, with wavy black hair and an easy smile. He breaks away to welcome us.

“The ITT is only a small part of Yasuni,” he says, when I ask him about the initiative. He’s especially worried because the Waorani don’t have specific, government-recognized ownership rights to the land that lies within the Untouchable Zone. “They will conquer this space, one oil well at a time, if we don’t have that document,” he says, and a tight T-shirt suggests we talk in the open-air communal hut on the far side of the village.

“Before we had no T-shirts,” he says, and a tight T-shirt suggests we talk. “We don’t know what plans the government has for our territory.”

Penti leads us across the soggy runway to a communal hut on the far side of the village. He wants me to meet his uncle, a silver-haired man named Kemperi. One of the very last jaguar shamans of the Waorani, Kemperi is widely revered for his ability to communicate with the forest spirits. Dressed in shorts and a blue T-shirt, he has long gray tresses framing a broad smile of brilliant white teeth. He does not know how old he is, he says, but he was already an adult when he joined a war party that ambushed and killed several Shell oil workers in the 1940s.

Twelve workers in all perished at the hands of indigenous warriors. The company later abandoned operations in eastern Ecuador, and it wasn’t until the missionaries subdued the “Auca” that oil exploration resumed here.

How many did Kemperi and his comrades kill that day? He counts on his fingers. Five, maybe six. “We killed them so they would never come back.” Despite the violence he describes,
A fiery glow in the sky over Yasuni, revealed in a long exposure, comes from the flares of oil wells burning off gas. With oil operations creeping ever closer, the possibility of destruction hangs heavily over the last untouched corner of this primeval forest.

TIM LAMAN
he speaks with the easy laugh of an old combat veteran recounting his younger days in the war. But what about today, what if the men with the hard hats and uniforms return? "If they come back, we will kill them," he says matter-of-factly. "We will do as our parents and grandparents taught us."

After nearly three weeks of traveling by truck, boat, and bush plane through Yasuni, I head for the capital city of Quito, high in the Andes. I’ve been offered the opportunity to speak directly with President Correa about his struggling Yasuni-ITT Initiative. Guards snap to attention as I pass the colonnades of the colonial-era Carondelet Palace and enter a lavish room of gold-trimmed furniture and brocade curtains.

Charismatic, articulate, and intelligent, Correa, 49, gets right to the point during our talk. The Yasuni-ITT Initiative, he says, is still on the table. "We've always said that if we didn't receive the necessary support for the initiative within a reasonable period, we would have to exploit the oil," he says, "with the greatest environmental and social responsibility."

The initiative poses a real dilemma, he continues. "Ecuador is a poor country. We still have children without schooling. We need health care, decent housing. We lack many things. What would suit the country most would be to exploit the resource. But we also understand our responsibility in the fight against global warming, the principal cause of which is the burning of fossil fuels. That’s the dilemma."

As we wrap up the interview, Correa sounds like a man who's already made up his mind. "I insist that we are going to exploit our natural resources, as all countries in the world do," he states. "We cannot be beggars sitting on a sack of gold." Nonetheless, he finishes by saying that he’d be willing to consider putting what is widely known in Ecuador as Plan B—exploiting the oil in the ITT—to a popular vote.

On the steps outside the presidential palace, I think about the road I saw under construction in Block 31 and the violation of the wilderness it represented. Regardless of the outcome of the ITT Initiative, significant portions of Yasuni will remain under siege. "If the Yasuni-ITT Initiative fails, we’ll figure out how to save part of it," Kelly Swing had told me as we sat on the deck of the research station, as though he too were already looking beyond the decision. "My main concern is that with each compromise with development, we end up with less for nature." A breeze rustled the treetops. Somewhere a macaw shrieked. "Should we use our capacity to tame nature and commandeer all the resources for ourselves and take it right up to the breaking point?" Swing asked. "Will we even know where that breaking point is?"

We thank the Kichwa community of Añangu and the staffs of the Napo Wildlife Center and the Tiputini Biodiversity Station for their support.