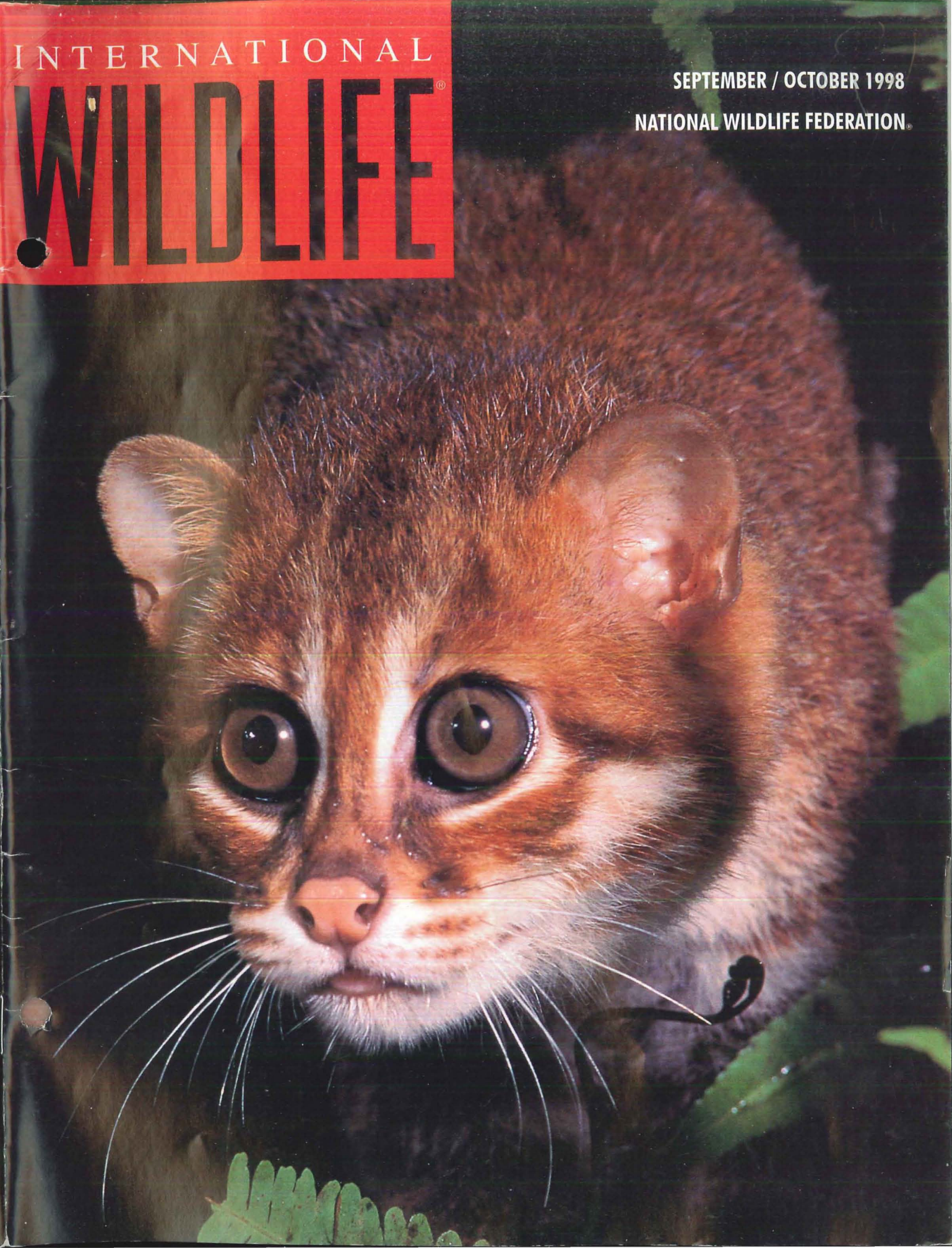


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# The Ghosts of Way Kambas

Among its elephants and tigers, an extraordinary park in Indonesia harbors the rare Sumatran rhino

By Greg Breining  
Photographs by Alain Compost

**P**ICTURE OF SURPRISE: A rhino roaming through Sumatra's Way Kambas park at night trips a camera's infrared beam. American biologist Ron Tilson set up camera traps in the park hoping to record rare Sumatran tigers lurking in the jungle. Instead he captured images of the Sumatran rhino, helping to reveal a new group of more than 12 of the animals. In all, the Sumatran rhino numbers just 300 to 400, making it the most endangered of the world's five rhino species.

**W**HEN RON TILSON, an expert on Sumatran tigers, came to Indonesia's Way Kambas National Park three years ago, he and his team set up a network of infrared-triggered cameras to record the stealthy cats as they stalked the dark jungle. Tigers of all ages and sizes soon appeared on film. But so did other, unexpected images: lumbering gray ghosts, each a ton of hairy, thick-skinned bulk with two horns.

What Tilson's team documented, by accident, was a population of the Sumatran rhino, one of the rarest animals on Earth. Although park rangers and biologists had recently seen tantalizing signs of the creature, Tilson's photographs provided the first hard evidence of a group of between one dozen and two dozen rhinos thriving in virtual seclusion.

Way Kambas, located in southeastern Sumatra, is a sprawling expanse of steamy lowland forest, mangrove swamps, sea coast and winding tidal rivers. A gem in the Indonesian park system, it harbors an extraordinary collection of charismatic wildlife, including Asian elephants, tapirs, monitor lizards, gibbons, flat-headed cats, clouded leopards—and, as Tilson's cameras showed, a significant number of Sumatran rhinos.

The elusive rhino is on the brink of extinction, primarily because of illegal hunting for its horn. Since the discovery of the population at Way Kambas, authorities in Indonesia and from around the world have taken new measures to protect it there. These programs—including a special anti-poaching patrol, a



training program run by wildlife wardens from Minnesota and an unusual park-within-a-park breeding center—have transformed this biologically diverse but relatively obscure park into a microcosm for the challenges and promises of Sumatran rhino conservation.

The Sumatran rhino once roamed the forests not only of Sumatra, but also of

Borneo, Malaysia, Thailand, eastern India and Myanmar (formerly Burma). An adaptable browser, it feeds on leaves, twigs and fruit. The species is the smallest of the world's five rhinos, standing only 1 to 1.5 meters (3 to 5 ft.) at the shoulder and weighing between 600 and 800 kilograms (1,300 to 1,800 lbs.). It is also the hairiest of modern rhinos and is

closely related to the extinct woolly rhino that lived in Eurasia in the Ice Age.

Until the nineteenth century, the Sumatran rhino was so common some people considered it a garden pest. In recent decades, however, as the rhino was hunted for its horn—a valuable folk remedy in Asia—and as forests throughout its range were logged and burned, the

creature became something of an enigma.

To find out how many Sumatran rhinos were left, researchers in 1993 ventured into Kerinci Seblat National Park along the mountainous spine of west-central Sumatra, then believed to be the stronghold of the species. Neil Franklin, one of the researchers and now field coordinator for Tilson's Sumatran tiger project, says the team expected to find 500 rhinos. "We spent a year not finding anything," Franklin says. Finally, after walking nearly 3,000 kilometers (1,900 mi.),



CAPTIVE CONTROLLED SITUATION

**CATS OF MANY COLORS:** Endangered felines also prowl the steamy lowland forests of Way Kambas. The clouded leopard (above), named for its billowy spots, may be as much at home in the trees as on the forest floor. The little-studied leopard reputedly hides in the branches, dropping down on unsuspecting prey. The Sumatran tiger (right) stays on the ground, stalking deer or wild pigs in the thick undergrowth. Both cat species are threatened by poaching and habitat destruction.

they discovered remnant groups totaling only 20 to 30 individuals.

After that stunning failure, estimates of the rhino's population were scaled downward. Now, experts believe only 300 to 400 of the rhinos exist in scattered groups in Sumatra, the Malaysian peninsula, northeastern Borneo and perhaps Thailand and Myanmar. Though population data are sketchy, the rhinos' numbers are believed to have plummeted by 50 percent or more during the last two decades, according to the Asian Rhino Specialist Group for IUCN—The World Conservation Union.

Because the groups are fragmented and many live in unprotected areas, the IUCN rates the Sumatran as the most critically endangered of the world's rhino species. "If it's not *the* most endangered large mammal of the world, it's definitely one of the top three," says Alan Rabinowitz, a scientist with the New York-based Wildlife Conservation Society. "If

nothing changes from right now, then I think they will be extinct in the wild."

Loss of habitat, a threat to many creatures, is not the primary danger to the Sumatran rhino. "There's still an awful lot of Sumatran rhino habitat in Southeast Asia and Sumatra," says Thomas Foose, program director of the U.S.-based International Rhino Foundation (IRF) and a program officer for the IUCN's Asian Rhino Specialist Group. "We estimate that there's enough habitat remaining for probably 10,000 Sumatran rhinos."

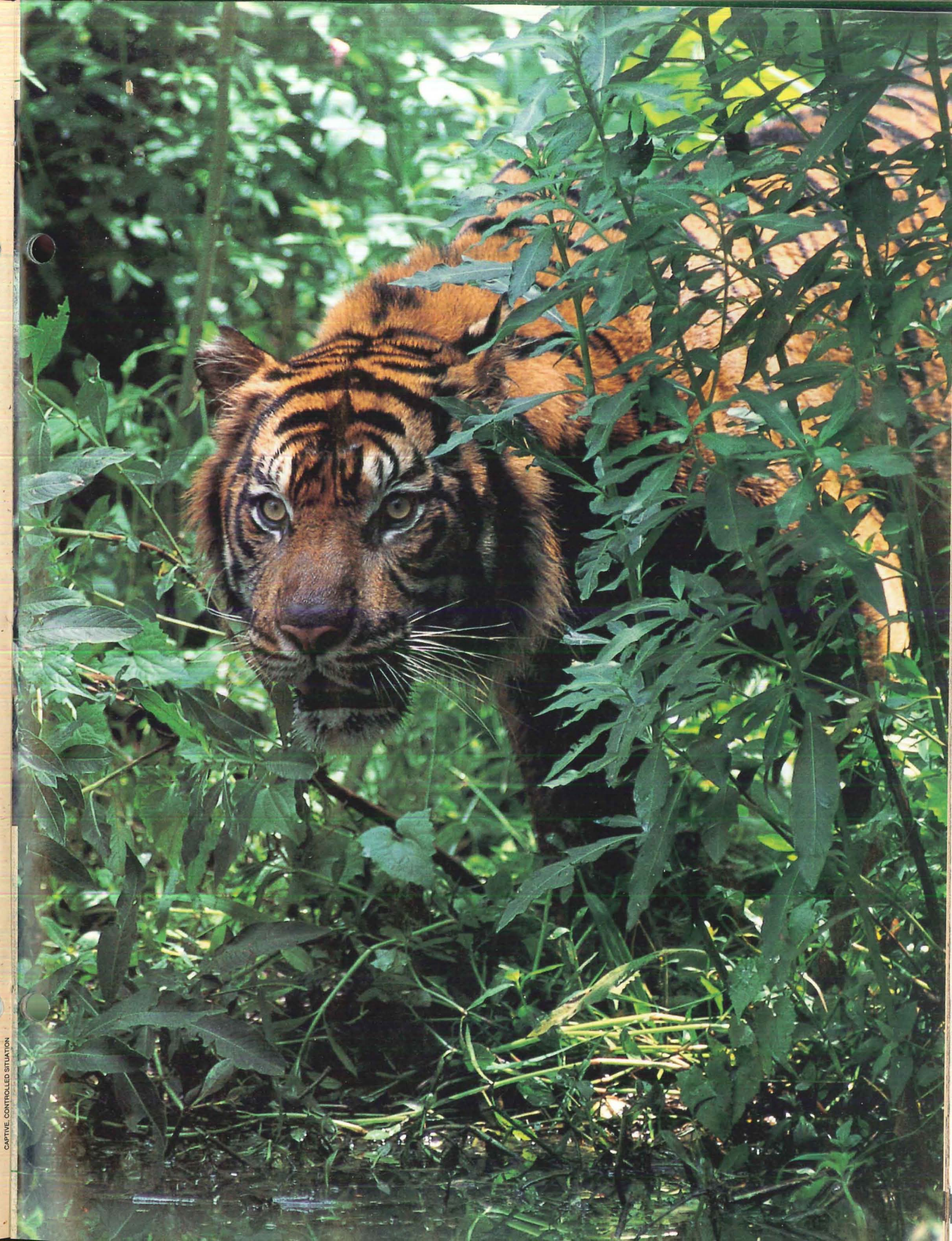
The chief threat to Sumatran rhinos is illegal hunting. "Poaching is intense everywhere in Sumatra," Foose says. "The only place where it hasn't been intense so far is in Way Kambas." The 130,000-hectare (320,000-acre) park has provided secure refuge for rhinos for two reasons, Foose says. In comparison to other Sumatran parks, Way Kambas has a history of effective management. Also, few poachers realized that rhinos still lived there.

Soon after the discovery of the Way Kambas population, the IUCN, the IRF and the Indonesian government jointly established a rhino protection unit (RPU) in the park. This RPU was one of several initially funded by the United Nations. Conservationists started the RPUs because they believed that park guards have too many other duties—such as maintenance work and guiding tourists—to devote enough time to law enforcement.

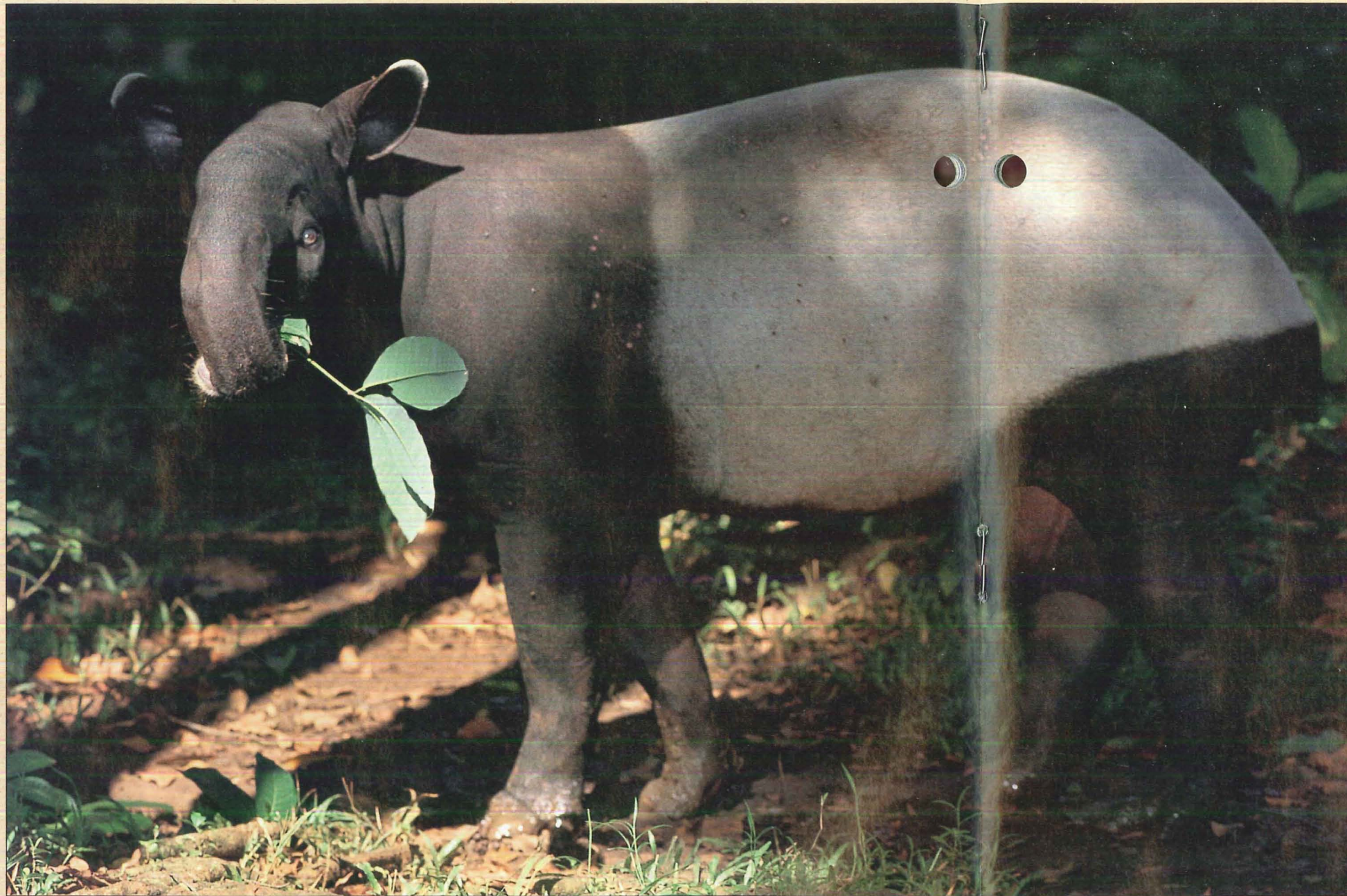
Arief Rubianto, a 27-year-old veterinary school graduate from Java, now heads the nine-person RPU at Way Kambas. Rubianto's young wife lives in Java with their one-year-old son. Rubianto sometimes goes for months without seeing his family. Still, he says, "the job is very important. I'm happy with the job."

Twenty days of every month, Rubianto's rangers patrol Way Kambas, hiking the trails through the lowland forest or motoring along the winding streams that run out to the Java Sea. When they are not in the field, the rangers stay at a barracks in the park. There Rubianto has rigged a demonstration rhino-poachers' trap consisting of a loop of steel cable over a shallow pit. Two logs are positioned to direct a rhino's foot into the snare. The rhino's footstep trips a trigger that frees a sapling, which tightens the snare and then snaps free. The rhino is left thrashing against the steel cable, which is anchored to a nearby tree.

Before his assignment at Way Kambas, Rubianto worked for an RPU in Bukit



CAPTIVE CONTROLLED SITUATION



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Barisan Selatan National Park in southwestern Sumatra. In 1996, his unit discovered the skin of a Sumatran rhino's leg in a steel-cable snare. The rhino had trampled the underbrush as it thrashed to slip the trap. Ultimately, it starved, and the poacher returned to remove the horn. The wardens found seven other active rhino traps in the area. "We cannot find this poacher in the forest," Rubianto says. "It's very hard."

As chief intelligence officer in the unit, Rubianto began to piece together an understanding of how the trade works.

Traffickers, he learned, recruit poachers from rural areas and show them how to make traps. Rhino parts travel to Tapan in west Sumatra, the apparent center of trade, where a horn brings as much as \$70,000. Smugglers spirit the body parts to Singapore or Hong Kong for use in folk remedies for fever, skin diseases and impotence.

Finally, using informants in the villages, Rubianto located a suspected poacher in Lampung Province in southeastern Sumatra. With local police providing backup, Rubianto posed as a buyer and met with

the suspect. The man had bones of rhinos, tigers and elephants, so police moved in and arrested him. Though convicted, the poacher was sentenced to less than four months in jail. "The charges are not so good," Rubianto says.

Many poachers are ruthless and better armed than the parks' law enforcement officers, who until recently did not carry guns. Often, park guards lack training and experience in dealing with these criminals. And, in parks without the RPUs, law enforcement may take a back seat to other duties. Ron Tilson spotted these

problems when he worked in Ujung Kulon National Park in western Java. There, the most prized target of poachers was the rare Javan rhino, an endangered relative of the Sumatran species.

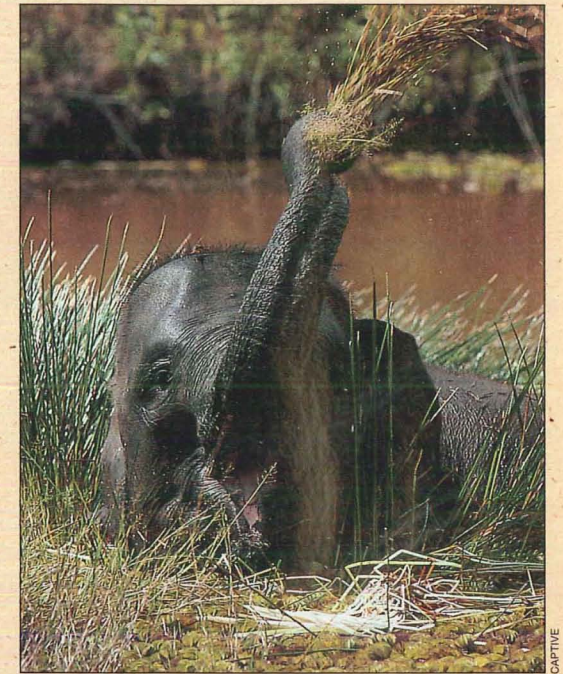
Tilson, conservation director of the Minnesota Zoo, decided to help Indonesian park authorities by persuading the zoo in 1990 to start an Adopt-a-Park program with Ujung Kulon as its first adoptee. The Americans provided a patrol boat, new guard posts and other resources. But Tilson realized, from living next to the guard post at Ujung Kulon, that more help was needed. "I thought there was a real lack of discipline in how they used the radios, a lack of discipline in how they went about doing things, a lack of discipline in reporting," he recalls. "I also realized I had no background in this." The solution: Tilson and a colleague at

the zoo decided to recruit American conservation officers to provide law enforcement expertise.

The man they selected was Gary Westby, a conservation officer who worked for the Minnesota Department of Natural Resources. Westby persuaded the Minnesota Conservation Officers Association in 1992 to launch an Adopt-a-Warden program and pledge money to help wardens abroad. In 1994, he and other conservation officers traveled to Ujung Kulon, bearing donated handcuffs, knives, water bottles, compasses, ponchos, sharpening stones and binoculars.

In 1997, when the Minnesota Zoo adopted Way Kambas as its second park, the conservation officers expanded their program as well. In the summer of 1997, Westby and several other officers visited Way Kambas to lead the assembled park guards and Rubianto's rangers in self-defense and handcuffing drills. They also accompanied guards on two patrols down the Way Kanan River and to the seacoast.

The Minnesotans discovered that American methods don't always work in other countries and that some previously donated gear had disappeared or wasn't



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**N**OSING THROUGH PLANTS: A young Asian elephant (above) feeds on swamp grasses in Way Kambas park. The Asian elephant's numbers have dwindled to fewer than 50,000 as its forest habitats have been logged and farmed. Way Kambas is an important haven for the species in Indonesia. The Malayan tapir (left) is also imperiled by the loss of forests in Southeast Asia. Like the elephant, the tapir uses its snout to feed, but the creature is more closely related to rhinos and horses.

being used. Despite these challenges and Westby's recent death in an auto accident, the conservation officers plan to continue working with their Indonesian counterparts. They hope to bring more clothing and personal gear to Way Kambas and conduct additional training sessions with park guards.

Other conservationists in Way Kambas are working at the same time on a different project that may increase the numbers of Sumatran rhinos: a 100-hectare (250-acre) sanctuary within the park, surrounded by an electric fence, to serve as a managed breeding area for the species. Three to five Sumatran rhinos languishing in zoos around the world are coming to the sanctuary, and their offspring will repopulate suitable habitat where wild rhinos have disappeared, Tom Foose says.

The sanctuary, which was built by the IRF, the Indonesian government and a tourism company, will help draw paying

tourists to the park and within a few years will provide a permanent source of funds for the RPU, its backers say. Over time, sanctuaries such as the one in Way Kambas may enclose vast acreages of rhinos and habitat, providing an additional barrier to poachers, Foose predicts.

Not everyone is convinced the sanctuary is the best use of conservation money and time, however. Critics point out that a previous captive-breeding effort between 1984 and 1993, in which 40 Sumatran rhinos were captured and shipped to zoos in Indonesia and elsewhere, resulted in 23 dead rhinos and no offspring. The Wildlife Conservation Society's Rabinowitz (whose own group was a partner in the earlier captive-breeding program) criticizes the IUCN's Asian rhino group for emphasizing captive breeding over protection of wild Sumatran rhinos. "There's been a huge amount of dollars spent and a huge number of meetings and a lot of patting on the back and talk of accomplishments," says Rabinowitz. "The bottom line is whether the Sumatran rhinos are increasing or decreasing. And they're decreasing."

Foose acknowledges that the previous captive-breeding program was not suc-



CAPTIVE CONTROLLED SITUATION

**T**O CATCH A RHINO: Gary Westby (above, in light shirt), a Minnesota game warden, and Arief Rubianto, an Indonesian antipoaching officer, examine a steel-cable snare used to trap Sumatran rhinos. To help fight poachers, Minnesota game wardens are training and supplying their ill-equipped Sumatran colleagues. Captive rhinos such as this one (right) do not reproduce well in zoos, but scientists hope a new breeding facility in Way Kambas will help restore the species.

cessful. By carving the new sanctuary out of native forest, however, Foose hopes to solve the nutritional and other problems that have plagued captive Sumatran rhinos. Also, the only candidates for the sanctuary at present are holdovers from the earlier captive-breeding effort that are living a marginal existence in zoos.

But will the sanctuary's occupants survive, much less reproduce? Under the best of circumstances in the wild, Sumatran rhinos are slow breeders. The animals don't mature until they are seven or eight years old; their gestation period is nearly twice that of humans (16 to 17 months); and they only give birth to one calf every three or four years. So the effectiveness of the new breeding program won't be known for some time.

Given such uncertainty, most Sumatran rhino advocates are pinning their hopes on the RPUs and the fight against poachers. If the RPUs continue to receive funds, training and equipment, "I'm optimistic that the rhino population can grow up in 10 or 20 years," Rubianto says.

Foose agrees that the next few years will be critical. "I think basically they're either going to go extinct over the next 20 years, or we're going to succeed in protecting and propagating them, and they will have recovered to maybe a couple of thousand animals," he says.

In addition to the success of anti-poaching and breeding efforts, the fate of the Sumatran rhino depends on how many of the animals are still lurking in the jun-

gles of Indonesia. If prime habitat turns out to be as devoid of rhinos as Kerinci Seblat was, then there may be even fewer than 300 to 400 Sumatran rhinos. But biologists may also have underestimated the species' numbers, says Nico J. van Strien of the IUCN's Asian rhino group.

"The Way Kambas experience may prove us wrong," says van Strien, referring to the discovery of the elusive rhinos in the Sumatran park. "There are surprises out there." □

*Minnesota journalist Greg Breining spent a month with American game wardens in Indonesia in the summer of 1997. French-born photographer Alain Compost has lived and worked in Indonesia for more than 20 years, and is coauthor of Green Indonesia.*