

SY MONTGOMERY

AUTHOR OF THE BESTSELLING *THE GOOD, GOOD PIG*



SEARCH FOR THE
GOLDEN MOON BEAR

SCIENCE AND ADVENTURE IN
PURSUIT OF A NEW SPECIES

WITH A NEW AFTERWORD BY THE AUTHOR

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SEARCH FOR THE GOLDEN MOON

Science and Adventure in Pursuit of a New Species

Sy Montgomery



New in Paper!

With a New Scientific Addendum by
Dr. Gary Galbreath • New Photos

Sy Montgomery has already shared with readers her amazing encounters with great apes, man-eating tigers, and pink river dolphins, but her latest muse is an animal whose name and appearance evoke another world altogether. Southeast Asia's golden moon bear, with its luminous coat, lionlike mane, and Mickey Mouse ears, was unknown to science—until Montgomery and her colleagues got on the trail at the dawn of the new millennium.

Search for the Golden Moon Bear recounts Montgomery's quest—fraught with danger and mayhem—to reconstruct an evolutionary record and piece together a living portrait of her little-known subject. This beautiful animal is not just a scientific *eureka!* It is also a powerful symbol of conservation. *Search for the Golden Moon Bear* is a field report from the frontiers of science and the ends of the earth, seamlessly weaving together folklore, natural history, and contemporary research into fantastic travelogue.

Pub Date: August 2009

\$19.95 US, \$19.95 CAN • PB

9781603580632

5½ x 8½ • 336 pages • Color photo insert

Previous ISBN: 9780618356508

Nature/Essays

Sy Montgomery is an author, naturalist, documentary scriptwriter, and radio commentator who has traveled to some of the world's most remote wildernesses for her work. She has worked in a pit crawling with 18,000 snakes in Manitoba, been hunted by a tiger in India, swum with pink dolphins in the Amazon, and been undressed by an orangutan in Borneo. She is the author of 15 award-winning books, including her national bestselling memoir, *The Good Good Pig*. Montgomery lives in Hancock, New Hampshire.

"Montgomery is equal parts poet and scientist." —*The New York Times*
Book Review

"Sy Montgomery's work is in a class by itself. No safe, stay-at-home desk job for her—evidently unworried by minefields and bandits, she traveled in very dangerous parts of Southeast Asia, taking risks that make John Wayne look like a wussie, to learn about a rare and vanishing relative of the black bear. The result is her usual brilliance, a book that is as original and interesting as it is insightful and beautiful. The author does more for animals in any one of her books than most of us do in a lifetime." —Elizabeth Marshall Thomas, author of *The Hidden Life of Dogs*

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SEARCH FOR THE GOLDEN MOON BEAR

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SEARCH FOR THE GOLDEN MOON BEAR

SCIENCE AND ADVENTURE
IN SOUTHEAST ASIA

SY MONTGOMERY

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WHITE RIVER JUNCTION, VERMONT

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Originally published by Simon & Schuster, 2002.
This edition published by Chelsea Green Publishing, 2009.

Printed in the United States of America.
10 9 8 7 6 5 4 3 2 1 09 10 11 12 13

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Chelsea Green edition ISBN: 978-1-60358-063-2

Library of Congress Cataloging-in-Publication Data
Montgomery, Sy.

Search for the golden moon bear : science and adventure in Southeast Asia / Sy Montgomery.
p. cm.

Originally published: New York : Simon & Schuster, 2002.

Includes bibliographical references.

ISBN 978-1-60358-063-2

1. Asiatic black bear--Southeast Asia. 2. Scientific expeditions--Southeast Asia. I. Title.

QL737.C27M655 2010
599.78--dc22

2008052556

Chelsea Green Publishing Company
Post Office Box 428
White River Junction, VT 05001
(802) 295-6300
www.chelseagreen.com

To my mother,
Mrs. Willa Brown Montgomery,
aviatrix and adventurer

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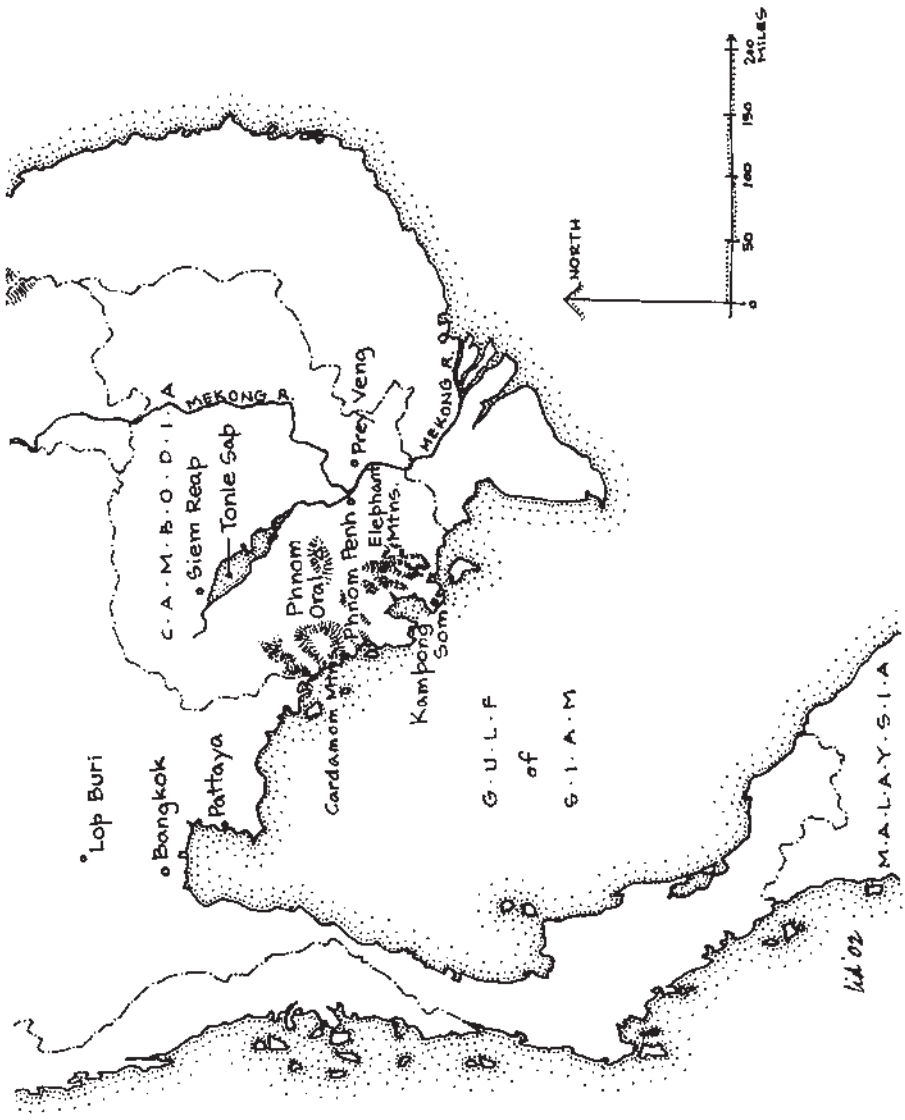
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The author's travels through the Southeast Asia



PART ONE

**A FIRST ENCOUNTER:
THE GOLDEN MOON BEAR**

A pale face stares out at us from the darkness, looming from the close, damp shade. At first we see only the lobed, moist nose, the small, brown eyes circled in black like a panda's—features set against the ghostly cream fur of her muzzle like a mask that a Siamese dancer might wear for a *khon* drama.

“Ahhhhh!” Sun Hean sighs softly. “She’s here!”

The bear moves slowly toward us, padding on leathery, in-turning paws. As she steps heavily from the leafy shadows in back of her outdoor pen, she reveals herself to us by inches. Now we see her round ears, sticking up like two unfolded oriental hand fans. They are light inside, but fringed with dark fur like eyelashes. The ears swivel toward us, then back, consulting both directions, considering as she paces forward. Now we see her deep black mane. Thick as a lion’s, it covers the top and sides of the neck and head. On her chest is a crescent etched in white fur. And now we see the rest of her body, and it takes our breath away. The legs, the back, the belly, the haunches—even the claws—are various shades of gold: the gold of wild bee honey, the gold of the ginger’s root, the gold from the throat of a rain forest orchid. A spectrum of gold—topaz, buttercup, amber, tigereye—the colors seem to change with the light filtering through the feathery leaves of the mimosas in her enclosure. On the upper part of her back, the hair is nearly orange.

No bear like her is known to science.

She was captured one dusky evening in the wet season, a year and a half before. She was living wild only a kilometer from where she is now caged. A hired guard hoped to please his boss with the gift

of this unusual cub. She lives now confined within bars of orange-painted steel. To the wealthy man who considers her his property, she is merely a beautiful curiosity.

But to us, she is the entryway to a labyrinth of mysteries.

We have come from half a world away to learn who and what she is. We look to her to show us the secrets of her kind. With the help of a laboratory full of machines and enzymes that chop, sort, and compare sub-cellular information, we will try to follow her back in time.

She could be a link to a past when Neanderthals roamed Europe, when *Homo sapiens* was confined to Africa, and when *Homo erectus* was still alive in Java, a human backwater. Most of Southeast Asia's rain forests, oldest in the world, at that dry, turbulent time had shrunk to tiny, verdant oases surrounded by dry thorn scrub. Most of its bears, if there were any, may have been restricted to mountain refuges. She could help lead us to a vanished refuge—or help us to create new ones.

She could help reveal to us a map of her ancestors' travels. If we could read it, we might be able to help conservationists repopulate now-empty forests with once-captive bears like her.

For a scientist, she could be the Eureka of a lifetime. For a conservation official, she could provide an emblem as compelling as World Wildlife Fund's panda. For a storyteller, this bear could be the starting point of a tale of historic discovery—or the frustrating saga of a mystery unsolved.

She is smaller than we expected. She weighs perhaps 125 pounds, and she is thin for her age. Yet so much rests on her.

The air is heavy with our hopes, heavy with the febrile heat, heavy with the southwest monsoon. The weight of it all seems to slow down time. Perhaps this is the pace the bear lives by—an ancient pace, graceful and considered, like the way her long tongue emerges from her mouth to examine a morsel on the ground. Like a separate, private creature, the pink ribbon slides from between her black lips, taking five full seconds to extrude

its full length, stretching seven inches longer than her muzzle. It does not seem like something that would inhabit the cavernous, yellow-toothed mouth of a bear. The tongue hovers like a hummingbird over the husk of a small nut. The tip can fold, acting like the two fingers of an African elephant's trunk, capable of plucking a grape. She touches the nut, releases it, withdraws the tongue. She considers its information in the most ancient, mysterious, emotional part of the brain, where the oldest bear-knowledge is stored.

Bear-time seems slow to us, perhaps, because we do not have the patience for such a life. In the winter, in the country where I live, a bear can slow her heart to eight beats a minute, and spend a quarter of a year waiting in the darkness. Bears are not made for speed. They do not stand on their toes, in order to run fast like tigers and wolves, but on their soles. Their stout limbs and short backs are built for strength. Bears are meant for long lives. If as cubs they are not killed by predators, or as youngsters by malnutrition, or as adults by hunters, they can live more than thirty years. Such a long lifespan testifies to the value of knowledge carefully accumulated and considered. There is a close, deep, den-dark patience to their movements, their senses, their knowing.

The golden bear lifts her head and opens her nostrils to our scent. She lives in a flood of odors. The area of her nasal mucosa is one hundred times ours. To her, the world is radiant with scent: she can smell the vapors rising from the soil, the ions escaping from the earth. Some scientists believe that bears navigate, often over ranges of many hundreds of square miles, by mapping and memorizing the different odors of their world.

Her nostrils quiver, pink and wet inside. She breathes in our identities: she reads the stories redolent in our sweat, our breath, our hair. She can smell the eggs in our stomachs.

But of her story, we know next to nothing. Her gaze comes to us as if from across many lifetimes—slow, wise, patient, and wondering. Her eyes seem tiny, as if they look out from the soul of a smaller

creature hidden within this shambling body. You look into her eyes as you would look at the stars, their light crossing eons, alien, eternal and mute.

For now, she keeps her secrets.

In the Market for Bears

As we pull over at the market at Kampong Som—a street fragrant with French bread and roasting swallows, crammed with wedding dresses, live lobsters, chain saws, flyswatters, cooking pots—our Toyota is thronged with children trying to sell us snails and clams. Our companion, Sun Hean, chats in Khmer with a pregnant woman in a blue pantsuit. Does she know where we might find a moon bear?

The name of the animal evokes the luminous night. Its original Latin moniker—*Selenarctos thibetanus*—honors Selene, the Greek goddess of the moon, because of the white crescent mark on the animal's chest. Otherwise, the moon bear, big and shaggy, with prominent, round, upright ears, and often, a thick mane like a lion's, is black as the tropical night—and as mysterious.

In fact, the first specimen described by science came from the foothills of the snowy Himalayas. Though moon bears are found from northeastern Russia and China to Afghanistan, they are little studied. Not until the 1960s did scientists realize these dark, heavy beasts, panting beneath their thick coats, padded through the heated, steamy stillness of Cambodia's jungles.

Yet in the same forests where grasses grow into trees one hundred feet high and banyons spill curtains of hair-fine aerial roots from treetops, the moon bears of the Himalayas scratch and snuffle. At dawn and dusk, they shift like shadows among gingers and bamboos. Their imprint is unmistakable. On the straight-boled, spotted trunks of bee trees, they carve their five-fingered signatures with black, recurved claws. In the crotches of tropical oaks, they break tree limbs to create springy resting platforms for their up to 450-pound bulk. In glossy monsoon soils, they leave their

footprints. With five rounded toes and a long heel pad on the back foot, their footsteps look like those of giant humans.

But you could spend years exploring these tangled rain forests and never see a moon bear. Instead, you would find them, as we did, caged in back of tourist hotels, chained outside of city pharmacies—and at markets like this one.

The pregnant woman doesn't ask what two young, well-dressed Cambodians, a sunburned blonde, and an American professor might want with a moon bear. She is an animal dealer. She knows that here in Cambodia, people buy bears for many reasons. They are treasured as household pets and kept as roadside attractions. They are sold for their meat and for their teeth. People eat their paws in soup and use their gall for medicine.

What *we* want from a moon bear, though, is stranger than the woman could possibly imagine. We want only to pluck out, with my eyebrow tweezers, a few of its hairs.

We already have a small zoo of hairs tucked in vials inside the professor's camera case. Each vial holds the genetic information of a bear captured from a different, known site. It is not the hair, per se, but its base, the living cells of the bulb, that contains the information we seek. After we return to the States, a laboratory in Idaho will extract from these specks of flesh the genetic information contained in each bear's DNA, and compare them.

In this way, we hope to document what could be the first new bear species to be reported in over a century.

But in order to do so, we need the hair of a black moon bear who has been captured in this province, a bear from the fragrant, misty forests of the Elephant Mountains.

The animal dealer says she *had* a moon bear for sale—but just that morning she'd sent it to Phnom Penh. For what? I ask Sun Hean. "For pet. For restaurant. I don't know," he answers. But the dealer does confirm that the bear had come from the rain-forested slopes of the Elephant Mountains. And there will be more where it came from.

Two mountain systems comprise most of the wilderness left in

mainland Southeast Asia: with the adjoining Elephant Mountains and Cambodia's highest peak, Phnom Oral, the Cardamom range, occupying much of western Cambodia, huddles in the shape of a Q beneath a cloak of monsoon clouds. The rainfall here is the highest in Cambodia, and the jungles the most dense. The spice-scented forests harbor creatures beautiful, deadly, and ancient: clouded leopards, with spotted coats soft and thick as mist; tiny primitive deer called muntjacks, their upper jaws curiously spiked with fangs. There are more tigers here than anywhere else in the country, and, possibly, more wild elephants than anywhere else in Indochina. In similar habitat in neighboring Vietnam, scientists discovered in 1989 fresh tracks of the Javan rhinoceros species thought extinct on the mainland for nearly half a century; some think it might yet survive here, too.

The other, wildest mountains are the Annamites. In a great igneous spine, they run for more than six hundred miles from the north-eastern corner of Cambodia up along the border of Vietnam and Laos. A mosaic of rain forest, dry evergreen woods, cypress and old-growth pine, the Annamites preserve, in the words of the great American wildlife conservationist George Schaller, "a living lost world." Four hundred species of birds have been cataloged here, a count only cursory. Of the roughly dozen large mammal species discovered in the world since 1900, nearly half of them—including a two hundred-pound antelope with spear-like horns, a giant, barking deer, and a zebra-striped rabbit—have been found, since 1992, in the Annamites.

Eventually our quest will lead us into both these mountain jungles. But before we would step into that wild and leafy realm, we would need to search its looking-glass opposites: private zoos, hotel menageries, and noisy, crowded streetside markets.

In Kampong Som, it appears that most of the wildlife is destined for the dinner plate. Along the street, where dentists advertise their services with large paintings of white, extracted teeth, a beautiful young woman, her hair tied up neatly beneath a conical hat, tends a charcoal fire over which skewered bats are roasting. In a pink plastic bowl beneath a dome of woven rattan, live frogs, tortoises,

and cobras await the soup pot. In the palm oil of a neighboring vendor's wok, three-inch grasshoppers sizzle.

"Is there any animal that people don't eat here?" I asked Sun Hean.

He thought for a moment. "The vulture," he answered solemnly.

The scent of pigs' blood mingles with the fragrance of temple marigolds. To be looking for a new species here seems irreconcilably absurd.

But it is no more unlikely, really, than the way our expedition had begun.

The route that led to the market in Kampong Som was circuitous, winding from China to the Amazon, from Hancock, New Hampshire, to Bangkok, Thailand. I had come to Cambodia thanks to extraordinary coincidences and extraordinary people.

Dr. Gary J. Galbreath was one of them. A professor of evolutionary biology at Northwestern University and a research associate of the famous Field Museum, Gary had been president of the Chicago-based Rainforest Conservation Fund when it took on funding the Tamshiyacu-Tahuayo Community Reserve in Peru in 1991. We met there in 1997 when I was researching a book on the Amazon's pink river dolphins.

"Did you know," Gary asked me as our boat chugged up the tea-colored river, "this place used to be full of giant, carnivorous Terror Birds?"

No, I did not. This he quickly remedied.

"They were feathered dinosaurs, essentially, long after the dinosaurs went extinct," he began. "It's possible a human being even saw one. They were the dominant predators in South America during the Age of Mammals. The Terror Birds even made it to Florida—to Daytona Beach! They found some fossils there. But only twenty months ago their *arms* were found—and it turns out they weren't winged like we thought."

This modest, green-eyed, middle-aged professor had me mesmerized.



Above: Strange sights awaited us through the windshield of Sun Hean's car. On the dash is a bottle of perfume to keep bad smells at bay.



Left: The golden moon bear at Mong Riththy's.