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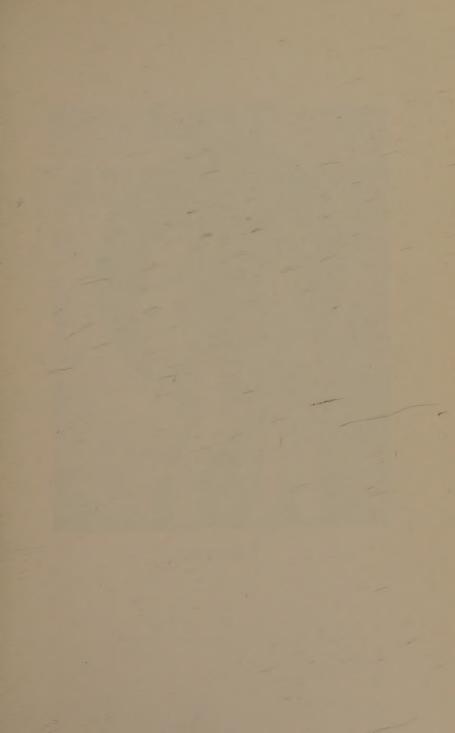
ALSO BY OSA JOHNSON

I Married Adventure
Four Years in Paradise
Bride in the Solomons
Osa Johnson's Jungle Friends
Jungle Babies
Jungle Pets
Tarnish
Pantaloons
Snowball

BY

Pascal James Imperato, M.D.

Doctor in the Land of the Lion





Osa Johnson

LAST ADVENTURE

The Martin Johnsons in Borneo by

OSA JOHNSON

edited by Pascal James Imperato, M.D.



1966

William Morrow & Company, Inc.

New York

D5646

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Published simultaneously in Canada
by George J. McLeod Limited, Toronto.
Printed in the United States of America.
by H. Wolff, New York
Designed by Marshall Lee
Library of Congress Catalog Card Number 66–11236

THIS BOOK IS DEDICATED WITH PROUD AND LOVING AFFECTION TO OUR MOTHERS BELLE LEIGHTY

AND

MADALYNNE M. IMPERATO

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FOREWORD

Osa and Martin Johnson have long been a legend in the annals of world exploration. For over a quarter of a century they brought to the world, through the lenses of their cameras and through their writings, an intimate account of unexplored regions and strange peoples. They were America's most popular explorers during that golden period when there were still places left on this earth to explore. They need no introduction to the older generation of Americans, for their names were once household words. But to the younger generation, to which I belong, their names may perhaps be less familiar.

Martin Johnson was both a romantic dreamer and a practical man with a compelling sense of daring and perseverance. He always knew what he wanted and where he was going,

and it was precisely this rare combination of qualities that motivated him throughout his life and made him one of the world's great modern explorers. He began his adventurous career in a truly romantic style at the age of fourteen by working his way across the Atlantic to England on a cattle boat. Next, there followed a two-year walking tour of Europe and then a return trip to the United States as a stowaway on an ocean liner.

Shortly after his return home to Independence, Kansas, he read an advertisement that had been placed in Cosmopolitan Magazine by Jack London. The famous author and his wife were looking for a cook to sail with them to the South Seas on their forty-seven-foot vessel, the Snark. Young Martin Johnson applied immediately and although his curriculum vitae did not include any culinary experiences he was chosen above all the other applicants. His long-standing interest in photography proved to be an invaluable asset to him during this two-year journey. He returned home in 1909 with a remarkable collection of photographic slides which he soon showed to eager audiences throughout the Midwest.

In 1910 Martin Johnson met and married Osa Leighty from Chanute, Kansas. By this time he was an established explorer and the author of a popular book, Across the South Seas with Jack London. For the first two years of their married life, Martin and Osa Johnson trouped through the rural West and into the rough mining country of western Canada, he giving an illustrated travelogue of his adventures on the Snark and she singing what passed for Hawaiian songs. The ten-cent admission price barely provided them with a subsistence income and the shacklike hotels with accommodations for men only often necessitated their sleeping in railway stations for weeks at a time.

But the Johnsons had a dream and they persevered despite

many setbacks and severe criticism. By 1912 they had managed to save \$4,000, which they promptly used to finance their first expedition to the New Hebrides and the Solomon Islands.

The majority of these islands had not been fully explored at that time and European administrative control of them was little more than nominal. They were inhabited by a variety of people, many of whom were still engaged in wholesale head-hunting and cannibalism. Into this setting stepped Martin Johnson with his lovely teenage bride at his side, and with resolute determination they faced every danger thrust into their path. They were never out of sight and sound for long of throbbing drums and savage dancing, they were plundered of their possessions, their guides abandoned them, and finally they were captured by a cannibal chief on the island of Malekula. But through it all the girl from the Midwest never flinched; she emerged irrevocably transformed into a Lady Baker of the twentieth century.

As a consequence of this journey, Martin Johnson soon realized that he had in his wife not only a traveling companion, but also a partner who was equally as capable as he of leading any expedition, anywhere. It is no surprise therefore that, after their return to the United States and the release of their first motion picture film, Cannibal Land, they embarked on another expedition to the South Seas. They poured the profits from their film into a more elaborate expedition and, thus equipped, they advanced from island to island, from tribe to tribe. Their new film, Cannibals of the South Seas, was acclaimed in Europe and America, and Osa Johnson's book, Bride in the Solomons, became a classic.

With only a few short months spent in civilization, they set sail again, this time for the unexplored interior of North Borneo. There were a few fleeting moments of glamor spent with the Sultans and Rajahs of the Malay Archipelago, but it

was not long before they were off into the interior. Ignoring official advice, they sailed up the unexplored Kinabatangan River, where death in a hundred forms stalked them. As in the South Seas, the demure woman from Kansas again caused a sensation—her skin was rubbed, her teeth were examined, and her long golden hair was pulled by scores of curious head-hunters.

This was a disappointing journey for the Johnsons, however. The unfriendly weather with its daily downpours and reeking humidity cheated them of many of their photographic prizes and so, after a disappointing year, they returned home.

In 1918 Martin Johnson was made a member of the Explorers Club of New York and Osa Johnson was given honorary membership. It was here that they met the American Museum of Natural History's famous African naturalist and taxidermist, Carl Akeley. It was he, more than anyone else, who persuaded them to turn their talents and energies toward East Africa. It was not long before Martin Johnson was sharing Carl Akeley's desire to preserve on motion picture film a complete record of Africa's wildelife. Driven by this desire, the Johnsons next embarked for East Africa. The financing of such an expedition soon exhausted the Johnsons' limited funds, and they turned to friends and relatives for assistance. The support was theirs for the asking, and thus in 1921 they sailed for Africa, a new continent with new adventures.

Their first weeks in Kenya were spent on short trips not far from Nairobi, where, at that time, wildlife still abounded. Under the careful guidance of Kenya's chief game warden, Blaney Percival, they rapidly became adjusted to conditions there and were soon able to face the most challenging dangers. It was not long before Percival revealed to them the secret of a hidden crater lake, teeming with wildlife, nestled far to the north in the little known Northern Frontier of Kenya.

This was still the romantic era of foot safaris with scores of porters marching across the open veldt. It is highly doubtful that people such as the Johnsons, who actually participated in such arduous trips, ever thought them to be romantic. And certainly their safari to find the lost crater lake, far from being romantic, was one of the most trying experiences of their lives.

After four weeks of intensive preparation, Osa and Martin Johnson set out with ox carts and an army of a hundred porters into the desolate Northern Frontier. They trudged for weeks across the barren lunar landscape, mostly by night, in order to avoid the unbearable heat of the sun. Finally, the men rebelled and refused to go on. But the mutiny was crushed by the Johnsons' determination and exemplary self-discipline. Once across the slag, the safari was laid prostrate for a week from sheer exhaustion. They next moved across the Kaisoot Desert, a steaming, barren stretch inhabited by hostile nomadic tribesmen. But their determination carried them onward until they reached the base of the Marsabit Plateau. Then an event occurred that few fiction writers would dare to create. They met an ancient native, Boculy by name, who guided them up from the desert into the refreshing silence of the Marsabit Forest, and straightaway led them to the edge of the crater lake. It lay in the cone of an extinct volcano, surrounded by tropical flowers, an African Shangri-La.

They named this place Lake Paradise and soon began the

first extensive exploration of the Marsabit Plateau.

In 1924 the Johnsons returned to East Africa under the patronage of George Eastman and the sponsorship of the American Museum of Natural History. The museum had commissioned them to make a film record of African wildlife on a scale never before attempted. Their plan was to build a permanent camp at Lake Paradise, where they would live for four

years while engaged in photographing East Africa's wildlife.

This was by far the Johnsons' greatest single undertaking up to that time. They landed at Mombasa with 255 crates of equipment and ten Willys-Knights jeeps and lorries which had been given to them by the Willys Corporation. On they went again, into the Northern Frontier with their army of 235 men and their caravan of jeeps and assorted ox carts and mule wagons. This was one of the last great safaris of its kind in Kenya. Within a few short years mechanization and improved roads did away with the need for such large cohorts of porters, and the availability of many commodities out in the bush negated the need of transporting such items from Nairobi.

Osa and Martin Johnson built a village of wattle huts and log houses on a ridge overlooking Lake Paradise and lived

there for four years.

There is not much left of the Africa that the Johnsons knew, but their Lake Paradise has remained as it was. The winds of change have swept across every corner of Africa, but their effects have been little felt in the remote Northern Frontier. When I visited it in 1962 it was still barren and lonely, reminiscent of Beau Geste with its whitewashed forts where redturbaned askaris rode camels and saluted the Union Jack as it was lowered at sundown. It was all so unreal, this holdover from a bygone era, yet there it was, a last remnant of colonialism.

East Africa's climate is a mighty destroyer of relics and human dwellings are no exception. The Johnsons' village has long since returned to the jungle. All that was left of the trim buildings, the flowering gardens, and the orderly paths are a carpet of bricks and rubble strewn beneath the grass. But the lake is still there, a delightful panorama of untamed wilderness where it seems that life never progresses, but simply turns over on itself in an endless, unchanging cycle.

When the Johnsons returned from Africa in 1928 they had established themselves as first-class African explorers. In addition to producing thousands of feet of film for the American Museum of Natural History, they produced *Trailing Africa's Wild Animals* for the popular screen. Martin Johnson's two books, *Camera Trails in Africa* and *Safari* became perennial favorites, and Osa Johnson's book, *Four Years in Paradise*, published many years later, has long been a popular travelogue.

In 1929 they returned to Africa again in the company of George Eastman, sailing down the Nile from Port Said into northern Uganda. During this journey they made the first motion pictures of the pygmies of the Ituri Forest. They continued on into the Serengeti Plains where they made their classic film, Simba. With the support of the American Museum of Natural History, they were able to realize all of their ambitions, producing a series of wildlife features that have not

been duplicated to this day.

In 1930 the Johnsons safaried to the Belgian Congo, where they made the first extensive motion picture study of the pygmies of the Ituri Forest and the first pictorial survey of the mountain gorilla. It was during this expedition that they added sound to their films and the resultant film, Congorilla, was thus the first sound picture ever to be made in Africa. Keeping pace with the times, they both obtained their pilot's license in 1932. The following year they flew the entire length of the African continent in their two Sikorsky amphibians, Osa's Ark and The Spirit of Africa, making the first aerial photographs of Africa's wildlife. They covered over sixty thousand miles by air on this safari and became the first ever to fly over Mount Kilimanjaro and Mount Kenya.

Upon their return from Africa, the Johnsons decided to visit Borneo again, where eighteen years before their fragile expedition had fallen short of success. Backed by the American Museum of Natural History, they set out on a two-year expedition to North Borneo. By canoe, raft, and houseboat they journeyed up the fever ridden waterways, cutting their way through the jungle, into the land of the Tenggara headhunters and there made the first motion pictures of these little-known people. Racked by malaria, their quinine supply destroyed by the torrential rains, they continued onward and in the true tradition of Bruce and Buckhardt achieved their goal.

Their single engine amphibian, having been renamed The Spirit of Africa and Borneo, carried them over hundreds of square miles of unexplored jungle and served as the only link between their camp deep in the interior and civilization on the coast. As they had done during so many of their other expeditions, the Johnsons again added a list of "firsts" to their accomplishments. They became the first ever to fly a plane over the interior of Borneo and the first ever to photograph the wildlife of this then little-known island. Osa Johnson became the first woman to reach the unexplored headwaters of the Kinabatangan River, the first to enter the territory of the Rumanau and Tenggara headhunters, and the first to fly a plane over the China Sea.

Upon their return, the critics acclaimed Martin Johnson's films of Borneo as the best of his career and as one of the most extraordinary photographic stories of all time. Their motion picture *Borneo* became an immediate success. In January, 1937, they began a nationwide lecture tour with their Borneo films in Salt Lake City, where they lectured to nine thousand children in the Mormon Tabernacle. On the following morning they boarded a commercial airliner for Burbank, California. Near San Fernando the plane ran into an electrical storm and crashed into a mountainside, fatally injuring Martin Johnson, who died on January 13, 1937. The brilliant explorer had

fallen in the full vigor of his productive manhood and there was neither tribute nor eulogy that could ease the shock of this tragedy.

Although my own talents lie far from the field of exploration, it would seem that fate has entrusted the writing of these

lines to me since I was born on that very day.

Osa Johnson suffered a cerebral concussion and a fracture of the right knee during this accident. She was determined, however, to continue her husband's work and proceeded to deliver over a thousand lectures from a wheelchair.

She devoted the remaining years of her life to writing books about her experiences in those parts of the world that she had explored with her husband. She produced several motion pictures on her own, the most famous of which were Jungles Calling and I Married Adventure. In 1952 she was working on several books for children, a cookbook of recipes collected on her travels, and a detailed account of her last trip together with her husband to Borneo. She had also completed the script for a cinerama color movie of her husband's life and was planning a return visit to East Africa.

Osa Johnson died in New York on January 7, 1953, and with her death the world of science, exploration, and education lost a tremendous force, a great soul, and a lovable per-

sonality.

Over a decade elapsed after Mrs. Johnson's death before the innumerable cases containing her memorabilia were opened for the purpose of placing their contents in the Safari Museum at Chanute, Kansas. Among the many things found was an unpublished account of the last journey that she and her husband undertook to Borneo. And so, more than a decade after its composition, the story which unfolds in the following pages came to light.

It is not only a genuine book of travel, but also an historic

document, related by an observant traveler, through whom we can recapture the faint, far whisper of humid jungles, throbbing drums, and naked savages. Yet it is all recounted in intimate, immediate detail by an extraordinary woman who had the unique experience of living on friendly terms with head-hunters and cannibals in an unexplored part of the world.

Pascal James Imperato, M.D.

Ozone Park, New York May 5, 1965

INTRODUCTION

The entire story in this book is true. I am relating it to you as I saw it and as I lived it. It is truly the missing chapter in the life of Martin Johnson and myself that has never been committed to book form until now.

The photographs which appear in this book were taken in North Borneo by either Martin or by myself. They are published here for the first time. Many of these photographs are historic for they are the first ones ever to have been made of the fauna, flora, and human inhabitants of the jungle interior of North Borneo.

I was the first white woman ever to reach the then unexplored headwaters of the Kinabatangan River and the first ever to enter the territory of the Tenggara headhunters. Our expeditions were fraught with many dangers from the diseases, dangerous game, and primitive headhunters that lurked in the dark recesses of a hostile and unknown environment.

In this book our various expeditions are combined into one in order to avoid repetitious descriptions of places and peoples. Nothing has been omitted. Every high point of adventure of each expedition is recorded just as it occurred.

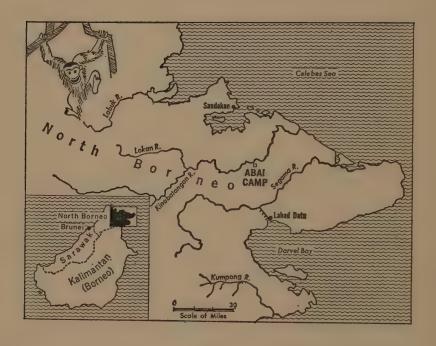


"I have had the right sort of woman to take along with me into the desert and jungle. If ever a man needed a partner in his chosen profession, it has been I. And if ever a wife were a partner to a man, it is Osa Johnson."

-Martin Johnson



Last Adventure





JOURNEY ACROSS THE SEA

Our journey was to take us across the sea, to the other side of the world, to a vast unknown and unexplored island called Borneo. It was an extremely hot and humid day in August as we sailed on the old Dutch steamer, Kota Pinang, out of New York Bay. The ship moved slowly, with a gentle pitching rhythm, into the open sea. The warm sea breeze and the steady baritone hum of the engines created an atmosphere for relaxation.

Martin and I were very happy. The worries, the hardships, and the long hours of work for this expedition were now over and at last we were on our way. We intended to do nothing but relax in anticipation of the Borneo jungles and the many adventures that they contained. In the interior of Borneo, the

land that God forgot, we were destined to live and make our home for more than two years amid an uneasy environment of wild creatures and still wilder headhunters. Martin and I stood out on the deck with our pilot, Jim Laneri, and our sound engineer, Joe Tilton. As the three men chatted quietly among themselves, I stared down at the rolling face of the ocean and thought back over our months of planning for this trip.

We had just returned from our fifth expedition to Africa, during which we had flown sixty thousand miles over the Dark Continent, when the idea of going back to Borneo struck me. During our first few weeks in the States I did not approach Martin on the subject inasmuch as he was preoccupied with the editing of our film and the writing of his book Over African Jungles. We had made the first aerial safari over the African continent and had obtained some of the finest wildlife photographs ever made in Africa. I soon surmised from the way in which Martin spoke that he had every intention of returning to Africa as soon as possible.

Each day I listened attentively to him as he made detailed plans for returning to Africa. On the surface I went along with his idea, but all the time the thought of going to Borneo was running through my subconscious mind. Finally one day Martin sensed that I was preoccupied with something other

than his plans for our return to Africa.

As he was discussing his plans in detail for the new African trip he suddenly stopped and said, "Osa, a penny for your thoughts. I'll bet you didn't hear a word of what I have been saying."

"No, Martin," I responded quite frankly. "I must confess

that my mind was far away from Africa."

He smiled for a few seconds and then said, "What were you thinking about?"

I hesitated for a moment and in that fraction of time de-

cided it was either now or never. "Borneo," came my reply with a forcefulness of tone that startled Martin and left him speechless. I continued in a most determined manner. "Look here, Martin Johnson, we have been to Africa many times. On our last safari we had the finest photographic equipment available and pretty well photographed everything there was to be photographed in Africa. Now, how about a different place for a change?"

There was such firmness in my voice and in my apparent

determination that Martin's reply was affirmative.

"That's a wonderful idea." Martin and I both broke into laughter. He continued. "Why, with our experience and present equipment, I am sure we could undertake an unprece-

dented photographic exploration of that island."

"Just imagine, Martin, there are headhunters and wildlife on that island that have never been photographed before," I replied in an obvious attempt to convert Martin's assent into determination. "There are even vast areas of those jungles that have never been explored before," I added as a finishing touch.

That was enough for Martin Johnson, just to tell him that there was a jungle that had not been explored before. He jumped from his chair and in a half-shouting voice said, "Let's

go!"

The next day our plans for returning to Africa were shelved and we began to plan and prepare for our expedition into the interior of North Borneo. Within a very short period of time this proved to be a stupendous undertaking. We made detailed studies of all available literature on the island and examined all of the maps that had been charted of the interior.

We interviewed people who had been to Borneo and spoke with anthropologists, historians, and geographers who were authorities on the subject. Weeks marched on into months. Letters, telegrams, cablegrams, and telephone calls related to some phase of the expedition kept coming and going across my husband's desk at the American Museum of Natural History. A thousand and one details had to be attended to in the procuring of equipment, film, medicine, food, clothing, and other essential items. Innumerable visits had to be made to factories, warehouses, and packing places. Even for seasoned explorers like ourselves the task of preparing for such an expedition was overwhelming.

As the months slipped by the crates and boxes, carefully packed with our precious equipment, piled up in the warehouses until they numbered well over two hundred. At long last the date of our sailing was fixed and the final arrangements for our departure were made. Our inventory of items included seventy distinct pieces of equipment in addition to personal items. With us we took our single-engine Sikorsky amphibian plane, The Spirit of Africa and Borneo, which had to be stowed in a special compartment of the ship. Completing the inventory was our mascot, Wah Wah, a Gibbon ape from Borneo who had been presented to us by a friend shortly before our departure on our last trip.

My daydreaming on the deck of the ship was soon ended by the sudden appearance of Wah Wah who, having broken his leash, was having a field day on the Kota Pinang. I thought Wah Wah to be amusing but the captain and the crew took a distinctly different view of the antics of my ape and in no uncertain terms told me to put an end to them, pronto. This proved to be quite an undertaking inasmuch as Wah Wah had no immediate intentions of being reconfined and seemed to have taken keenly to having the liberty of the ship. After a rather ostentatious display of acrobatics above the heads of the crew on the uppermost deck, Wah Wah decided that the gestures of the scowl-faced men below carried some meaning. With defiant hesitance he made his way over to me and

jumped into my arms. From the safety of this vantage point he shouted some malevolent cries at his pursuers who returned to their usual assignments.

Wah Wah was an extremely likable pet who belonged to a species that is considered extremely valuable by the natives of Borneo. It was customary to include one of these apes when presenting a tribal chieftain in the Borneo hinterland with tribute. Most of the important chiefs in the interior possessed a

Gibbon ape as a sign of status and not merely as a pet.

Wah Wah had a jet-black face dominated by a pair of prominent brown eyes and surrounded with a halo of shimmering silky white hair. His long mischievous arms terminated in delicate slender fingers that could perform a number of surprisingly intelligent maneuvers. On the whole our pet had a very even temper but occasionally he would become extremely angry and on these occasions he was capable of inflicting a very nasty bite. I received bites from him several times that required treatment by a physician. Once I was bitten by another pet Gibbon ape by the name of Goldie. This was serious enough to warrant the removal of a portion of bone from my left thumb in order to prevent osteomyelitis.

Our plans called for remaining on the Kota Pinang until it reached Sumatra, at which point Martin, Jim, and I would disembark with The Spirit of Africa and Borneo and continue the rest of the journey to Borneo by air. We would first fly to Singapore where arrangements would be made for the transferral of our cargo from the Kota Pinang to a ship headed for

North Borneo.

There is something distinctly restful about an ocean voyage. Time, place, and the worries of a troubled world seem to disappear under the narcotizing influence of the steady rhythmical movement of the ship. Life becomes a balanced rhythm of night and day that merge into one another without concern for dates of the week or weeks of the month. One is able to view man and everyday life in their proper perspectives, unhindered by the rush and urgency that constantly surround us. Values change in this tranquil atmosphere at a steady, quiet pace and one's mind becomes more receptive toward the beliefs and mores of those primitive peoples who lie at the journey's end. One has time to study the sea and to delight in those few of her inhabitants who venture to appear above her rolling turbulent face.

We would never tire of watching the scores of graceful flying fish that moved with smooth agility over the foamy waves and the groups of playful porpoises who seemed to delight in the attention of the onlookers. Occasionally, we would see a school of killer-whales crashing with defiant determination

through the shimmering blue of the water.

The pleasant monotony was abruptly broken when the Azores, Gibraltar, Malta, and Tunis loomed on the edge of what one could almost believe to have been infinite. Martin and I both had a feeling of nostalgia for Tunis for it was here that we had stopped on our flight from East Africa to Europe the last time we explored the plains and rain forests of central Africa. The ship that was now in the hold of the Kota Pinang had once spread her wings over the proud white face of this sprawling Arab metropolis.

Within a few days the ship steamed into Port Said. Since she was the only ship in port at the time all of the guides, cigarette-sellers, postcard sellers, and sundry fakirs singled us out as the objects of their machinations. We resisted them and in the end came out triumphant. The following morning the Kota Pinang began her tedious journey down the motionless heated waters of the Suez Canal. As we sailed along the monotony of the desolate sand-baked hills was broken only occasionally by

a ship passing in the opposite direction. At long last the ship floated into the Red Sea.

The heat was intolerable, hotter than in any place or at any time that I can remember. It seemed like an eternity before we made our way into the Indian Ocean, and here in place of the unrelenting heat we had just left behind lay the angry turbulence of the monsoons. The long high waves, with their foaming whitecaps, crashed maliciously against the bow of the ship and tossed it about.

The storm seemed interminable. Jim Laneri, Joe Tilton, and Martin were all confined to their bunks with seasickness. I was the only one that escaped unscathed. The monsoons ended as abruptly as they had begun. The calmness of the sea was in itself spectacular after the storm. The ship moved across the Indian Ocean beneath a cloudless blue sky by day and a canopy of black velvet by night. On September 14 we sighted the northwestern coast of Sumatra. This huge island first revealed itself as a long gray line on the horizon that rapidly mushroomed up against the pale blue tropical sky until it took the shape of rolling lush green mountains shrouded with a delicate veil of spicy mist.

It was a wonderful feeling to awaken with the spicy sweet odor of the tropics filling the cabin. Within an hour the ship glided into the peaceful blue waters of the port of Belawan. Native canoes dotted the sandy coconut palm-fringed shores, and small gentle waves rolled over a floor of dazzling coral. Small native villages broke the green continuity of the jungle wall that crept ominously backward until it disappeared into swirling and brooding mist.

Everything had been arranged on board the ship for us to remove the plane from the hold and to assemble it on the deck. It required several hours of tedious work to put the plane in flying condition. While The Spirit of Africa and Borneo was being readied for its first flight in the Orient the Kota Pinang slowly nosed its way along the palm-shaded shore to its berth.

As soon as the ship was secured in the dock, a large crane hoisted the plane from the deck and set it down on the pier. There Jim Laneri made some further adjustments before giving the order for the plane to be placed in the water. While this was being done I busied myself with packing the supplies and equipment that were to come with us aboard the plane and in arranging the cargo that was to remain on board and continue with the steamer to Singapore.

Jim put some gas in the tanks and within a few minutes the engine sang out with a healthy hum. The propeller churned as the plane glided over the blue water of the quiet bay and then gracefully rose up against the soft azure sky. Jim dipped the plane's wings in a salute to the steamer's captain and after circling the ship several times landed and pronounced her per-

fect and ready for flying.

The Spirit of Africa and Borneo had been specifically built for flying over difficult terrain and was capable of landing on either land or water. It had retractable wheels and removable pontoons which were necessary since we would be flying over unexplored territory and would have to be prepared to make an emergency landing in a variety of terrains as well as on the water.



FLIGHT TO BORNEO

It was shortly before noon when Martin, Jim, and I boarded the plane. The engine sputtered at first, but within a few moments it began to buzz steadily. There was a loud roar and the thrilling sense of sudden movement as the plane raced across the sparkling bay. Faster and faster we moved, leaving behind a trail of foaming water and swirling exhaust. Suddenly, there was a slight jolt. We were air-borne. The plane glided down along the coastline of Sumatra, a cloudless blue sky above and a smooth undulating ocean below.

Martin and I were extremely happy as we gazed out of the windows at the sweeping tropical panorama. We were not only delighted to be in the air again but also thrilled by the fact that we were now on the last lap of our long journey.

Our immediate goal was Port Swettenham, which lay on the opposite side of the Malacca Straits. Although we had studied the captain's charts very carefully and believed we knew just where we were, we did not possess a single map to guide us.

Down the coast we went, flying over the sprawling green jungle and the reef-lined shore. Scores of native villages, built on tall, slender stilts near the water's edge, broke the pleasant monotony of the rain forest. Occasionally, we could see cumbersome gobongs (canoes), Chinese junks, sampans, and small fishing boats in full sail making way parallel to the coast.

After about an hour of uneventful flying, Jim pointed to a conspicuous rocky peninsula that jutted out into the sea. We knew from the captain's charts that it was at this point that we were to turn left and head out across the Malacca Straits. The engine was humming with a peaceful and perfect rhythm as we sat back and enjoyed our brief lunch. We rapidly lost sight of land as the plane flew onward toward Malaya. Martin and I took turns at the controls.

Wah Wah was all over the cabin and seemed to have a great deal to say about the sudden change of scenery as he gazed attentively out of the oval windows. Our gasoline tanks held sufficient fuel for three and a half hours. But if we were lucky enough to have a strong tail wind we would have enough for another additional hour of flying. At long last the green coastline of Malaya appeared below. We had been in the air for four hours, and since our fuel was low we had some cause for alarm. Fortunately, the water beneath us was extremely calm and ideal for a forced landing, should that become necessary.

Because we did not have any maps to guide us, we were not sure of the precise location of Port Swettenham. Martin said he knew that it lay five miles inland from the coast on the edge of a wide estuary. But there were several rivers below us, cutting a tortuous path through the thick liana-woven jungle. On

we went, and now the real guesswork began. Jim finally decided to follow the largest river inland, and as luck would have it a small town soon loomed on the horizon.

After we had determined the direction of the wind from a column of smoke rising from the stack of a small steamer, Jim brought the plane down and made a perfect landing. Our gasoline tanks were almost empty and we breathed a sigh of relief, but too soon, I am afraid, for it was not long before we realized that we were bucking one of the strongest currents any of us had ever known. For a few anxious moments we drifted out to sea. But luck was with us again. A launch carrying a representative of the firm with whom Martin had made arrangements for our gasoline supply rapidly approached our helpless plane and it was not long before the tanks were again brimming with gas.

Jim taxied the plane to the nearby docks where we were to remain for the night. We had no sooner docked than it seemed that every sand fly and mosquito in Malaya had come out to greet us. There were literally thousands of these insects swarming and buzzing around the plane. The heat and humidity in Port Swettenham were so intense that we were forced to open the hood of the plane for a small breath of air. When we awoke in the morning we all looked as if we were coming down with the measles. The mosquitoes and the sand flies had had an evening for themselves.

We left Port Swettenham and headed for Singapore, where we were scheduled to meet Joe Tilton and the Kota Pinang. Martin had made arrangements to have all of our cargo transferred from the Dutch steamer to a smaller boat called the Maradu, which was one of three vessels that plied between Singapore and Borneo. We arrived in Singapore after a pleas-

ant and uneventful flight.

All of us enjoyed our ten days in this bustling metropolis.

We spent most of our time as the guests of the Sultan and Sultana of Johore while the plane was being fitted with extra gasoline tanks. Joe Tilton sailed on time on the *Maradu* with our two-hundred-plus crates, boxes, trunks, and bags and a menagerie of sixteen Gibbon apes, an owl, and a deadly four-teen-foot Hamadryad snake.

The following Monday morning we took to the air once again and flew from Singapore across the China Sea to Borneo. It was a beautiful day with only a few thin clouds here and there. The wind was almost a tail wind. Jim headed the plane east, out over the China Sea. Soon we lost all sight of land and for hours flew over water. There was not a bump in the air. Everyone was in high spirits because Borneo, our destination, was coming closer and closer with each turn of the propeller.

I relieved Jim at the controls at various times, as did Martin. This unusual flight gave me the distinction of being the first woman ever to fly over the China Sea. I was as proud and happy about that achievement as Martin and Jim were.

Soon land loomed up ahead. It was the island of Borneo, land of the unexpected. There it was ahead of us like a great emerald nestling between the placid water and the clear blue sky.

Borneo is four times the size of England and Wales combined. On the north it is bounded by the Straits of Balabac and the Sulu Sea, with the Java Sea to the south, the Straits of Macassar and the Celebes Sea to the east, and the China Sea to the west. The equator crosses the island almost at its center and as a result its climate is distinctly tropical.

Jim kept the plane on course and headed for the coastline and Penangkat Bay, which lay in Dutch Borneo. He brought the plane down smoothly and taxied over the bay to within a few hundred yards of the town. There were a number of small boats and fishing craft plying back and forth in the harbor. Malayans, Chinese, Japanese, and Sumatrans scurried up and down the busy wharf completely unconcerned by our presence. Arrangements had been made beforehand for a boat to be loaded and readied to bring a supply of gasoline alongside as soon as the plane landed. But no such boat could be seen. Two canoes put out, but the occupants could not speak our language, and we could not speak theirs. We taxied up and down the harbor for a half hour waiting for the boat to arrive. Our wait proved to be in vain. We were all quite disgusted and disappointed and decided to try to make for Kuching, the capital of Sarawak. Jim climbed out onto the wings where the fuel tanks were located and measured the amount of gasoline that was left. He decided that, with luck, we could make the hundred-mile journey to Kuching.

The Spirit of Africa and Borneo headed inland. It was beautiful country to fly over, but there was not a landing place to be seen anywhere—only dense jungles, streams, and flooded mangroves, with now and then a village built on piles at some river's edge. We came out over the China Sea again. Flying now by maps we had obtained in Port Swettenham, we flew inland, following a small river, until we sighted the rooftops

of Kuching.

The Maradu was already lying at anchor in the small port. Jim brought the plane down easily and we all breathed a sigh of relief for there were only a few drops of gasoline left in the tanks. The resident commissioner, Mr. Cobbold, was waiting for us on the wharf. After giving us a warm reception, he escorted us into the town by auto and took us to his delightful home where we were to be his guests.

We spent the afternoon sightseeing in Kuching, which was delightful and modern even in those days. The town was crisscrossed by wide modern roads, and there were many automobiles. The business section semed to be thriving. The majority of buildings were of wood, one or two stories in height, and contained from ten to twelve rooms. They were all surrounded by flowering gardens.

Mr. Cobbold introduced us to the Rajah and the Ranee of Sarawak. Ruled by the only white rajah in the world, Sarawak adjoins North Borneo, toward which we were headed, on the western coast of the island.

Western coast of the Island.

The rajah invited us to the palace for dinner that evening and, of course, we readily accepted his gracious invitation.

After dinner we were escorted to a grandstand on the parade grounds where a pageant and military tattoo were to take place. There, with the rajah and the other European inhabitants of Kuching, we witnessed a series of interesting and colorful events. Troops, smartly attired in their crimson uniforms, paraded and drilled with precision. Natives from the interior, dressed in their finest tribal attire, wrestled and engaged in mock fights. They danced to the accompaniment of their weird-sounding wind instruments; leapt and stamped to the rhythm of the gomboose and the gong; thrashed their headdresses of tall, colorful feathers from side to side. Little did I realize at the time that among these performers were some ex-headhunters from the interior, whose fellow tribesmen I was soon to meet.

The following morning we took off for Miri, which is about 325 air miles up the coast from Kuching. By noon we had reached our destination. Jim coaxed the plane directly to the wharf of the Miri Club, which is owned by the many Europeans who direct the oilfields there. The members of the club were on hand to greet us and, after serving us lunch, helped us fill our tanks with gasoline and oil.

Off we flew again, this time headed for Labuan which lies not in Sarawak but in North Borneo. It required only an hour of steady flying for us to get to Labuan, where we refueled and then took off for our final destination, Sandakan. We were all happy that this was the final lap of our long journey. I was beginning to feel the strain of all those take-offs and landings and was relieved that it would soon be over.

Martin and I took turns at piloting. We were both old hands at this, having flown from Capetown to Alexandria and all over East and Central Africa in addition to Europe and the

United States. We both felt very proud.

In Africa, we had named the plane *The Spirit of Africa*. Now we renamed it *The Spirit of Africa and Borneo*. It was a five-passenger, single-engine plane. The cabin was spacious and as comfortable as the interior of any high-priced automobile. It was fitted with dual controls, and thus it was possible

for the pilot or co-pilot to fly with equal ease.

On the nose of the plane Martin had painted a huge eye. This eye is said, according to a native Borneo legend, to be that of a god long dead who will always guide you to your destination. A similar eye always appears on the bow of the native gobongs and Chinese junks. Although neither Martin nor I put any stock in this native legend we agreed to have the eye painted on the plane with the hope that it would serve as a familiar symbol to the natives and facilitate our dealings with them.

As the plane whizzed over the jungle, chattering monkeys scampered out of the high limbs to the safety of the matted growth below. Beautiful tropical birds darted from tree to tree, their blue, purple, and orange feathers flashing. Winding rivers and streams gleamed like silver ribbons. Out on the water we could see dozens of sharks with no difficulty whatsoever. They swam in the shallow lagoons that lay between the reefs and the shore. The coral bottom of the lagoons raged with color, brilliant reds, dazzling blues, shimmering silvers, and deep rich purples.

At Weston we headed the plane northeast across land which was covered with steaming marshes and crocodile-infested swamps. Occasionally, we would sight a lone native hut. Our original plan was to fly along the coastline to Kudat on the northern tip of Borneo and then down the coast to Sandakan. However, when we reached Kimanis Bay, Martin decided to fly the plane inland to Sandakan and thus save one hundred miles of travel.

This overland route was shorter but much more dangerous than the coastal route. Along the coast we could always make a forced landing in some lagoon or estuary, but inland, over the jungle, much of which was unexplored, such a landing could spell disaster for all of us. The day was so beautiful and the engine was running so well that Martin decided to take the risk. Inland we flew, over three hundred miles of unexplored jungle. Even with a good tail wind there was barely enough time to get to the other side of Borneo before dark. Mountains twelve thousand feet high loomed ahead of us.

Up we went, gradually gaining altitude. Jim followed the course of the Papar River to its headwaters. Next we came to the Crocker Range of mountains. Cruising at eight thousand feet, we passed the peaks of Mount Alab to the north. The country below was wild, cut by deep ravines, covered by timber two hundred feet high, as yet untouched by man.

We continued eastward and once again were in the midst of bleak and desolate mountains, unknown valleys, more mountains and ravines, and always the dense, savage, ominous jungle. Thin streams glistened in the sun as they flowed between gully and hill.

We had become so engrossed with the scenery that no one noticed the approach of a long line of storm clouds that soon surrounded us. It would have been prudent to turn back at that point, but since we were so near our destination we decided to go on. It was not long before we were completely enveloped in the thick, black clouds of a tropical squall. We flew blind from one cloud to another without the benefit of any instruments for blind flying.

Jim flew the plane down over canyons that were merely matted jungle, except where swift little streams had, through the centuries, worn canyons in the rocks. We flew over native villages that we knew were the homes of savages and headhunters. We were worried and were thinking of the same thing—turn back? But no one wanted to be the first to suggest such a course. Every aviator is an optimist and we hoped that we would get through to our destination in Borneo.

The clouds grew denser. We circled around continuously, trying to find holes in the clouds that we could get through. Martin and I wanted to turn back, but Jim Laneri, our pilot, kept going ahead. Afterward, he told Martin that he had hoped that we would command him to turn back, but he did not want to be the one to suggest such a course. Then rain started. We strained our eyes trying to find the Sulu Sea, which lay but an hour's flying time to the east. But the clouds were too thick. All that we could glimpse was an occasional headhunter-inhabited jungle below. On we went until a loud clap of thunder, accompanied by great streaks of flash lightning, brought us up in a hurry.

It seemed that we all had the impulse to turn back at the same time, but we were almost too late. No longer could we see the jungle below. The rain crashed down on the wings in torrents. What a place to be in an electrical storm! Jim now flew by compass and slowly gained altitude until we reached fourteen thousand feet. He was not going to run the risk of flying into a mountain peak. What a feeling! Here we were over the heart of the unexplored Borneo jungles in an electri-

cal storm and flying blind with no place to land.

For what seemed like an eternity, we flew through the storm. Suddenly, we found a small opening in the clouds. We could see patches of blue sky above and a patch of green jungle below. Jim dived the plane through the opening. Within a few minutes we were out of the worst of the storm. Although the drizzling rain still played on the plane, we could now see some distance ahead. To the north and east the rain was falling in torrents, and we realized that there was no chance of getting through to Sandakan that day.

But our worries and fears were not over! Coming down in our direction from Mount Kinabalu was another storm that seemed to travel as fast as our airplane did. Instead of running from it, Jim decided to turn and cross its path and get to the outer edge of the other side of the storm. He flew up and up until we reached twelve thousand feet and found ourselves passing over Mount Alab. When well past it, Jim headed down to lower altitudes. He had cleared the last storm.

The sun shone ahead and it was not long before we could see the sea below. The motor was throttled down. Gently and smoothly we floated down onto Labuan Bay, where we landed just before sunset. The resident commissioner, Mr. Fleming, came in his launch to meet us. He was surprised by our return since the weather at Labuan had been perfect. He could not begin to imagine what we had been through. In all my years of flying I have never had such an experience. I certainly would not want to go through it again, but I would not have missed that adventure for anything in the world.

Although the weather the following day was fine, Jim said that he did not want more flying over uncharted terrain. We could and did take the coastal route, but not for very long. As we were approaching Kimanis Bay, Martin turned to me and said, "Take a look over to the east. There is not a cloud in the sky." Jim, who was at the controls, knew what Martin meant.

Without uttering a word he turned the plane eastward and headed overland. The challenge was too great to resist. We had to go overland. Jim knew it, Martin knew it, and I knew it.

While crossing Mount Alab we could see Mount Kinabalu standing out clear and beautiful with a white collar of fleecy clouds a thousand feet below the peak. Martin filmed this beautiful mountain, which is known as The Chinese Widow.

There are few more impressive sights than Mount Kinabalu after an afternoon shower, standing jagged against the eastern sky, with the silver streaks of waterfalls pouring down its steep sides. It stands out against the background of the blue sky and reflects on the black sheen of its precipices, the ecstatic colors of the crimson tropical sunset. It is the seat of the mighty and the home of the departed spirits of many of the tribes.

The atmosphere was crisp and clear, so we flew down low over the roofs of the headhunters' villages. We could see the inhabitants garbed in their colorful dress which was so unlike the ugly trousered dress of the coastal natives.

For the most part Borneo is lowland, covered with jungle, but so beautifully verdant that when it is viewed from the air you are led to suppose that it is unduly cultivated. We tried to fly by maps, but soon found that they were made by the inexperienced. Not a river nor a mountain was where it was supposed to be. The coastline was fairly well charted, but the interior was not, and thus the maps of this area were a hopeless mess.

It was not long before we sighted Sandakan Bay. I had my nose flattened to the window, trying to pick out well-known landmarks, but I could find none. We circled the town several times until at last we found the wind sock floating from an improvised mast atop the customs house. Sea-worn steamers

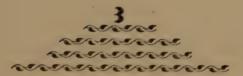
and flimsy Chinese junks scurried about the port. Jim made a perfect landing on the smooth surface of the water.

We had reached our destination at last! It was the end of long tedious months of preparation in America and of two long months of travel. We all felt a sense of exhilaration.

We nosed the plane up to a large buoy near the customs house breakwater and tied up to it. A launch came puttering out to us and took us to shore, where we made for the Sandakan Hotel. And so ended the first phase of our trip to Borneo. This was the portion that was supposed to be peaceful and quiet but turned out to be filled with danger and adventure.

Thinking back now, I realize that what we had to go through steeled us for the dangers and adventures that lay before us.

Our flight over the virgin interior of North Borneo was noteworthy not only because it was a thrilling adventure, but also because it was historical. Never before in the history of the world had anyone ever flown over the interior of Borneo. Once again we had another "first" to add to our record. We were the first to fly a plane over the interior of the Borneo jungles.



HEADQUARTERS IN SANDAKAN

Sandakan begins as a straggling wooden wharf that leads up from the sea to an unaesthetic tangle of flimsy wooden buildings that stand precariously atop a confusing maze of spindly stilts. The land slopes up gradually in a series of undulating green hills that finally culminate in shimmering pink sandstone cliffs that thrust their proud jungle-crowned heads abruptly against the blue tropical sky. The houses of the Europeans stood on broad terraces that had been cut into the steep faces of the broad hills. Their thatched roofs created a quiltwork design of sparkling yellow on the green carpet of tropical foliage. Government House stood atop a promontory which formed the other horn of a crescent of hills which enclosed the comparatively flat land on which the shops and recreation

ground stood. No matter where one traveled in Sandakan one had to negotiate a hill, sometimes big, sometimes small.

We found the working force of Sandakan to be mostly Chinese women; and to our surprise, practically all of the business was being run by the Chinese who had come from across the China Sea. The Chinese owned and operated ninety percent of the shops and small stores as well as the shipping facilities. All of this, of course, gave the town a distinctly Oriental atmosphere in spite of the presence of many other ethnic groups. There were dusky Mohammedan traders, pale blonde Dutchmen who managed the extensive rubber estates, aloof Englishmen in their tropical attire, Malayans in their shabby trousered dress, native government soldiers in their smartly tailored uniforms, and rushing coolie women carrying their broad baskets of vegetables to the open air market.

These coolie women wore the most conspicuous large black hats that I have ever seen. They also wore distinctive sandals which, although fashioned out of wood, had an extremely soft look about them. The upper portion of these sandals was made from a cloth which was obtained from the bark of a local tree while the bottom was carved from wood. I often thought that the idea for them must have originated with the Dutch explorers and settlers who reached this part of the world so many centuries ago. The constant clicking of these sandals provided the basic rhythm for the din of noise that was Sandakan's very own.

These women carried cumbersome wooden yokes across their shoulders at the ends of which were suspended large baskets of vegetables. Their faces never betrayed the discomfort which must have arisen from such heavy burdens. When these women arrived at the neat and clean open market the Chinese traders would auction off their produce to the highest bidder. It was very humorous to Martin and me to listen to the auc-

tioneer making his "pitch" first in Malayan and then in Chi-

Sometimes these coolie women would receive pay for their vegetables in the form of rupias, which were the official currency of North Borneo. However, since it was agreed that vegetables could be exchanged for fish, they were often paid with a wide variety of the latter, including octopus, for which the Chinese have a special predilection. I vividly recall seeing one of these creatures in Sandakan, stretched out on a large table in a native market. Its long cumbersome tentacles, covered with hundreds of gaping suckers, lashed out in every direction in an attempt to retrieve its lost freedom. While this sight disturbed me somewhat, it did not in the least seem to impress the local inhabitants who continued to busy themselves with their usual activities.

While the Chinese relished octopus, the Malayans had an overwhelming craving for sea slugs. These unappealing ocean inhabitants are deep black in color and measure more than a foot in length. To the Malayans this is a choice delicacy, but I could never bring myself to even consider eating a sea slug or anything remotely related to it.

It was not long before Martin and I discovered what a beautiful little place Sandakan really was. Some of its streets bore a striking resemblance to those that one would see in a typical country town in America. The broad main street was shaded by a canopy of ancient trees that spread their powerful green arms across the entire breadth of the roadway. These trees were so tall that the telegraph lines were attached to them

without a second thought.

Sandakan, the capital and principal seaport of North Borneo, stretched lazily along the ocean front for about two miles and climbed back for another mile into a green backdrop of undulating hills. It is inhabited by ten thousand people who come from a wide variety of racial backgrounds. Occasionally, one would see the native inhabitants from the interior, many of whom were so close to their ancestral background that they still wore their colorful tribal costumes.

The architecture of Sandakan reflected in a dramatic manner the many ethnic influences that have been present for centuries. Mohammedan mosques, with their beautiful slender gables and minarets pointing skyward toward heaven, stood in sharp contrast to the surrounding conglomeration of Chinese, English, and native Borneo architecture. Several buildings, with wooden balconies, looked as if they had been transplanted from the old American West.

The harbor was dotted with a variety of Chinese junks, some of which had recently plied the Sulu Sea from China with their precious cargoes of spices, rice, and sugar cane. Some stood motionless on the glassy surface of the bay while others glided in full sail in and out of the coral-bottomed inlet. The crew of a junk usually consists of an entire family, husband, wife, children and, occasionally, of an extended family unit including grandparents and other relatives.

The junks were very picturesque and beautiful, especially in the sunset, as the spice-scented breezes carried them out into the vast China Sea. Although they are picturesque and beautiful, they do all of the heavy hauling in Borneo. People are born, raised, and die on these vessels without ever knowing a home on land. The entire family is involved in the maintenance and sailing of the junk, especially the women, who generally perform all of the heavy work.

On the very day we arrived in Sandakan, we learned, while signing in at the hotel, that the Sultan of Brunei was stopping at the same establishment with his fifteen wives. We had seen a large group of well-dressed native women sitting on the breezy porch as we entered the hotel but it was not until we

made an inquiry that we discovered who they were. As we took a second look at them Martin said to me, "Osa, don't look so worried. I wouldn't trade you for the whole fifteen of them."

"I'm not worried, Martin," I replied. "I'm only afraid it may give you some ideas, such as having another wife or two while in Borneo."

"No, Ma'am!" exclaimed Martin laughingly. "One wife is enough for any man. How can he stand it when they all start talking at once?"

One morning as I was walking along the corridor of the floor on which we had our rooms, I noticed that some of the Sultan's wives were placing an impressive quantity of food near the door of his suite. This quite naturally aroused my curiosity and so I sought out the hotel clerk and made an inquiry about what I had just seen. He told me that the first wife or favorite wife was the only one allowed in the Sultan's room in the morning. It was her task to wash his feet, attend to his other needs, and then serve him his morning meal. The other wives were not allowed in the room to see him until permission was granted, which was usually given through the first wife. Each of the Sultan's wives prepared several varieties of food for the royal breakfast and delivered them to their husband's door where the favorite wife gathered it and served it to her master.

Quite unlike the Sultan, Martin and I had breakfast in the dining room of the hotel and immediately afterward set about the business of obtaining a home in Sandakan. What we thought would be an arduous task proved to be a relatively simple matter. We were fortunate in securing a fine governmental residence which was not in use at the time. This house was given to us, rent-free, on the provision that we donate to the government, for educational and historical purposes, copies of all the photographs that we were to make of the fauna, flora, and tribes in the interior.

Our residence in Sandakan turned out to be a delightful eight-room, two-story building, completely furnished with fine imported English furniture. It stood on the green crest of a small hill, overlooking the bay. The house had a wide, well-ventilated veranda from which we could gaze down across the flowering tropical gardens toward the ever-present sea. A long, winding road led up from the street and, after cutting a tortuous route through the sparkling lawns and luxuriant gardens, swung in a great stately arc in front of the house. Two acres of fragrant tropical blossoms surrounded us on all sides.

The building was electrified and supplied with fans, but unfortunately there was no system for keeping out the everpresent humidity. There were two modern bathrooms, one of which Martin converted into a fine developing room. While the house lacked a cellar, it did have an unusually large number of closets and a spacious storeroom. The kitchen was housed in a separate building a short distance from the house. This was customary in Sandakan inasmuch as the majority of buildings were constructed of wood and therefore in constant danger from the open fires which were used in cooking. The day we moved into our new home in Sandakan we officially registered at Government House and were honored a few hours later to receive a summons from the governor. It was in the form of an invitation to dinner.

It was not long after our arrival in Sandakan that Martin was warned by the authorities not to go too far into the interior. He was cautioned that death in a hundred different forms awaited any white man who ventured there. Poisonous insects, snakes, animals, fever, and savage headhunters, as vicious as any on earth, lay in wait. But Martin had heard the same warning many times before. He had heard it in Africa and in

the South Sea Islands where we went and made the first detailed photographs of cannibals. Such a warning from governmental officials only served to stimulate Martin's desire to do just what he had been planning all along.

We both worked feverishly in order to get our house in Sandakan in readiness. In no time at all, Martin installed his elaborate photographic developing room and all of his other equipment. It was our plan to use this governmental residence as our main headquarters in Borneo. Martin also planned to erect a camp of several small houses somewhere in the interior which would serve as our jungle headquarters. From there we intended to make all of our excursions into the interior, returning only occasionally to Sandakan. We also planned to keep all of the animals that would be captured during the expedition at our jungle headquarters.

When Martin was not working on the developing room or with his photographic equipment, he was in the plane looking for a potential site in the jungle upon which to build our camp. During the first week the search was seriously hampered by continuous rains. However, whenever the weather cleared, or we had a few hours of sunshine, we would take to the air and head for the interior.

One day, while returning from one of these fruitless excursions, Martin suggested that we continue on past Sandakan and take an aerial view of a well-known island leper colony that lay out in the bay. This colony, which in reality was an island village, was sheltered by sheer mountainous cliffs. They extended out into the sea and formed a natural protective wall on one side of the village. At the opposite side of the island, a small jetty of land protruded out into the water and together with the cliffs on the other side formed a small bay. This bay was lined by a white sandy beach, at the edge of which the inhabitants had built their dwellings. Here in this truly beautiful spot, which was the rival of the most famous beach resorts in the world, was the sadness and ugliness of a dreaded disease, leprosy. I shall never forget this contrast, for it was so symbolic of the Borneo jungles. Here, existing side by side, was the best and the worst in nature.

We returned to Sandakan and for the next several days just sat waiting for the sun to shine again. As soon as it came out we stopped what we were doing, ran for the plane, and flew off again into the blue. On and on we flew, over the seemingly endless jungles, up and down the winding Kinabatangan River. My eyes were rapidly tiring from the tedious and fruitless search for a clearing that could be used as a campsite. The sun was just beginning to tumble down toward the orange backdrop of the western horizon when Martin shouted, "Osa, down there to your right! That's the spot. It's right on the water's edge."

I did not answer Martin. My lips had been rendered immobile by a sense of relief and surprise. I glanced down through the oval pane of glass at the sun-drenched clearing that lay on the water's edge. It was beautiful! My eyes looked up and met Martin's. We both smiled. We decided then and there that the clearing below was to be the site of our camp. It lay on the upper reaches of the Kinabatangan River at a place called Abai by the natives. After fixing its location firmly in our minds, we headed back to Sandakan where Martin immediately set about getting everything in readiness for our move into the interior.

As soon as word was out that Martin was hiring natives for an expedition up the unknown Kinabatangan River, he was besieged by many who desired to go on the trip. Since we were going into unknown and unexplored territory we had to exercise extreme caution in selecting the members of the expedition. Day after day the screening continued, oftentimes with disappointing results.

One of the first to be hired was Martin's man Friday, a jovial Chinese by the poetic name of Ah Fat Lee. While he was originally engaged to do all sorts of odds and ends for Martin, it was not long before he confined his activities to taking personal charge of the washing of Martin's clothes. Every once in a while, when it struck his fancy, he would wait on the tables and would perform this task quite well.

Ching Wo, who served as our head carpenter, was taken on shortly after Ah Fat Lee. He remained with us for about eleven months and was in complete charge of all the carpentry work in the building of our village at Abai. He was an extremely versatile and gifted craftsman who could construct anything from a delicate dressing table to cumbersome cages for orangutans. He made all of the tables and chairs that we were to use at Abai, and as it turned out later they were among the finest and most comfortable that we have ever owned.

Our next employee, Ahamed Ali Sing, was a grave disappointment to us and lasted only about four months. Martin had hired him as an interpreter and placed him in charge as manager of our Sandakan residence. We were fortunate to replace him with a tall, slim Eurasian, Jack Charley, who proved to be a very trustworthy and conscientious worker.

On the second day of hiring, we found a long line of potential candidates waiting outside our home. Martin turned down the first seven as unsuitable but hired the eighth, Wong Chong, a husky Chinese coolie with a pleasing personality. He later proved to be one of the most valuable members of the expedition. Next Martin interviewed a Bajau native named Ah Kim and, taking a liking to him, sent him on to Jim Laneri. It was not long before Jim hired him as a watchman for the plane. Ah Kim never left *The Spirit of Africa and Borneo* out of his sight from the day he was hired until we left Borneo.

One of the most important members of any expedition is the chief interpreter. We were more than fortunate in securing the services of one of the finest and most trustworthy interpreters in North Borneo. He came to us through the good efforts of Agnes Newton Keith, a good friend we had made in Sandakan. Logan was the name of this tall, well-built native with the sincere eyes and pleasing face. He remained with us throughout the entire expedition and was always a source of encouragement to Martin and me during difficult and trying times. He became one of our great friends. I shall never forget him.

After turning down about fifteen more candidates, Martin hired Ah Yin. He remained with us for months and was considered Number One boy. Leong Fat, Number Two boy, was hired soon afterward. He and Ah Yin were both Chinese and were in charge of taking care of the house. When the Chinese New Year came along, finding themselves isolated at our jungle camp, they felt extremely forlorn. Martin felt sorry for them and since they were such excellent workers persuaded Jim to fly them down to Sandakan for the New Year's celebration.

They were excited not only about going on the plane but also by the fact that Martin had decided to advance them an entire month's salary. They certainly celebrated. We heard stories about them for months to come, but fortunately they kept out of trouble.

The following were hired in short order:

Ah Sing Tukanai, a safari porter.

Sam Ah Sing, an excellent Chinese cook who could make the

finest meals right in a small oven in his canoe as we traveled into the interior.

Poong Timing (pronounced Teeming), Number Three boy. Harumal Bhodrad, a watchman for our jungle camp.

Melitona Molina, a faithful native woman who remained with us throughout the entire expedition. She did washing and sewing and was especially adept at sewing heavy canvas bags.

Florentino Aguillon, an Italian who was married to a half-Malayan, half-Filipino wife by the name of Feeli, whom we were later to meet in the interior.

Dai Mai, a Murut coolie.

Sai Din, a Murut native who served as animal keeper and remained with us throughout the entire expedition. Martin and he became such great friends that Martin brought him to America with us.

Ah Kee, a Chinese carpenter.

Awang Jarry, second animal keeper who assisted Sai Din.

Lim Shun, a Chinese cook for Jim and Joe.

John Calero, a Filipino mechanic who assisted Jim Laneri.

Wong, an automobile driver who served us in Sandakan, conveying our supplies from one place to another in preparation for shipment to Abai.

Gan Dan Sing, a watchman.

There then followed a long list of porters, coolies, trackers, guides, and the like. Martin obtained several large gobongs and pressed a Chinese junk, with full crew, into service.

After a few more days of detailed planning, everything was organized and the long trip from Sandakan to our campsite was begun. At long last we were on our way to our jungle headquarters!



A HOME IN THE JUNGLE

Day after day the sounds of pounding axes and swishing parangs (jungle knives) echoed through the virgin timber. The impenetrable green wall of ancient trees, interlaced with giant lianas, slowly gave way. With each day the sun-filled clearing grew larger, creeping slowly into the green barrier of twisted jungle.

Each morning after breakfast Martin, Jim, and I would fly up to our jungle camp and supervise the work being done there. We would return to Sandakan again in the evening, a trip requiring only an hour by air but six days by river junk. During the first phase of the work at Abai, temporary shelters were built for the native workers. They lived in these while the job of clearing the area was begun.

The task of clearing an area equal to four square city blocks of dense rain forest was too overwhelming for our staff. Therefore, Martin hired more natives from a small Malayan village that lay across from our campsite, on the other side of the river. He also ordered more junks to be sent up from Sandakan with lumber, tools, carpenters, and coolies to help with the job.

The first house erected was the one that was to be Martin's and mine. It had a wide veranda that afforded a beautiful view of the nipa palm-lined river bank. A hundred yards from it was the house that was to shelter Jim Laneri and Joe Tilton. Scattered around the clearing in an asymmetrical manner were smaller houses for our staff of servants, coolies, porters, trackers, and guides. We virtually built a small town in the Borneo wilderness and named it "Johnsonville" in honor of Martin's family.

The building of the camp recalled to my mind the many stories my grandmother used to tell of the covered wagon days in the United States and of how the pioneers built town after town in the Wild West with savage Indians all about. Here we also were surrounded by savages and headhunters and plenty of them at that. These headhunters took not only the scalp but also the whole head and displayed the scalp with pride on their belts.

The houses immediately surrounding ours at Abai were those of our personal servants, Feeli and her husband and Mendoza, who was chief of all our native boys. He spoke perfect English, having gone to school in Sandakan. His father, interestingly enough, had been educated in England. The cook occupied a house all his own since his temperament did not render him cohabitable. Sai Din, who was in charge of all the animals in camp, occupied a small house behind ours.

In addition to the personal quarters for the other native

boys, we had a guest house, mess hall, photographic laboratory, and equipment storeroom built at Abai. All of the buildings were sufficiently separated from one another so that, in the event of a fire in one, we would have a good chance of saving the others. All of the buildings were connected with one another by a system of elevated pathways. These were constructed of very hard mud and clay and proved to be invaluable in getting from one part of the village to another, particularly when the daily rains came or when the river overflowed its banks.

The buildings at Johnsonville were made principally of bamboo poles tied together with rattan rope. Quite unlike the native dwellings of Borneo, we built stoops or steps leading up to our house and closed the buildings in with solid walls. We also had doors and large hinged closures for the openings which acted as our windows. Some of the houses had porches, screened in with mosquito netting. It was a rare occasion when we could sit out on any of the porches with any degree of comfort because of the heat and humidity.

I was not at Abai very long before I set about planting a vegetable and flower garden. I attempted to raise carrots, potatoes, peas, green beans, lettuce, radishes, tomatoes (ninety percent of which were stolen by the monkeys), cabbage, and many other vegetables and flowers. The garden was hardly worth the effort I expended in planting it. What the monkeys passed up, the white ants would devour. This was entirely different from my experience in Africa where I had an enormous garden at Lake Paradise, with all kinds of vegetables, fruits, and flowers. In Borneo, the soil was too hard and much too wet. This coupled with the monkeys and the ants made gardening impossible.

Johnsonville stood in a tranquil setting. Jungle birds continuously sang melodiously from the green tops of the stately

nipa palms that lined the sandy shore of the sluggish river. The Kinabatangan River at this point was as wide as the Missouri River at Kansas City and from our camp we could see for miles up and down the forest-cushioned waterway. Every mile or so small streams, or *trusons* as the natives called them, emptied into the Kinabatangan. Along these small streams was the real wildlife of Borneo. The streams were all edged with dense tropical vegetation of varying shades of green, sprinkled with the velvet purple of wild orchids. They and the Kinabatangan were teeming with a wide variety of edible fish that we sampled shortly after our arrival.

All of this beautiful tranquility was abruptly disturbed one evening as I was making my way from the bedroom over to the mess hall along one of the elevated pathways. Because it was a moonless night and thus extremely dark, I carried a flashlight with me. When I was halfway down the path, I noticed something moving into the yellow rays of the flashlight beam. I stopped short in my tracks, my mouth dried to sandpaper and my pulse pounded at my temples like an anvil. It was a horrible sight and to say that I was frightened would be to put it mildly. I was absolutely terrified!

There in front of me lay not one, but two snakes. One was about two feet long with a shimmering green skin and a flamingo-pink heart-shaped head. It closely resembled the deadly fer-de-lance. The other snake was turquoise blue with piercing black shiny eyes. When I gathered my senses together, I immediately turned and ran back for my shotgun. However, when I returned to the spot where the snakes had been, both of them had disappeared.

I described them to the native boys, but no one had ever seen or heard of such snakes before. I can assure you that I was not dreaming and that I did not even have one cocktail that evening. However, after seeing those two terrible, fantasticlooking snakes I ran to Martin with the intention of getting a drink to calm my nerves. It was as if he had read my mind for he said, "Honey, if you haven't had a cocktail yet, then you

had better get one. You're shaking all over."

The following morning I went looking for the two snakes with several of our native boys. We had been searching for hours when we suddenly came upon a giant python (reticulatus) dangling from a tree. Immediately below the snake was a wild boar, peacefully eating and apparently quite unaware of the snake above. Within a fraction of a second, the python slithered down and with its huge mouth open grabbed the startled boar. The brutal struggle began. It was a fight to the death. Both creatures rolled over and over in the slimy swampy earth. The squealing boar sank his sharp ivory tusks into the thick unyielding skin of the snake as the python slowly but methodically wrapped himself around him.

Tugging, pulling, and squirming, with water and mud flying all about the arena of death, the boar tried to get loose, but the hold of the python was too overpowering. The python did not make a sound. With deadly silence he went on with his intended purpose of killing the boar. In contrast, the boar squealed and grunted futilely as the reptile wound himself around him. The fight continued. Large gaping wounds now covered the snake's body. Blood and mud covered both com-

batants.

The boar rolled over and over in the slime in an attempt to crush the snake, but his efforts were in vain. He tried to run, but the weight of the immense snake about him was too great and he fell. He rolled into deep water as if he were trying to drown the python but rolled out again as the attempt failed. His movements began to slow down. He was tiring of the fight. The tremendous pressure of the snake encircled about him was too much. His squeals and grunts stopped and all

movement ceased. The battle was over and all that could now be heard was the cracking of the boar's bones as the python went about his grim job.

The snake wrapped himself around the limp corpse and exerted tremendous pressure until every bone in his victim's body was crushed. He slowly unwrapped himself and then swallowed the boar whole. Just before he did so, a salivalike substance flowed from his mouth which enabled him to better swallow the large animal. This particular boar, with its long gray hair, weighed at least two hundred pounds.

Of course, the stomach of a python is capable of tremendous expansion. Once he had swallowed the pig, he retreated to his lair where, as is the python's habit, he would sleep for about six months. His body is adapted so that he digests his meal during this long period of time. This particular python measured more than twenty-seven feet in length. And so another chapter was completed in the never-ending struggle for survival in the jungle where the strong devour the weak.

As if what I had seen was not enough for one day we ran into the legendary two-headed snake of Borneo on our way back to camp. We saw him before he saw us. I motioned to the boys to remain quiet and to capture him alive if possible. What a prize to bring back to America! Down the trail he came, but when within twenty feet of us, sensing that danger lay ahead, he veered off into the tall grass.

He was about two feet long with shimmering green skin that was striped with a series of bright longitudinal yellow lines. He created a very grotesque sight with one head coming toward us and the other head apparently looking back in the direction from which he came. Actually, the second head was not really a head at all, but merely the shape of his tail end. The formation was exactly like his real head and he held it just high enough above the ground to lend the impression of a sec-

ond head. If we had seen him from the other end we might

have thought that he was crawling backward.

The boys ran into the grass but he successfully eluded us. I was somewhat disappointed in not being able to capture him. I was also wondering, after what I had told Martin the night before, what he would say when I related the story about the two-headed snake. I finally decided to tell him since now I had witnesses to back up whatever I said.

On entering the grounds I found that Martin had finished his developing for the day and was in the house resting. As I stepped in from my porch my face must have belied my

thoughts for he said, "Now what did you do?"

"I didn't do anything Martin," I replied. "But I did see something!"

"Oh, brother, what tall stories this gal tells," he replied, turning his head away from me.

"No, Martin," I replied, "this is not a tall story. I saw another snake and this time a two-headed one."

"What!" he exclaimed incredulously. "A snake with two heads?" Martin smiled a little and then said, "And I'll bet that he sees twice as much as any other snake."

"Martin, please, I'm serious. I did see him."

"Let's get a better look at your eyes. I believe that the

jungle fever has really caught up with you at last."

"Please listen. I am serious and I don't have jungle fever. I have the boys to prove it this time," I said as I moved toward the door and called out to three of the boys to come into the house.

I asked them to tell Martin exactly what we had seen. In their Malayan tongue they unfolded the story, talking a mile a minute. Martin had to slow them down because he could not understand Malayan as well as I could. I was so angry with him for having laughed and ridiculed me that I just let the

boys go on talking. As I stood there listening, it slowly dawned on me that one of the boys relating the story had not got a very good look at the snake and firmly believed that it had two heads.

No matter how hard he tried, Martin could not convince the boy that there was no such thing as a two-headed snake. However, the boy's argument was so convincing that I saw signs of Martin's weakening. I decided to teach him a good lesson for not having listened to me and so I just let the boy continue and walked out of the room.

When the boy left the house he said, "Now the Tuan Sahib believes us." Inwardly I smiled and said nothing until after dinner when Martin reapproached the subject. The tone of my voice was distinctly sarcastic. "You listened to the boys. Now won't you please listen to me?"

He was apparently impressed by what the boys had said for he promptly said, "Okay, let's have your story." I then told him all the details of how, at first, it really did look like a twoheaded snake but that when we got close to it we could see that the tail merely resembled another head.

He was glad to hear the full story.

"Honestly, Osa, for a time there I thought that the sun had been too much for you or that you were just fooling me."

"No, I wasn't fooling, Martin Johnson," I snapped. "If you had listened to me in the first place you wouldn't have had the punishment of listening to the boys."

He smiled in a conciliatory manner. "All right, you win.

From now on I will listen."

EXCURSIONS INTO THE JUNGLE

After our camp had been established at Abai, Martin and I began our exploration of the interlacing rivers of North Borneo. There were three principal river systems that snaked their way through the almost impenetrable jungle of this sector of Borneo, and for the most part their headwaters had never been fully explored.

The Kinabatangan River, on whose banks our permanent camp was situated, was the largest and least known of the three. Running a course almost parallel to the Kinabatangan was the Segama, which like the former emptied into an estuary on the Sulu Sea. Because it was more navigable than the Kinabatangan, its headwaters had been partially explored several years earlier. A small native town, poetically named

Lahad Datu, had been built on Darvel Bay, where a small tributary of the Segama dispersed its serene waters over the many-hued coral bottom of the sea.

It was our intention to explore several hundred square miles of the interior lowlands by dugout, houseboat, and airplane. However, before commencing an exploration of the unknown headwaters of the Kinabatangan River, we decided to try a small test-run expedition up the Segama River and its many tributaries for the purpose of obtaining wildlife pictures. After that we intended to explore the Kinabatangan and its main tributary, the Lokan. It was there that we would find the headhunters, who at that time were little known.

As soon as we commenced sailing up the Segama we learned that there were fairly large rubber plantations along its banks and that a motor launch was in use on the river which could take us almost to its headwaters. Martin did not want to use the launch as that would have only served to chug out a message to the jungle life of our approach. He also ruled out a full expedition along this river because of this factor. This now confirmed our decision that it would be along the Kinabatangan that our expedition would travel inland as far as the waters could carry us.

As we sailed up the placid Segama we passed the Sekong Rubber Estate, which was one of the largest of its kind in Borneo. The manager of this plantation was a strapping six-foottall Englishman by the name of Mr. Watt. Since visitors very rarely came his way, he was quite delighted to see us and insisted that we have dinner with him at the plantation. He was an excellent host and saw to our every comfort.

We remained at the Sekong Estate for two days, not only because of Mr. Watt's insistence but also because Martin was learning more from him about North Borneo than from anyone else he had heretofore met. I had not been at the estate very long before my feminine sense of curiosity prompted me to wander all around the plantation. As I was meandering through the cathedral-like silence of the rubber groves, I spotted a huge python crawling among the trees. We exchanged glances and then after a short pause we both took off in opposite directions. I immediately summoned some of our porters and with my courage thus fortified took off in hot pursuit of the snake. What had promised to be an exciting and victorious chase soon deteriorated into a ponderous two-hour search. In and out of the trees we darted, giving the distinct appearance of playing a game of tag instead of being on a python hunt. Were it not for the fact that one of the men accidently stumbled across the snake, we might have gone on for hours on end. The din of excitement created by the porters crashed through the silent mist-shrouded groves and echoed across the rolling lawns to the main house. Martin and Mr. Watt came running down to see what on earth was going on. Their faces flushed red with excited surprise when they saw the reptile.

Mr. Watt was so impressed with the size of the python I had captured on his estate that he asked Martin if he could pose with the snake for a photograph. He wanted to send several pictures back to his home in England and so Martin more than willingly granted his request. The python measured more than twenty-eight feet in length and quite obviously had been on the prowl for something to eat when I came upon him. Mr. Watt, who had captured many pythons on the plantation, stated that this one was the largest one captured to date. The fact that it had been captured by a woman made it a unique catch for a second reason.

After taking our leave of Mr. Watt, Martin decided to organize a small expedition to search the territory around Lahad Datu on Darvel Bay. We had been told that there were elephants to be found in the marshes there and of course we were

anxious to photograph them if possible. We spent several days tramping through the humid misty jungles around Lahad Datu. We saw monkeys galore, snakes, wild boar, and several other animals but no elephants. After we became completely exhausted from trudging through the slimy swamps and marshes, we conceded defeat and started on our return trip to Johnsonville on the Kinabatangan River.

While we were somewhat disappointed we were nonetheless satisfied that we had now eliminated the Segama River as a site for serious photograph work. We knew now that wildlife in abundance did not live along its palm-fringed banks. As we had suspected all along, the Kinabatangan was the home ground for a wide variety of jungle inhabitants and it was our intention now to push ahead with its exploration. Unlike the Segama River, which is near the coastline of North Borneo, the Kinabatangan runs directly through the center of the territory, into the heart of the jungle interior.

As we were paddling our way up the Segama from Darvel Bay, I noticed a well-trodden trail leading from the sandy bank up an extremely large hill. Through the binoculars we could see the fresh imprints of human feet on its sandy surface. Martin decided to investigate and therefore ordered the boats over to the shore. We left most of the crew in the boats below and with six of our best men trekked onto the trail and up the steep hill. We followed the meandering path until it brought us into some open bushland near the top of the hill. Off in the distance we could see the tops of a small group of houses.

As we approached the village we were greeted by several rather primitive-looking natives who had evidently never seen a white man before. They stared at us suspiciously with narrow, brown eyes that were encased in prominent epicanthic folds. Martin immediately gave them some gifts of beads, salt, cloth, and other trinkets. He had no sooner handed the presents over to the natives than many more emerged from the dense black cover of the concealing jungle.

We soon learned that these natives were members of the Dusun Tribe. The men were of a fine mesomorphic physique with a head of hair which was extremely black and straight. Their facial features were distinctly coarse but this disappointment was rapidly obviated by their pleasant and easygoing type of personality. Their skin was soft and smooth and beautifully decorated with fine tattoos that radiated over their extremities in a wild variety of fascinating patterns. This type of tattooing was reminiscent to Martin and me of the Solomon Islands, where many years before we had seen some of the same artistic patterns.

The Dusuns did not cicatrize their skin with beads of scar tissue as do many of the tribes in East Africa. Unlike many of the East Africans, they did not indulge in the use of either oils or grease in beautifying themselves. The women as well as the men were arrayed in a variety of contrasting tattoos which did not seem to have any particular pattern and certainly no definite meaning.

They surrounded us and cast suspicious inquisitive glances at us from head to foot. But their manner was friendly and quite unlike that of the cannibals of the New Hebrides, who when they surrounded us always had culinary intentions. We conversed with the villagers as best we could through our interpreters and ascertained from them that there was a dearth of wildlife in the immediate area. While Martin occupied himself with learning about the fauna of the area, I went about investigating the Dusuns themselves.

The women, in addition to their elaborate tattoos, also wore immense rings of tin and copper around their waists. Many of them were arrayed in beautiful necklaces of ivory-white teeth that draped over their delicate shoulders in a most graceful manner. They were extremely shy and it was only after we had been in the village awhile that they came out of their houses.

The custom of tattooing always intrigued me. Among the Dusuns there is no set time for affixing tattoos. It does not constitute a part of their puberty rites as it is avidly practiced by both men and women of all ages. It is interesting that in spite of the strong Mohammedan influence in Borneo, which greatly discouraged tattooing, the custom flourished and indeed seemed to be on the increase.

In Sarawak, many years ago, when a warrior had taken a head, the backs of his fingers and hands were tattooed. If he had displayed exceptional bravery in accomplishing this feat then his thighs were also tattooed. We were to discover later on that in the interior of North Borneo, the natives still used the tattoo as a symbol of headtaking.

The stoicism which they displayed in undergoing this painful and inconvenient operation was amazing. The instruments used for tattooing differed greatly from tribe to tribe. Most of the tribes used an iron pick which was attached at a right angle to a wooden handle. Holding the handle at one end, the person performing the tattooing would hammer the sharp pointed pick into the flesh until it was sufficiently pierced. Then, with the assistance of a forcepslike instrument, the dye would be inserted.

Among several tribes in the interior, we found that tattooing was reserved only for women. The right to wear tattoos as well as the right to tattoo others was strictly a hereditary one. It was a matrilineal prerogative in that it was passed down from mother to daughter.

I could never learn why the Dusuns tattooed themselves. However, I strongly suspected that in some way it was related to the concept of appeasing the various spirits that played such an important role in their animistic religion. It could not be ruled out that tattooing was a holdover from their now

long-since abandoned practice of headhunting.

The Dusun race is the strongest ethnic element in North Borneo. They are a primitive people not only in their mores but also in their technical knowledge about practical living. They build their houses close to the ground, unlike the other tribal groups, and thus expose themselves to the inclemencies of the weather and the ever-present dangers of nature. Their ignorance concerning many small practical matters was in glaring contrast to their more advanced immediate neighbors. Their religious beliefs were steeped with an overwhelming burden of superstitions, taboos, and alarming legends.

The Dusuns had an interesting custom of making potted meat. This entailed mixing the flesh of a dead animal with certain barks and herbs, placing the mixture in the hollow lumen of a bamboo shoot, and then burying it in the ground for six months or more. The result, when exhumed, was a jelly-like mass of necrotic material whose smell would test the strength of any man. It nauseated me. Never before nor since have I smelled anything like it. Like the odor of a skunk, it permeated everything in the immediate vicinity, including our clothes, which we had to change and dispense with.

The Dusuns, however, seemed to relish this dish and avidly ate it together with durian which is an oval fruit with an offensive odor all its own. I managed to overcome the odor of durian and swallow a few mouthfuls, but I could not get within a few feet of the Dusuns' potted meat, much less eat it.

To say the least, the Dusuns had a varied diet. At different meals, I noticed that they are snakes, rats, squirrels, monkeys, and an assorted spectrum of jungle herbs. They had an especial predilection for monkey meat. They would serve the entire arm of a monkey, complete with the hand, on a wooden platter. The resemblance of this to a child's forearm was so great as to make the spectacle of people eating it revoltingly cannibalistic.

After spending the day at the Dusun village, we set about returning to our boats for the continuance of our trip back to Abai. We had hardly reached the shore of the river when the skies became darkened with swirling masses of black thunderheads. The terrifying roar of thunder rumbled across the roof of the jungle as great bolts of silver lightning incised jagged paths on the trembling sky. The rain came down in torrents, as if some great celestial sea had overflowed its banks. What had been a beautiful day only a few minutes before was now full of thunder, lightning, and rain. And yet, off on the peaks of the distant mountains, we could see that the sun was shining.

A prominent feature of the weather in Borneo is its marked variation in localities adjacent to one another. If one locality were to experience sixty inches of rain in twelve months, it would be considered a very wet year. And yet, another locality, only twenty miles away, would consider the year dry if it received anything less than a hundred inches of rain. This marked variation in precipitation from area to area accounted for the conflicting statements we found in so many books on Borneo. Some authors related that the climate was wonderfully balmy while others stated quite disgustedly that they experienced nothing but continuous rain.

We had also read of the refreshing cool nights, but those who wrote such reports had, quite obviously, never been in the interior where we were. It was always hot and humid, even at night. Never did the temperature fall below ninety degrees, except on the upper reaches of Mount Kinabalau.

Since this mountain throws up her twin peaks to an altitude of 14,000 feet, it was not infrequent that they were covered with a blanket of shimmering white snow.

To the natives with us, whom I allowed to look through my binoculars at the peak of this mountain, it was a source of wonderment and mystery. Many of them would stretch out their hands in an attempt to touch the mountain. As they looked through the glasses they thought that it was within their reach. Martin would then hand them the glasses and have them view the mountain through the opposite end. As soon as they saw that the mountain was further away than it really was, they would drop the glasses and look again to make sure that it had not moved. They would then view the mountain through the glasses again. They would repeat this cycle over and over again with obvious enjoyment.

Martin was always up to some such trick. His favorite was the "glass-eye trick" which he used to entertain our boys and the members of the Dusun tribe as we made our way down the trail to the edge of the river. Martin had tried this trick all over the world, in the South Seas and in Africa and always with hilarious results. He would place a glass eye which he had brought from America in a handkerchief and hold it up against his eye. With his other hand, he would reach into the handkerchief and apparently remove his eye. He would then add some realism to the trick by removing the handkerchief from his eye and by keeping the eyelid closed.

He would hold the glass eye in his outstretched hand and show it to the natives who believed it to be his own eye. This had such a profound effect on them that they would scamper away from him for they believed that he was a god who could take himself apart. Whenever these natives saw him again they would pay particular attention to his eyes and walk deliberately close to him so as to see whether or not he still had both of them.

We remained on the shore since the waters of the Segama had become extremely turbulent as a result of the storm. The boys were obliged to get out of the boats and to beach them because of the possibility of their capsizing. What a miserable lot we were! We were all drenched to the skin, except the Dusuns who did not in the least seem to be inconvenienced by the storm. The storm's end was as spectacular as its beginning. The rain stopped, the river became calm, and the sun shone through the rapidly clearing clouds in long silent columns of gold.

Dripping wet and uncomfortable, we returned to our boats and, waving good-bye to the Dusuns on shore, continued on our way down the Segama. We sailed rapidly with the swift flow of the river to its broad estuary, and then as we reached the ocean we turned our boats left. We hugged the sandy coastline, making our way toward the mouth of the Kinabatangan River. The water beneath the hull of our boat was crystal clear. The river bed shimmered with a spectacular spectrum of beautifully colored coral, bright red, pale blue, rich purple, and radiant yellow. As we looked at the beautiful mosaic of flashing colors Martin remarked, "This is Borneo all right. They have their rainbows in the water and not in the sky after a storm. Just contrary, that's all."

The water was teeming with plump fan-tail fish. They swam with their beautifully colored and exquisitely delicate fan-shaped fins in and out of the exotic colored coral. The coral, while beautiful and alluring, is poisonous for most fish, but not for the fan-tail, which takes refuge in it from its enemies.

We never saw any natives swimming near the coral since a

small abrasion from it on the skin can lead to serious illness. Even our own boys would try to swing the boats away from it in the event that we overturned and would have to swim to shore. They wanted no part of this beautiful and attractive lair of nature.

There were many jellyfish, shaped like rubber balls, floating above the fan-tail fish and the coral. They were of a bluish-white hue and had small delicate tentacles that extended below the water. While some of them could be seen occasionally below the water, they always stayed clear of the coral.

When we arrived at the estuary of the Kinabatangan River, Martin decided to sail for Sandakan instead of going up to Abai. We sailed along the coast for a few more miles until we arrived at Sandakan, where we all had a welcome change of clothing and a much deserved warm bath. After resting for a few days, we planned to go back to the coast and then up the Kinabatangan River to our jungle camp at Abai. But there was no resting for Martin once he learned that there were two very interesting visitors stopping at the Sandakan Hotel, not far from our residence.

The two interesting visitors were the Sultan of Sulu (Sooloo) and the Sultan of Jolo. We had met the Sultans before and had been wined and dined by them, but to Martin they were something special. They were brothers and were descendants of the rulers of the islands of Sulu and Jolo. These two islands were once the haven for the infamous pirates who roamed the China Sea at will a hundred years ago.

Some historians maintain that the Sultan of Sulu merely assumed that title himself a hundred years ago and that in reality he was nothing more than the chief of a desperate pirate horde.

Both of the sultans spoke English and Malayan fluently, but Martin could not entice them to talk about the pirate days of old. They were both followed by their male secretaries wherever they went. Well-groomed, neatly shaven, impeccably dressed, and urbane, they had a regal bearing indeed. They granted Martin's request to photograph them and their secretaries on the steps of the Sandakan Hotel.

The Sultan of Sulu was so desirous of taking a good picture that, when Martin was about to snap the photograph at nine thirty in the morning, he went back to his suite and put on his tuxedo. He also insisted that his brother, the Sultan of Jolo, as well as the secretaries wear their fezzes.

After taking our leave of the two Sultans, we returned to our jungle camp at Abai as planned.

HEADHUNTERS COME TO VISIT

Down through the centuries the island of Borneo has been subjected to countless waves of ethnic invasions. The first outsiders to arrive were the Javanese who brought with them their Hindu religion. They were a docile people whose influence was restricted primarily to the coast. Shortly after their arrival there came a great influx of Malays from the north. Imbued with a roving disposition, these people extended their influence widely and firmly entrenched themselves on the island.

The Malays embraced Islam when its influence first began to permeate the Far East. Through them this religion spread over the entire island and quickly smothered the last vestiges of Javanese Hinduism. Like all Mohammedans, the Malayans formed sultanates, and through them forcedly spread their creed. They gradually pushed the aboriginal natives of the island (Dyaks) back into the interior and made a concerted effort to win as many converts as they could among them. In this effort, however, they were hampered by the Chinese influence that had been present among these people for many centuries.

It is impossible, of course, to make any factual statements regarding the ancestral origins of the aboriginal tribes who presently inhabit Borneo. However, it can be stated with a certain degree of accuracy that Borneo together with the other islands and archipelagoes of the China Sea once formed a part of the Southeast Asia mainland. The distinct Mongolian physiognomy of the present aboriginal inhabitants of the island lends support to this idea.

It is postulated that after the separation of Borneo from the mainland, many geological ages ago, there came an extremely long period of time during which the island remained relatively isolated. The Chinese were the first to arrive, not as a great ethnic invasion, but rather in small numbers. Their primary concern was the procurement of gold, quicksilver, copper, sulphur, and tin that lay in the mountainous interior. They penetrated the interior of the island along the many navigable rivers and there they established fairly large communities. Over the span of several centuries they intermarried with many of the indigenous peoples and soon became absorbed by them.

It is theorized that the aboriginal inhabitants of present-day Borneo are descended from the original mongoloid inhabitants who in turn intermingled with three other aboriginal groups who arrived on the island at a later date. The Kayans arrived in the south and the southeast, the Ibans in the southwest, and the Muruts in the north. The Muruts probably came from the

Philippines or directly from Annam.

The Muruts resemble the other groups in their mongoloid features but differ markedly from them in their customs. Unlike the other tribes, they are not a river people and in point of fact possess little or no skill in building boats. They rarely travel by water, but they are noted for their ability to travel great distances on foot. The expanding pressure of the Malays and the oppressive hostility of the river pirates eventually forced them to yield and migrate to the safety of the mountainous interior.

Some writers have stated that the Muruts do not use the blowgun. This, however, is grossly inaccurate. It was a rare occasion indeed to see a member of this tribe without this deadly instrument. The photographs of these tribesmen which appear in this book clearly show each of them to be armed with a blowgun.

The Muruts presently live in the north of the island in the impenetrable Crocker Range of mountains that lie near the headwaters of the Kinabatangan River. They are a fierce warrior people who easily dominate all of their neighbors. The name Murut itself, which is a variation of the Malayan word marut, meaning brave, is a clear indication of their military prowess. It is interesting that while they may take many heads in battle they are not able to propose marriage to a woman. According to their custom the woman must propose to the prospective husband.

Shortly after our camp at Johnsonville had been completed, we were surprised with a visit from eight members of this tribe. They related that they had seen our "great bird" (plane) flying across the sky and had trekked across the mountains from the interior in order to find it. Upon their arrival in

camp, Martin immediately made them welcome and accorded them the respect that was usually reserved for chiefs. They were so pleased by the treatment they received that they remained with us for several weeks.

Sai Din, our animal caretaker, was a detribalized Murut who, having abandoned his ancestral village, had taken up a new life in Sandakan. When our visitors arrived they avidly conversed with him and indicated by their reaction that they were quite pleased to find a member of their tribe being treated so well by the Johnsons. During their long stay with us at Abai their behavior was beyond reproach. I would not doubt that this was due in part to the influence that Sai Din had over them. As would be expected, however, they were especially attracted to the two most beautiful native female members of our expedition, Feeli and Geeli.

The Muruts are a very primitive people. They weave their own cloth, manufacture their own weapons and musical instruments, and make their fires from the friction created by rubbing two pieces of wood together. One of their most interesting customs was their pointing to objects with their chins and never with their fingers.

As a group they are handsomer than their neighbors and in general are finer physical specimens. They are strong and ferocious warriors and great adventurers. When it comes to daring, they have no equals. They amply demonstrated this to us by their hazardous trek to find our plane. They had traveled for hundreds of miles through swampy jungle and over rugged mountains in order to reach our camp. Their only protection was their blowguns and their parangs which they put to more practical use during the trip in killing game for food.

Several of our visitors had tattoo marks on their arms and on their chests. Each tattoo mark represented a human head which they had taken as a prize in battle. I often thought this to be analogous to our practice during modern warfare of placing an emblem on a plane or battleship in order to indicate that it had added one more to its kill. One of the Muruts had sixteen distinct tattoo marks on his left arm, indicating that he had sixteen heads to his credit, even though he was an extremely young man.

Many years ago, when Sir James Brooke, the British rajah, was eradicating piracy on the island, the tribe that he most feared, not because of their viciousness but because of their valor, was the Murut. When he entered the town of Sandakan for the purpose of securing terms of peace he was met by many tribes, all drawn up in battle dress and formation. In the forefront of all of them stood the Murut who had come down from the mountains in order to defend the island. The English must have been greatly impressed with these people, for although there were hundreds of tribes present, the Muruts are the only ones mentioned in their chronicles.

On several occasions our visiting headhunters accompanied me on my hunting trips into the forest. They always insisted on preceding me through the dense undergrowth in order to flush out any danger that might lie ahead. They were thrilled when I took them for a ride on the outboard motor boat. The sight of the expressions on their faces as the boat glided swiftly over the face of the water without any oars was reward enough for the time I expended in giving them this new thrill in life. They took a keen interest in our daily activities and would always watch intently whenever we took pictures of animals or other tribesmen. They spent the remainder of their time sitting around their fire, telling one another legendary stories about the great warriors of their tribe. Sai Din, who could understand their language, would sit with them for hours and would then give me a synopsis of the tales that had been told.



The Johnsons' base camp at Abai in the Borneo jungles; in the foreground The Spirit of Africa and Borneo. The building in the center served as the kitchen and dining room and those at the right as living quarters for the members of the expedition.



An aerial view of the Kinabatangan estuary, with its maze of channels and jungle-choked islands.

The Johnsons' houseboat under construction. Built entirely of bamboo, rattan and nipa palm by native craftsmen, it contained four rooms and was equipped with electric lights and a kerosene-burning refrigerator.





TOP: The Johnsons' junk, raft and gobongs begin the long, arduous journey up the Kinabatangan.

BOTTOM: The Spirit of Africa and Borneo afloat on the Kinabatangan River. Whenever the plane was moored on the river the natives circled around it continuously in their canoes. Much to their enjoyment, Martin Johnson would often take a group of them into the air.



Osa Johnson drinks from a Borneo "water vine." These vines are abundant in the Kinabatangan jungle and each contains over a quart of refreshing cool liquid.





The Kinabatangan River at sundown.



ABOVE: Orchestras such as this one were common in the Dyak villages. The sound of the gongs could be heard for miles.

LEFT: The fishing hole. Osa Johnson spent many pleasant hours at this delightful spot near camp when she was not busy with the myriad domestic details of the expedition.

The Johnsons meet Feeli and Geeli. These two Dyak beauty queens suddenly appeared alongside the houseboat in their slender gobong. The Johnsons later visited the girls' village and made some excellent photographic studies of Dyak village life.





Geeli. She became a star performer in the Johnsons' motion picture, Borneo.



A Borneo duet. Feeli plays the gomboose, a stringed instrument peculiar to Borneo. Accompanying her with a drum is the Johnsons' guide and interpreter, Logan.

Although there were the usual native drinks available in camp, I never saw one of the Muruts touch anything stronger than tea. Their favorite dish was shrimp, which Utar kept them amply supplied with during their stay in camp. Every day he would go through the ritual of whirling his net cowboy style over his head into the river. A short time later he would pull it in bulging with shrimp. These headhunters also relished boar meat which according to Sai Din they ate often in their mountain village. In view of this culinary predilection I was able to understand why they rushed to help Jim Laneri one day as he was dragging a boar he had shot into camp. After it had been barbecued, we offered some of the meat to them which they greatly relished.

The Muruts invited us to visit their village back in the interior. However, we had to decline this kind invitation in that it would have been a physical impossibility for us to trek overland with all of our cumbersome equipment. Martin and I regretted this decision since we were quite anxious to learn more about them and their way of life. We had to content ourselves with learning as much as we could about the tribe from

our eight guests.

Among many things, they described to me their method of burial, which to say the least was quite unique. Whenever a member of the tribe died a huge clay jar would be made and then split into two equal parts. The corpse of the deceased would be placed in this jar and then the two parts joined together. After this the jar would be taken to the burial grounds where it would be interred. Martin had an overwhelming desire to photograph this ritual but this was out of the question in view of the location of the Muruts' home.

These headhunters wore their coarse, black hair in bangs over their eyes and in either a bun or a long pigtail in the back. They kept it in place with hairpins made from splinters of deer bone. They rarely shaved their faces since their cheeks, chins, lips, and arms were devoid of an appreciable amount of hair. The upper part of their bodies was bare except for an occasional necklace of beads or an armlet of brass wire. They wore loincloths of riotous colors that formed an apron effect both in the front and behind. Attached to these loincloths was a bamboo container in which they kept their poisoned darts. These quivers were sections of bamboo about three inches in diameter and ten inches in length fitted with a cover or cap. A sharp hook attached to the upper end of the container permitted it to be attached to the owner's loincloth. The darts, without the piths, were carefully wrapped in animal hide and placed tip downward in the container. Another small container, attached to the large one, contained a number of piths that were ready to be attached to the poisoned darts.

The poisoned darts were about nine inches in length and about one eighth of an inch in diameter. At the lower end a small tapering cylinder of tough pith, about an inch in length, was fitted. Its diameter at the butt end was equal to the diameter of the lumen of the pipe so that it made for a precise fit.

The Murut blowgun is called a *sumpitan*. It is always made from hard, straight grain wood that is usually found only in the mountains. The first step in its construction is the selection of the desired tree. Once this is chosen, the trunk is split into long pieces about eight feet in length. These strips are then carefully shaven down until they take on a cylindrical shape of four inches in diameter. A special platform is then erected, about six or seven feet from the ground. The solid cylindrical rod is then placed in a vertical position with the upper end projecting through the platform and the lower part resting on the ground below. The rod is then tightly secured to the platform so that it is rendered immobile.

At this point the rod is ready for boring, a laborious job

requiring many hours. The actual boring is performed with a straight iron rod about ten feet in length. Its diameter is slightly smaller than the diameter of the desired bore. One end of it is equipped with a sharp chisel-like head and it is this device that actually eats its way down the solid rod. A native standing on the platform brings the iron rod down on the pipe being bored and gently turns it after each blow. The rod bites into the hardwood and then, under the gentle turning of the operator, scoops out the core of wood. Another native pours water into the hole continuously in order to reduce the heat created by the friction of the turning rod and to float out the chips of wood that are constantly being formed.

The blowpipe under construction is kept immobile during the entire operation by means of strong wooden supports. After the bore is made in the cylinder of wood it is polished to perfection. The outer surface of the pipe is then smoothed down and given a final polishing. The pipe is then complete with the exception of the spearblade or bayonet which is attached to the upper end with rattan at a later time.

It was not long before I had the opportunity to see these blowguns in action. One afternoon when the Muruts left our camp I followed them with Sai Din out of curiosity. Within a relatively short period of time I found them seated at the base of a large tree. They were as motionless as statues and were conspicuous by the fact that they were not talking. Through Sai Din I soon discovered that they were hunting and more particularly that they were hunting for an animal to give to Martin and me in gratitude for our kindness. They informed me that they had spotted many animal tracks indicating that game was going back and forth in front of the tree. They asked me to wait with them and to be absolutely silent, which is something I quite frankly found difficult to do. They told me they had heard a woodpecker nearby and that assured

them of a successful hunt. I later learned from Sai Din that the call of the woodpecker is recognized by the Muruts as an omen of a successful hunt.

So there we waited beneath the tree. We did not wait for very long for in less than an hour a Borneo deer appeared on the trail. It was completely oblivious to its danger. Slowly and quietly the Muruts got into position while the wind was still blowing toward them and away from the animal. One of them assumed the top position on the tree trunk and readied his blowgun for the kill. The others below him loaded and aimed their guns in the event that he needed some help. But that day he needed no assistance. With all the skill and cunning of an experienced hunter he blew on his sumpitan and successfully brought the animal down with a single blow.

The blowgun has one great advantage over our modern weapons in that it is completely silent when fired. If the first shot misses, which is rare, the animal being hunted is totally unaware that he has been shot at. When we returned to camp from the hunt, I decided to reward these headhunters with a new taste thrill. I brought them out to the kitchen building where I took some ice cubes out of the refrigerator. I handed some to each of them but they quickly dropped them as if they were pieces of burning coal. However, when they saw me holding the cubes without injuring my hands, they immediately picked up their cubes from the floor.

I put one of them into my mouth and they followed suit. After it had melted away they wondered what had happened to it, but they kept asking for more. "Some sort of white magic," they must have thought to themselves. I now began to wonder what I had let myself in for. Would they ever stop asking me for more ice cubes?

I knew that I had to stop them for their own sakes but without offending them. I finally struck upon the idea of giving them some vanilla ice cream to eat and with their attention thus diverted defrost the refrigerator. While they are the ice cream I left the refrigerator door open and in a matter of a few moments all of the ice cubes melted. The headhunters were sorely disappointed when they learned that there were no cubes left. I promised to give them some on the following day and, as it turned out, on every day thereafter until they left. Ice cream and ice cubes soon became a staple part of their diet.

After having eaten my vanilla ice cream the Muruts went across the clearing to the other side of the camp where our own men were cutting and clearing an additional patch of jungle. I followed behind at a short distance and soon noticed what at first I thought to be an illusion—flying snakes! However, I quickly learned that this was precisely what they were. They would fly from tree to tree as the natives disturbed them in their clearing operations. They are an extremely poisonous reptile that strike through the air like arrows of death. During our expedition to Borneo I saw at least sixty-three varieties of poisionous snakes but these flying serpents were the deadliest of them all.

Just as I reached the edge of the clearing a great tree was felled and about fifty of these reptiles took to the air and flew directly over my head. At first I thought that they were heading for me, but I soon realized that they were heading for the tree directly behind me. They were only about twenty feet above me and although I had my rifle with me, even at such close range, I felt utterly helpless.

Our native boys scattered in all directions and I followed suit, running away from the tree where the snakes were landing. As I ran I came directly into the path of a python who was hanging from a low branch on another tree. I was face to face with another killer. I was so completely petrified that I stood perfectly still. One false move on my part would have

meant death in a matter of seconds. What a horrible sensation it was! Deadly snakes flying overhead and a python in my

path.

One of the Murut headhunters fortunately spied the python at about the same time that I did. With amazing rapidity he raised his blowpipe and with deadly accuracy fired a single poison dart that whizzed past my ear and penetrated the head of the giant reptile. Before the python could move, his jaws were pinned together and he was dead from the poison of the Murut dart (damak). We all breathed a well-deserved sigh of relief.

The darts which the Muruts fire through their blowguns are small in size but deadly in their effect. The poison with which they are coated is prepared from the sap of the *upas* tree. This sap is heated until it becomes dark and pastelike in consistency. In that state it is applied to the outer surface of the dart and retains its deadly powers for years. The poison is fast-acting, and in a matter of seconds the victim is dead. There was at that time no known antidote for this poison. The Muruts, who lived in a snake-infested wilderness, knew that their own survival depended upon their speed and accuracy with the blowgun.

When Martin heard about this episode with the python and the flying snakes he was greatly disturbed and much concerned over my personal safety. "Well, Osa," he said. "Shall we stay?"

"Of course," I retorted sharply. "If these natives can outsmart these snakes, so can we. I don't care if they fly, walk, wiggle, or crawl."

And stay we did, in nature's boisterous incubator where everything thrived or died in a crazy-quilt pattern of animal and vegetable life. Here in the haunt of some of the strangest jungle life on earth we made our home. As the days went on we

knew that, in spite of the ever-present dangers, we had selected the right place. We were surrounded by the ear-shattering noise of hundreds of river monkeys and a symphony of curious tropical bird calls. White egrets flew over our rooftops and the rare Borneo deer moved silently through our campsite.

Shortly after my encounter with the flying snakes we began the construction of a houseboat that would take us up to the unexplored headwaters of the Kinabatangan River. Our Malayan boys were skilled watermen and expert boat-builders. Supplied with an endless quantity of hardwood from the surrounding forest, they were able to turn our rough sketches

into reality in a relatively short period of time.

This raft was built of bamboo, hardwood, and rattan without the use of a single nail. It was so sturdy that it never once required a single repair during all the time that we used it. It had two bedrooms, a combination kitchen and dining room, a storeroom, and a dark room. One bedroom was for Martin and me and the other for our sound engineer, Joe Tilton. On the aft veranda there was a kerosene refrigerator and a small electrical generator which provided us with an ample amount of light.

We intended to take a number of gobongs and smaller boats with us for transporting our men and our supplies. In addition, our Chinese junk would follow us and carry all of the heavier items as well as the odds and ends. From this raft we intended to photograph the native villages, the fauna of the riverbanks,

and all the lure and beauty of this jungle world.

The interior jungles of North Borneo can be traversed by foot but unfortunately one cannot travel very far without having a force of coolies to hack out a trail. This, of course, was too tedious a method and would defeat our primary purpose, which was to photograph wildlife in its natural, undis-

turbed state. The commotion created by a party cutting and hacking its way through the dense jungle undergrowth would have frightened every animal away for miles around. For these reasons, Martin had decided to travel by river and raft. We now had a house raft on which to sail up and down the silent waters of the interior. This was truly a small bit of America in the equatorial wilderness of the Borneo hinterland.

PESTS AND LEGENDS

Borneo is a land of vivid contrasts where even nature itself has gone wild. Nowhere was this better demonstrated than at our camp at Abai where the beautiful and the unaesthetic lived side by side. Here, hundreds of miles away from civilization, I tried to make living as comfortable as possible even though at times this was a seemingly impossible task. One of the principal ways by which I accomplished this was through my culinary talents.

Martin, Jim, Joe, and I always dined together in the evening at Abai as there was no better time during which to discuss our plans for the following day. I always made a special effort to make that small part of our day as pleasant as possible. Our dining table was made of bamboo and rattan with six comfortable matching chairs. The menu varied greatly from day to day, but it was always appetizing and appealing to the men. One evening we were treated to a turkey dinner which was made possible by Jim Laneri. He had flown down to Sandakan on the previous day and while there had succumbed to purchasing a turkey that was hanging in a butcher's window.

To complement Jim's unexpected present I prepared cranberry sauce, candied sweet potatoes, creamed onions, asparagus tips with hollandaise sauce, sweet peas and, of course, some good old-fashioned turkey stuffing. We also had some caviar, and a cocktail, green turtle soup, and for dessert, cocoanut-custard pie, cheese and crackers, and wine.

The table was covered with a fresh white linen cloth which I had brought with us from the States. A large cluster of purple and white orchids made a most attractive center piece. Our plates, silverware, and glasses, which came with us from home, were always kept spotlessly clean and in first-rate condition. It may seem strange that we were able to have such a homestyled American dinner in the interior of Borneo. Certainly, it would lend the impression that we had a life of comparative comfort and serenity in this wild land. But nothing could be further from the truth. What I have described was but a little spark of comfort in an otherwise black void of hardship and privation.

We lived in a steaming jungle that was forever being inundated with torrential rains. Borneo does not have a wet and a dry season, only a wet one. In eighteen months at Abai we received over two hundred and fourteen inches of rain. Oftentimes, weeks would go by without one stray beam of sunlight breaking through the thick black cluster of clouds. It was always so wet and humid that even our safety matches would not light unless they were kept in an air-tight tin. Clothing mildewed overnight and machinery rusted rapidly under the corrosive influence of the penetrating moisture.

This climate was a necessary part of that environment which is a prerequisite for maintaining the life cycles of a variety of insects. And to be sure they were there, by the millions! The mosquitoes and sand flies were especially bothersome. In order to protect ourselves from their incessant attacks it was necessary for us to smear our bodies, and especially our arms and faces, with a thick oil. But even this was often without effect. By morning, the mosquito netting on our bed would be covered with three to four inches of these insects. Martin's words, in a letter to a friend, accurately described the problems that we faced in those stygian jungles:

My typewriter is so rusty that I must work very slowly with it else it will skip and jump. My only time for writing is at night when thousands of malaria-carrying mosquitoes, moths, and sand flies sting and bite me or else get into my hair. The temperature here never goes below ninety degrees, day or night. The dampness is at times unbearable. It is so humid that my clothing is constantly saturated. Scorpions, centipedes, and enormous spiders parade on my table and over the floor. Lizards run up and down the wall and now and then drop on me or on the typewriter. It is a hell of a country.

Worst of all are the rains. It rains at least a dozen times a day. Everything gets so rusty. The leather has peeled off all of my cameras and most of my clothing has become mildewed. In spite of all this, however, it is a beautiful country and a most interesting one. I have never seen jungles as colorful as these anywhere in the world. Beautiful moths of fantastic design constantly fly into the house at night and once in a while bats of various sizes pay a call.

The heat and the humidity of these jungles have corroded my lenses, ruined my cameras, sound equipment, airplane

parts, and make life a constant hell. We have wasted over twenty-thousand feet of film thus far.

In addition to what Martin described in his letter we were also harassed by a variety of other jungle inhabitants. Ants were forever present. They bore a striking resemblance to the African safari ant, not only in appearance but also in their aggressiveness and ability to inflict a most painful sting. Some of them were a full two inches long. One night thousands upon thousands of them got under the floor of our hut and they made such a racket that the entire camp was awakened. Our house servants removed a few planks from the floor and poured several pailfuls of hot ashes over them. Needless to say, the problem was solved.

Scorpions abounded in this area of the interior and oftentimes reached eight inches in length. I can well recall the narrow encounter that I once had with one of these scorpions. It was early in the morning and prior to brushing my teeth I had placed my watch on a nearby wash basin. When I had finished, I reached out to pick it up by its black strap and to my astonishment it began to move. In the dim yellow light of the dawn I could see that it was not my watch. It was a scorpion! I reached for my flashlight and put it to use in a manner for which it had never been intended.

The bite of a scorpion in an adult is usually not fatal. However, in children its bite is quite poisonous, causing a severe local reaction and sometimes a state of generalized weakness accompanied by fevers. In a child the bite can be fatal. Fortunately, in all of our travels, neither Martin nor I have ever been bitten by one of these arthropods.

A wide variety of lizards were the unsolicited tenants of the various camp buildings. They had a special predilection for the thick nipa palm-thatched roofs where they would sleep during the day and fight among themselves at night. Occasionally, one would snap off the tail of its opponent and then both the tail and the tailless lizard would fall on either the floor or on the mosquito netting. One particular species made a peculiar musical sound that closely resembled the singing of a canary. We never made a concerted effort to dispose of these tenants since they did assist us in reducing the insect population of our houses.

At times it seemed that everything in Borneo was keeping pace with the times by becoming airborne. We would see flying frogs, flying lemurs, and even monkeys that seemed to fly. The latter were a species of ring monkey found all over Borneo. These anthropoids are capable of jumping eighty to one hundred feet from tall trees into the brush below. They characteristically spread their four extremities in such a manner that their taut skin acts as a wind resistor. Thus equipped, they are able to sail down from their high perches with the greatest of ease. We often saw them jumping down from the tall nipa palms along the Kinabatangan directly into the water. They were excellent swimmers and were able to remain under water for several minutes without any difficulty at all.

Around our camp, however, these monkeys were a constant nuisance. Not only did they completely destroy my garden but they also tore large holes in our grass roofs and habitually stole roll after roll of Martin's photographic film. My patience with these flying rascals was finally exhausted when one of them decided to jump from the rafters of our house. It was just before daybreak when I was abruptly awakened by a monkey who had decided to jump from a beam overhead onto my mosquito netting. His weight plus the impact of his dive caused the netting to tear and he landed right in the center of my abdomen. Not only did he wake me up but he also took all of the wind out of me. In his fright he became tangled in the

netting and pulled it down on both of us. In retrospect, Martin thought that all of this would have made a very humorous sequence in one of our movies. But at the time I failed to see the humor of the episode. Martin finally rescued me by pulling the netting off. The startled monkey jumped out of the open window and darted off into the dark forest.

Centipedes were by far among the most dangerous of all the pests that infested our camp at Abai. Equipped with two pincerlike foreclaws they are able to inject a poison into their intended victim while at the same time holding him immobile. In Borneo the majority of centipedes reach a length of eight inches and for the most part they are of the poisonous variety. Fatalities from their bites are much more frequent than from

the bites of scorpions.

I shall never forget the extremely close call that I once had with a centipede. One night while I was asleep in my cot I was suddenly awakened by the peculiar sensation of something crawling over my right ankle. My heart pounded in fearful thrusts, but I dared not move. I had no idea as to what it was but I knew from experience that it was wiser by far to wait until it had crawled off my ankle. As soon as it left my ankle, I let out with an earth-shattering scream that woke up the entire camp. Martin and all of the porters came running and in a matter of seconds found the ten-inch centipede that had crawled across my leg. He was soon dispatched with one slash of a native parang.

More numerous than the centipedes but infinitely less dangerous were the millipedes or thousand-legged worms. They continuously plagued us at Abai, crawling through the nipa palm roof, along the walls and floors, and occasionally dropping from the rafters onto our heads. Their chief enemies were the numerous snakes that looked on them as the primary source of their food.

It is only fair to say that Borneo's arthropod population is not all scorpions, centipedes, millipedes, and the like. Some insects, such as the fireflies, are extremely beautiful. These glowing insects would illuminate the shoreline of the Kinabatangan River at night, giving it the radiant appearance of a fairyland. I can well recall the evening I puttered down the river in an outboard motorboat for the purpose of doing some fishing. Unfortunately, we had failed to fill up the gas tank before leaving and thus it was not too long before the gasping cough of the engine announced the inevitable. We had run out of fuel. Fortunately, we had a gallon of gas on board but we did need a light in order to fill up the tank. One of the natives pushed the boat beneath an overhanging tree that contained thousands of fireflies and they supplied all of the illumination that was needed.

The dense green foliage that lines the shores of the Kinabatangan contains a splendid array of beautiful and exotic tropical birds. By far, the most numerous is the green pigeon (burong puna), a small bird with soft gray and green feathering. They are found in great flocks that migrate up and down the river in a cycle that has as yet to be elucidated by ornithologists. The Dyaks and other tribes of the interior had a special craving for these birds but, fortunately, they had a difficult time in hunting them with their blowguns.

In the early morning one could see dozens of jet-black crows and brown-speckled, cream-colored sandpipers along the water's edge. Unfortunately, these birds do not sing and thus it was the exception rather than the rule to hear birds

singing along the river bank at this time.

Truly the most beautiful of all the river birds was the kingfisher. His velvety-beige forehead rests between a pair of deepset, pale blue eyes and terminates in a small, delicate, ruby red beak. The mantle of feathers that covers his back is a brilliant turquoise while those that terminate his majestic wings and stately tail are a deep, rich blue. This bird makes a pleasant high-pitched call that is barely audible, even in his immediate vicinity. But this call seems to reflect, unlike that of any other bird, his self-contentment and happiness.

The most audible of all the bird calls was that of the giant hornbill that echoed for miles, in unaesthetic tones, across the roof of the forest. The lonely call of the Argus pheasant (barong kuan) seemed to echo the silent past as it rolled through the jungle in the forenoon. Because the natives use its feathers for decorating their hair, this bird is strictly protected by the government. It has an exquisite tailspread of four feet, comprised of feathers of brilliant yellows, rich reds, deep blues, and dark purples, all harmoniously arranged as only nature can do. Its musical call forms the basic harmony for the symphonic music of the jungle.

Snow-white egrets abounded along the banks of the rivers. Perched among the vari-colored orchids and the flowering exotic trees, with their narrow yellow beaks flashing in the sun, they made a most attractive sight. In their company we would often see numerous small parrots with dazzling turquoise bodies and bluish-gray heads that terminated in ivory-white beaks. If they were not busy cooing to one another, they were occupied with the task of catching insects on the wing or scratching for small crabs on the silty banks of the river.

It was always the birds that made the river bank so wonderfully beautiful. It was in itself a marvel of creation, the astounding variety of species and size, the profusion of numbers, each capable of finding its own particular food in this single habitat. The aristocratic kingfisher stood out above all the rest in his dashing array. He was surrounded by a court of bustards and cormorants, peewits and tree-ducks, sandpipers

and crowned plovers, stately herons and elegant storks, selfcontented pelicans and aloof cranes, gulls and eagles, vermillion parakeets and boisterous egrets, all flying and fluttering, wheeling about, scratching and digging, arriving and leaving against the inverted satin bowl above, motivated to activity by the purpose of living.

From among all of these beautiful creations we finally chose one as a pet, a loquacious mynah bird with an ebony black body crowned with a brilliant dash of yellow on the head. He was an excellent talker and quite choosy about his food, which consisted primarily of various fruits. Shortly after he was acquired, Martin noticed that he would cough and expectorate at various times during the day. With the idea in mind that he was suffering from a cold, Martin included a pulverized aspirin in his food each day. When this regimen did not improve the situation after a few days, we took a closer look at the matter and soon realized to our surprise and embarrassment that the bird was not suffering from a cold. Rather he was imitating Martin's cough!

It was surprising that in view of all the species of birds that inhabited the interior of North Borneo, there existed a legend about only one, the vulture. According to the legend, a large vulture appeared in the sky during a great feast and called out as if a human being were trying to speak. Up to this time there had been a great drought that had caused famine in the land and the death of both animals and men. There was a great and powerful chief whose name was Vishni, who was loved by all his people. They now looked to him to intercede with the gods and good spirits in order to alleviate their suffering.

Vishni ordered that a feast be held in honor of the gods, but this proved to be without effect. The gods were still angry. Death, starvation, thirst, disease, and finally panic were slowly exterminating the tribe. Human sacrifice was then ordered by Vishni. It, too, failed. Therefore, Vishni called all of his people together and told them that he would be the final and supreme sacrifice. When his son heard of his intentions, he stepped forward and asked that he be permitted to take his father's place. But Vishni would not hear of it.

However, the anguish of the chief so grieved his son that he ran off into the jungle and disappeared. Shortly thereafter, the vulture, calling with a human voice, appeared in the sky. It then began to rain in torrents. According to the Dyaks, the spirit of Vishni's son had transposed itself into the form of a vulture in order to appeare the gods. This sacrifice so pleased the gods that they caused it to rain and conferred upon Vishni's son, the vulture, the power to make rain.

No trace of the boy was ever found and to this day the ringing call of the vulture can be heard throughout the jungles, causing the rains to fall. The legend says that every day he calls for rain, and I can state that, in the interior, that "call" is always answered.

This legend was related to me by an old man in the interior who told me that Vishni lived many centuries ago, but that the spirit of his son still lived in the vulture. And, he added, this is the reason why there is so much rain in Borneo. If we had placed any credence in this legend, Martin and I would have most assuredly tried to eradicate every vulture on the island.

On a clear day when there were no vultures present in the sky and none to be heard the Dyaks would engage in a very unique type of boat race down the Kinabatangan River. Why this race could be held only on such days was undoubtedly related to some deeply rooted superstition. The boats used in the competition were "dugouts" which were made from trees that had been carefully selected for their durability and light weight. When finished they bore a striking resemblance to the

canoes of the American Indian, but were of slightly greater width. They were capable of moving with great speed down the river, under the impetus of the broad paddles that their rowers used.

Each boat had a crew of three rowers, although in some instances there were only two. Not satisfied with racing one boat against another, these athletes converted these races into obstacle courses. Prior to the race, the course would be marked off by many long logs which were laid parallel to the shoreline. At various intervals along the course a long log would be placed at right angles to the other logs and thus directly across the path that the boats were to take. Thus, in order to achieve victory in this competition, it was necessary not only to outrun the other contestants, but also to negotiate the many obstacles.

When the signal was given to begin, the paddlers would try to get their boats going as fast as possible. To assist in accomplishing this, the rowers would remain in the aft part of the boat, causing the prow to jut up out of the water. In addition to cutting down the negative effect of friction from the water's surface, this maneuver also enabled the boat to more easily

negotiate the log obstacles.

Rushing down the river at tremendous speeds with their prows standing proudly above the water, these boats would sail over the logs. It was not until the boat was almost half over the hurdle that it would make contact. At that time two of the paddlers would move up to the prow and by their weight cause it to dip into the water. With all three of the oarsmen paddling furiously, the boat would slide down the other side of the hurdle and speed onward toward the next one. The skill of the rowers in getting these boats over the hurdles was so great that it was only a matter of a few seconds before they accomplished their goal.

Martin and I had the opportunity of watching several of these races in Borneo, and we always enjoyed them. Scores of natives would line the shores and in their own unique way cheer their favorites on to victory. From four to fifteen boats would take part in these races which were judged by appointed judges whose decisions were final and unquestioned. Oftentimes they would last an entire day with different crews from different tribes manning the boats.

I vividly recollect the day we spent filming one of these races and how exhausted we felt when it was all over. After we had discussed our plans for the following day we all retired early out of sheer exhaustion. Martin had laid out a strenuous program for the following day and we knew only too well that he would have us all out of bed at the crack of dawn. It was a beautiful night with the cold yellow light of the moon casting an enchanting luminous glow over the silent forest. I lay awake for a brief period of time, looking out through the open window at the velvet black sky and at the strange patterns that the silhouettes of the trees had created.

I slowly fell asleep but soon awoke with the peculiar feeling that there was someone else in the room besides Martin and myself. I looked slowly about the room and saw nothing until my eyes fell on the window where they met with the poised outline of a brock monkey. Apparently, he was enjoying the same view that I had enjoyed a short while before. Since my cot was so close to the window, I did not relish the idea of going to sleep with that monkey in such close proximity. I slowly reached down to the floor and picked up one of my slippers, and just as slowly I raised the mosquito netting that covered the window. With one long, well-aimed swing I hit the monkey on his exposed tail. He let out with an ear-shattering tirade of jabbering and maledictions and then jumped to the ground below. He ran off into the nearby jun-

gle where for a long time I could hear him jabbering insults at me.

Martin, who had been in a deep sleep, was rapidly awakened by my activities and in a tone that was both angry and confused demanded, "Now what happened?" I told him what had happened and he muttered something to the effect that it was indeed very peculiar that I was always the one that such things were happening to. "If it isn't a snake then it's a centipede and if it isn't that then it's a monkey. What next?" he muttered as he fell off to sleep.

The brock monkey, which is one of the largest monkeys in Borneo, is extremely difficult to photograph because of his inability to remain still for even a short period of time. His entire body, except for his face, fingers, and toes, is covered with a beige-colored hair. The hair on the top of his head converges to a point just above the top of his nose, creating a triangular shape. The hair around his rather prominent face is arranged in the form of a beard that extends down both sides of his face to the sharp chin where a triangular tuft of fur is formed. Unlike most monkeys, his ears protrude from the black fur of his head-like those of a dog.

His extremities, fingers, and toes, are very long and are especially adapted by virtue of their anatomy for arboreal living. The interdigital space between the fifth phalanx and the others is unusually large and obviously enables this monkey to hold onto branches of wide diameter without any difficulty.

The next morning, after breakfast, I noticed a brock monkey, about the size of the one that had been on my window sill the night before, sitting in a tree on the edge of the camp. He looked straight at me as if to say, "All right, sister, just try and hit my tail." The serious and angry look on his face caught Martin's eye and since he had a camera with him he snapped the monkey's picture. No sooner had the shutter

snapped shut than the brock turned and was off into the woods.

Hot on his heels went one of our native boys. He was about five feet behind the monkey when they disappeared into the wall of twisted green vegetation. We heard a loud and angry howl from the monkey and thought that the boy had caught him. But within a matter of a few minutes the boy came running out of the forest without any monkey. He ran over to Martin and showed him his hand. It had been badly bitten by the brock, which had turned on the boy before he had made an attempt to touch the monkey. Martin immediately cauterized the nasty wound and sent the boy with Jim down to Sandakan. In this part of the world we had to worry not only about tetanus but also about rabies and we were not going to take any chances with this boy's life. Jim took the boy in the airplane and since it was his first ride in the air he soon forgot about his painful wound. He was taken to the hospital in Sandakan where after proper care no untoward results ensued.

We learned later on, however, that the boy had indeed grabbed the monkey. He had seized hold of his leg but before he could let go of it the brock had sunk his sharp teeth into the boy's hand, giving him the nasty gash.

We spent most of that day preparing for our long-awaited trip into the interior aboard our raft. When evening came, Martin suggested that, since it was so warm, we sleep on the raft and accustom ourselves to what was to be our home for several long months.

A JUNGLE FESTIVAL

We all had a good night's sleep on the raft, which was anchored on a small truson off the Kinabatangan River. We had planned to rest the entire day in preparation for the long and strenuous journey that we were about to take into the interior. However, like so many of our other plans, this one, too, was destined to be altered. It was in the early part of the lazy warm afternoon when two very beautiful Malayan girls sailed up to our raft in their rather fragile gobong. Martin and I had been resting on the aft veranda when their small craft came into view.

Much to our surprise, they greeted us with a friendly "hello" that was rapidly followed up by a few other words in broken English. We soon learned that both of these girls had

spent some time down in Sandakan many years before and were able to speak a few words of English. Their poetically harmonious names, Feeli and Geeli, seemed appropriate to the beauty embodied in these two native debutantes.

I asked them where they lived and Feeli, the more outgoing of the two, responded, "Not far away. You want come and see?" Martin, who was standing nearby, replied, "Yes, sure,

but exactly where do you live?"

"No long way upstream," came the answer. "Think it's okay to go, Martin?" I queried.

"Sure, honey. Why not?" answered my husband in a tone

that convinced me he was ready to go.

So we jumped into one of our gobongs with some of our camera equipment and several of our boys and paddled up the narrow twisting stream toward the village. Martin hoped that this was going to be not only a jungle social call but also an opportunity to study some Dyak mores and customs at first-hand. The name "Dyak" has long been applied in a most indiscriminate manner to all Borneo primitives. It is now known, however, that these people are comprised of many tribes having diverse ancestral origins, a real puzzle for the ethnographers.

It was not long before the river widened and twisted itself into a great sweeping arc on whose crest a small clearing stood precariously against the green cliffs of the unconquerable forest. Fifteen broad houses with gently sloping roofs of nipa palm and elegant bamboo verandas stood proudly on delicate slender stilts. As our boat pulled into the tranquil cove, the men, women, and children came racing down to the shore to greet us. Most of them had seen white men and women before and a small number of them had been to Sandakan at one time or another and were thus able to speak a few words of English.

Their rather large houses were divided by thin bamboo partitions into several smaller rooms. The floors, which were constructed of smooth hardwood and rattan, were covered with decorative grass mats which were used for a variety of purposes, including sleeping. Their houses were devoid of even the most rudimentary types of furnishings. Meals were usually served to the members of the family in one of the larger rooms. They would arrange themselves in a circle in the center of the room in a squatting position and then eat from small platters that were placed in front of them.

The women, for the most part, were slender and rather delicate in appearance. They wore sarongs in a dazzling variety of bright colors and surprising patterns. The men wore flashing turbans of intricate patterns and designs and an assorted conglomeration of different types of pants. Their smooth olive complexions were dominated by their spontaneous and engag-

ing smiles.

These people seemed to enjoy fishing and possessed a variety of lines made from rattan. Fish formed an important staple in their diet and thus there was no protein deficiency to be found among them. I made a gift of several fishhooks to various members of the village and their reaction was one of genuine gratitude and pleasure. The shore of the river nearby was lined with coconut trees, tall, short, young and old, all arching their exquisite spines up into a summit of green that formed a lacy fringe for the azure canopy of the sky. The villagers took special care of these trees, from which they obtained an endless supply of coconut milk.

Feeli introduced Martin and me to her mother and father. Her father was a soft-spoken, light-brown Filipino of moderately small stature. Her mother, who was an engaging Malayan with a contagious smile, was also quite small in size. We had no sooner gone through the formalities of introduction than I

noticed that Logan, our interpreter, had been quite obviously smitten with a malady that is as common in Borneo as in any other part of the world. He was a tall, husky, and handsome fellow with a uniquely pleasant personality and a flair for playing practical jokes on everyone. He was a real Borneo troubadour who could sing love songs and woo a maid properly and proudly. He had been quite definitely attracted to this native beauty who, being somewhat haughty, was spurning his silent advances.

Feeli turned to him and abruptly demanded, "What do you

want?"

"Nothing," he responded. "I come look, see."

"How you look? See, now good-bye," she retorted coldly. When Martin heard this he started to laugh so loud that

before long everyone was laughing hysterically.

Feeli was a strikingly beautiful girl with black, warm sparkling eyes and an alluring smile. Her jet-black hair fell in long majestic and undulating waves over her delicate and slender shoulders where it arched in smooth satin curves. Her skin was smooth and soft with a quiet olive hue. She undoubtedly knew that she was very attractive to Logan at whom she would cast furtive glances with her mischievous eyes. Both of them, of course, could speak English, but they preferred to speak in their native language, possibly out of a desire to leave us out of the conversation. Feeli was an extremely talented girl who could dance with great grace and who could play the gomboose with delicate finesse. If we could have taken her from Borneo and placed her in a night club, she would have been an immediate sensation.

Her friend, Geeli, who was of a more affable disposition, had smooth, black, delicate hair that fell over her shoulders and down to her trim waist in straight but gorgeous lines. She, too, was beautiful, but in an innocent and retiring way. Unlike

her companion, she was shy and introverted, but like her she always bore a pleasing smile. She readily consented to pose for our cameras and Martin took this opportunity to make several attractive photographs of her and me together.

Within a relatively short period of time, Logan broke the ice with Feeli and before long they were singing and playing musical instruments together. Feeli was particularly expert in playing the gomboose, a stringed instrument that closely resembles a modern guitar. It is tuned in much the same manner, that is, by turning the keys at one end to tighten or loosen the strings. Logan played the Borneo drum, which like drums in most primitive areas of the world was constructed of animal hide tightly drawn by means of laces over a hollow shell. This duet was at times very good but on other occasions it was extremely bad. I certainly found it difficult at times to appreciate the artistic beauty of what was being played, but perhaps the natives did not. The monkeys definitely enjoyed the crescendo that arose from these instruments for they kept jabbering unintelligibly and jumping from tree to tree during the entire performance.

The women in this particular sector of North Borneo enjoyed a greater degree of freedom than did their counterparts in other areas. They took a lively interest in village affairs and indeed seemed to have a great deal to say about important matters. Most of them were addicted to chewing a peculiar mixture of tobacco and to smoking cigarettes that they made themselves. They would take a small portion of native-grown tobacco and, placing it in a sheath of nipa palm, roll their own cigarettes. They were expert dancers, performing some of the most exotic steps that I have ever seen. Truly, they were the wild women of Borneo on these occasions.

After we had been introduced to almost everyone in the village, we were invited to sit down in preparation for the

feast that was to be held in honor of our visit. The native orchestra began its repertoire of primitive barbaric tunes. The tunes played ran the spectrum from savage harshness to civilized sweetness. Their efforts were supplemented by those of the local population of birds and monkeys, who lost no time in adding their high-pitched screeches to the already deafening din. The instruments used were the gomboose, the drum, and the Malay gong. The latter is an instrument which the Dyaks do not make themselves, but one which they obtain from the Malays. It is similar to the Javanese gong but different from the Chinese gong. Quite unlike the latter, it has a thick shell and a broad rim which when struck emits a deep tone of muffled quality. These instruments are used not only for entertainment but also during time of war and for the purpose of sending signals at night.

By means of this gong-telegraph system, word was sent through the jungle that the festival was in progress. Slowly but surely, we noticed that different types of natives were arriving at the village, some from the river and some from the hidden paths that managed to cut their way through the grasping tentacles of the jungle. Even our Murut headhunter visi-

tors appeared.

Martin directed my attention to two natives who were avidly drinking rice wine from a three-gallon jug through long flexible straws. This wine was the strongest stuff brewed on the island and according to my husband tasted somewhat like grain alcohol. After several enjoyable minutes of imbibing this euphoria-producing liquid, the two natives became thoroughly inebriated and then turned to telling one another jokes in their native tongue. Their unrestrained laughter was so contagious that almost everyone around the fire joined in with them. Within a short time, their wives appeared on the scene, but unlike American wives, they said nothing. The two

drunkards finally drank themselves to sleep and for the rest of the feast remained somnolent on the warm ground in front of the fire.

Feeli, who was making a grand effort to be the star performer of the party, exhibited a most exotic dance. Dressed in a short but flaring rattan dress, she covered her breasts with a cloth adapted into the shape of a brassiere. Waving her slender arms above her thrashing head, she whirled and danced in excited and wild steps to the beating jungle rhythm. Seated about the main dance section were groups of visitors, Muruts, Dyaks, river pirates, and many others who had come from over the nearby hills and up from the low-lying riverine valleys. After Feeli had performed, her mother, Alma, and another old woman, both of whom were feeling no ill effects from the pleasant influence of rice beer, decided to dance. Since they were thoroughly inebriated, their dances were non-sensical, but nonetheless quite humorous.

The Murut headhunters performed a strange dance all their own. They rushed into the center of the arena amid the most unearthly screams and rapidly poised themselves on one foot to the accompanying tune of the throbbing drums and gongs. With the other foot they described a circle and at the same time extended their broad muscular arms in a manner to represent symbolically the wings of a bird. Periodically they would clap their hands together to time with the frantic crescendo of the drums. The music became louder and the intricate steps of the dance faster until suddenly all of the natives burst out with a terrifying and earth-shattering war cry. I grabbed Martin's arm and cast a glance at his face. He was utterly calm. The music continued to grow louder and the screams of the dancers more violent until everyone was worked up into a state of frenzied excitement, including ourselves.

Upon a signal from the leader of the dance, the cry of the

natives became more energetic and the screams of the dancers more piercing. Their weaving and gyrating motions grew wild, their eyes flashed with wild frenzy, and their voices grew more berserk. The yelling, the incessant throbbing of the drums, and the dancing finally reached a climax of excitement at which point the dancers were ready to collapse from sheer exhaustion. Suddenly a peculiar yell fell from their distorted lips. Immediately the music stopped, the dancers left the arena and the tumultuous noise and excitement was followed by a dead silence which by its sheer weight was ominous. The excitement of that dance was so great that even Martin and I found ourselves panting heavily when it was all over as if we had taken an active part in its performance.

As if what we had just witnessed was not enough, two Murut warriors rushed into the arena, armed with their shields and parangs. Again the music throbbed wildly across the darkening sky. At first they confined themselves to exhibitions of defense, such as springing from one side to the other, leaning to the right and then to the left, parrying the imaginary parang held by their adversary, and falling on one knee and then the other. After this they seized hold of their parangs and feigned blows in all directions, on the shield of the opponent, above his head, and on the sides of his head. Not once did they fail to hit the shield. They kept retreating, advancing, pursuing, dodging, and striking to the wild rhythm of the inebriated musicians and to the crescendo of their tribesmen's cries. It was a wonderful performance, clearly demonstrating the skill with which these Muruts could wield their parangs and what formidable opponents they were in battle.

Rice and fish were served throughout the night and the pungent rice wine flowed freely and in great quantity. While the party was continuing on its way after the dances of the Muruts, I happened to detect a somber look on Martin's face. "What's the matter? Is anything wrong?" I asked him.

"I don't know, Osa," he replied. "But look over there between those two large trees where those two drunken natives are lying."

I almost screamed. "Martin, it's a leopard!"

"Yes, I know. I've been watching him to make sure that he

doesn't get any more curious or come any closer."

Then, before either Martin or I could reach for either gun or camera, he fled into the dense jungle. There are very few of these animals in Borneo, and that fellow was only one of two that I ever saw there. It was the only one that Martin had the opportunity of seeing during the entire expedition. The Borneo leopard is rather small and fragile in appearance when compared to its African cousin. In East Africa, some of these animals achieve an amazing size. One leopard that I was forced to shoot in Africa, in order to save my husband's life, measured more than nine feet from the tip of the tail to the end of the snout.

The other leopard that I had the opportunity of seeing in Borneo was on a truson of the Kinabatangan River, a short distance from our camp at Abai. I had been fishing for several enjoyable hours from a small wooden pier that the boys had built for me over the shallow waters of this stream. After a very successful day, I was heading for the shore with my tackle, catch, and gun when I spotted a large coiled cobra angrily hissing in the grass adjacent to the pier. Unknowingly, I had approached it to within five feet but, fortunately, was able to make a fast retreat back onto the pier once I realized my danger.

With its hood flared with threatening arrogance, the snake thrust its deadly black head high into the air. It swayed too and fro in my direction and from side to side with its murderous fanged head a full foot above the ground. I was perplexed as to why it did not make an advance toward me, in which case I would have had to take to the water. I soon appreciated the reason for this when I saw a spotted yellow flash in the tall grass on the other side of the pier. Closer examination revealed that it was a small leopard, which apparently would have walked right into the cobra had I not appeared on the scene. Before I could ready either my camera or my gun, the cat darted off into the darkness of the woods.

The snake seemed to sense the loss that I had caused it and, looking up at me with vexed arrogance, spat its venom and then slithered off into the high grass. When I returned to camp and related my story to the boys, I was informed that cobras have a special predilection for the river bank. To an Izaak Walton enthusiast, this was sad news indeed.

They also told me that the leopard was despised by all of the tribes in the interior because of an incident that had occurred many years before on the shores of the Kinabatangan. It seems that a group of women and children were returning from the river to their village with their daily supply of water when they were ambushed and attacked by a leopard. The old woman leading the group was killed and devoured by the cat. Since that time a constant war had been waged by the natives against all leopards, to the point where the animal is now practically extinct on the island.

So great was their hatred for the leopard that any animal even remotely resembling it was killed. The chief victim of such mistaken identity was the civet cat, which fortunately has survived the unrelenting campaign waged against it. The Dyaks use its attractively long tail as an ornamental attachment to their colorful turbans and the skin for making strik-

ingly beautiful coats. The teeth, especially the upper fangs, are used in making necklaces and bracelets.

This feline feeds primarily upon the small and rather defenseless plandok deer. It will never attack the larger Borneo deer and will on some occasions actually demonstrate overt friendly behavior toward it. I have seen a civet cat lying on a low branch of a tree, actually picking ticks from the head of a large Borneo deer while the deer stood quietly below; and then, within a few minutes, attack and kill a small plandok deer.

But enough now about leopards, cobras, and civet cats. Back to the Dyak festival. The party lasted until the following day at which time the villagers decided to build a peculiar type of dance floor. We had planned to leave at this time but with this unusual development, Martin decided it would be worthwhile to stay. So stay we did. This unique dance floor soon evolved from amidst the scurrying, hacking, and hammering of the village workers and took on dimensions that neither of us had anticipated.

It was composed of a bamboo floor tied together with rattan rope and set up on bamboo poles about twelve feet above the ground. There was no center support for the floor, and this gave it a very resilient quality. It would sway up and down with the rhythmic beat of the dancers' feet and would easily support thirty natives at a time. The orchestra sat on the platform, but on the edges where there was a minimum of movement.

The instruments and the music were the same as the evening before and many of the dancers, such as Feeli, performed their art in the same manner. Feeli was considered to be the best dancer in the entire village, and she certainly displayed her ability as never before on the new dancing platform. Dances were held at any time during the day or night on this unusual platform and anyone who so desired was allowed to join in. As the men and women came in from fishing in the river or from out of their small fields they would don their colorful costumes and headgear and join in the fun. These displays of the terpsichorean art continued all through the day and on into the following night.

I often stood in apprehension that the swaying bamboo platform would come crashing down on our heads, dancers and all. But Logan informed us that to his knowledge such a mishap had never happened. After an entire day of witnessing these maniacal gyrations, I was in dire need of an analgesic and some good old-fashioned peace and quiet. Martin was beside himself with joy over the fact that he had been able to photograph these most unusual dances, but I am quite sure that he too had had his fill.

As we prepared to head back to our base camp at Abai the next day, our Murut headhunters came to wish us a farewell, as they intended to head back for their home over the mountains. After they had left, Logan found my flashlight with a hank of human hair attached to it. He informed me that I had been greatly honored and complimented by these tribesmen because they had presented me with one of their most treasured possessions, a human scalp! Needless to say, I had mixed emotions about accepting the gift. It was impossible to ascertain the age of the scalp, and thus we were unable to say whether or not they had obtained it while they were with us. Both Martin and I hoped that they had brought it with them from the interior. To be on the safe side, we made a head check of all our personnel as soon as we arrived back at camp and, fortunately, they were all accounted for.

Because of the delay caused by our visit to the Dyak village,

Martin decided to postpone our trip up the Kinabatangan by raft for several more days. This afforded us time to develop and process the excellent films we had made in addition to giving us the chance for a few days of well-earned rest.

Life went along very peacefully in our camp for the first two days that we were back. However, on the afternoon of the third day a strange native came running out of the dense

foliage, crying in pain. He made straight for Martin.

"Great guns!" Martin shouted. "What on earth is that?" One of our native boys answered, "A sick headhunter." "What does he want with me?" Martin continued.

"Oh, he just wants you to fix his toothache," came the

reply.

"But," protested Martin, "I'm no dentist. And if I do try, and it hurts him more, he's liable to want my head. Nothing doing."

"This morning I hear of dentist," spoke up one of the other

natives in Malayan. "You get him?"

"A dentist here at Abai?" exclaimed my husband. All of our boys nodded their heads affirmatively.

Martin looked bewildered and so did I for that matter. Our boys told us to put up a flag along the river, saying that it would bring the dentist to shore when he sailed by.

"All right," mumbled Martin, "tell them to put up the flag and get a dentist so that this sick headhunter can't blame me

for his pain."

Up to this time we thought that we knew practically all there was to know about the interior of North Borneo. But what we did not know was that Chinese "dentists" do travel by junk or sampan into even the more remote regions of Borneo. And to our surprise one entered our camp within a few hours of our hoisting the flag. He had two signs announcing

his profession painted on his small dugout, one in English and the other in Chinese. He informed us that he came from Sandakan.

These "dentists," we learned, travel up and down the many waterways that penetrate the interior of the island, pulling teeth and placing gold caps on others. Undoubtedly, they do not possess training that would even approach that of a dental technician in the States. But here in Borneo they were the best that could be obtained. The majority of these traveling practitioners made their lucrative income by placing gold caps on native teeth, whether or not they were in need of them. More often than not perfectly healthy teeth were capped with a layer of cheap gold and thus the majority of natives in the interior all possessed teeth that had been capped at one time or another.

When Martin inspected the equipment that this particular dentist had, he remarked that he was indeed glad that he did not have a toothache. After a half hour of strenuous and rather unpleasant work, the tooth was finally pulled out. The headhunter jumped up from the chair and, without waiting to compensate the "dentist," ran into the interior of the forest. He was thrashing his arms wildly and screaming in a horrendous manner as he fled. As we watched him Martin remarked, "Now I know what makes the wild men of Borneo so wild."



CHARGED BY ELEPHANTS

The camp was buzzing with activity. Natives were rushing here and there, getting the equipment ready and gathering together sundry supplies. Martin, having checked his cameras out for the third time, was spurring everyone on. There was no holding him back. He had learned on the previous day that there was a herd of elephants a few miles from camp and he was determined to photograph them.

"Get everything ready for several weeks," was his excited and explicit order. There was no telling how long we would be gone and certainly no clear indication where this quest would lead us. Slowly the impressive array of our impedimenta gathered in the center of the camp, guns, ammunition, food boxes, clothing, and a variety of camping equipment in addition to Martin's supplies. It looked as if we were preparing

to go to the other side of the world.

Before long everything was in readiness. There was to be no lunch in camp that day. Although it was well on into the afternoon, Martin would not wait. He gave the order for the safari to start. The long, weaving column of natives moved out of the camp into the dense, dark shadows of the awaiting

jungle.

The lashing blades of the parangs swept into the lianaentangled forest, blazing a trail where, since the beginning of time, none had existed before. On and on we went, through the dark, treacherous, and stagnant waters of the swamps and across the swirling, angry faces of the uncharted rivers. Several days passed and still no sight of those noble holdovers from the Pleistocene. But we kept going until we drove ourselves to the point of utter exhaustion. At last we rested for a while amid the oppressive miasma of decaying forest and water-soaked earth. Then we were on the trail again, down the steep unfriendly ravines, across the humid marshes, and into the thick forest, matted with creepers and lianas, as everpresent as a green mantle that surged with defiance over hill and valley in multiple hues of green.

Hour after hour we cut and hacked our way onward. The monkeys and birds shouted their maledictions from the safety of their arboreal retreats and cursed in high-pitched angry tones our defilement of what man had never seen.

But at last we heard the one sound that sent a shivering chill down our spines. It rolled out with a tone that connoted fearless pride and yet satisfied contentment. It was the musical trumpeting of an elephant. Martin's face was smothered with smiles. "Osie, how far away do you figure he is?"

I replied, "The wind is blowing in our direction. My guess

is about a mile or a little more."

A mile, of course, may not appear to be very far in civilization where sweeping wide avenues can carry one over that distance in a matter of minutes. But, in an equatorial rain forest, that distance must be measured in terms of long depressing hours of cutting through thorny brambles and pincushion undergrowth. Since it was almost dusk, Martin decided to move on for two more hours before pitching camp. Without protest, the men marched on until one great slash of a parang swept us into a wide breezy clearing surrounded by stately banyan trees.

We pitched camp there for the night and, after a rather hurriedly prepared supper, fell into our bunks in utter exhaustion. The vibrating symphony of cicadas and crickets lulled us to sleep.

As soon as the first stray rays of silvery light crept up on the black horizon, Martin had us back on the trail again. The forest was disappointingly quiet, but this did not deter him. He searched the skies and then, climbing a tall tree, scanned the jungle for those well-known signs that were not to be found that day. Unlike the African elephant, the Borneo elephant is not followed by a flock of cow herons, which roost in the trees when they are not rendering their much-appreciated service of removing ticks from the elephant's hide. In Africa we were always able to spot a herd of elephants by the flocks of cow herons that always followed along. If a tree was full of herons then we knew that the elephants were either sleeping or grazing. If the herons were on the move, then we knew that the elephants were also on the move.

We continued to cut our way through the jungle, morose over the fact that all that could be heard was the swishing and hacking of our parangs and axes. Martin was worried that we had lost the herd. However, I tried to uplift his spirits by theorizing that the animals were probably quietly grazing nearby.

A few more hours passed and still no echo of the elusive pachyderms. We finally emerged out of a dense bamboo thicket into a rather large clearing which lay separated from a still larger clearing by a patch of thick brambles and matted jungle. We cut our way into the larger clearing and were delighted to find hundreds of elephant tracks strewn over the thick felt mat of tangled grass. Martin was beside himself with

joy.

It was obvious that this clearing was their grazing ground and the spot from which he had heard the trumpeting the evening before. On closer examination of the dense green wall of the clearing, I spotted an opening on the opposite side, banked by large banyan trees, that led to a large trail. "There, Martin," I exclaimed, "that is where they must have gone!" Before I realized it, Martin took off in the direction of the trail with everyone, including myself, following him. With his long legs he was capable of taking strides that were far greater than those of anyone else in the party. By the time he darted into the yawning opening that led to the elephant trail, he was a full hundred feet ahead of the rest of us.

We had no sooner entered the trail than we saw Martin racing back toward us, his face drained white with fear. "Get up into that banyan tree!" he shouted in a choked tone. "Hurry, they're right behind me!"

We stumbled over each other as we raced for our lives out of that tunnel of death. My heart skipped a few beats and my fingers ran numb with cold fear as I ran for the tree. Up we went into the safety of the upper branches, up from under the murderous feet that were now crashing with angered fury down the dark trail. I felt the earth shudder and heard the infuriated blast of the leader as the herd emerged into the clearing. Out they came, all twenty of them, led by a great bull, magnificent in his anger. They crashed beneath the tree

and across the clearing, trumpeting in terrifying blasts across the forest. Truly they were the lords of the forest with their threatening white tusks held high in the air and their great trunks thrashing an angry warning at the pitifully small creatures who had dared to invade their domain. Swaying and rocking, trumpeting and moaning, angry and proud, these great swirling giants careened through the forest.

We remained in the trees long after the elephants had passed. Slowly the tenseness of the situation eased and, without conscious effort, we were able to recapture our breath.

"Martin," I gasped, "what on earth happened?"

Martin ventured a nervous smile and then replied. "Osa, I had no idea they were so close. That trail was as quiet as a church. As I went around a bend in the trail, there they were, ears outstretched, heads rocking, and trunks extended. They were getting ready to charge. I knew that you and the boys were not far behind me and my first thought was to get back to warn you. As I turned to run, they took off after me." My husband took a deep sigh. "I am sure glad that the jungle floor is not as hard here as it is in Africa. If it was they would have had me that time."

After a short rest, Martin had all of us on the trail again. We began to head back in the direction from which we had come, but along a well-trodden elephant trail instead of along the trail that we had blazed. For this reason, traveling was by far much easier, even though the ground underneath was muddy and slimy and scarred with water-filled elephant tracks. At one point it was necessary for us to stop and build a raft in order to get ourselves and our equipment across a rather deep stream. The somewhat sobering thought that after all we had been through we still had not obtained a single photograph of an elephant, much less a herd, entered my mind. I decided not to mention it to Martin.

Some of the streams we crossed in traversing this elephant trail were so deep that they were well over the head of even the largest bull in the herd. The Borneo elephant, however, swims just as readily as does his African cousin. But here the resemblance ends. The Borneo elephant is closely related to the Indian elephant in both appearance and habits. Like the latter, its ears are small and the head is somewhat elongated. In overall size it is much smaller than the African elephant. There is a paucity of these animals in Borneo due in part to indiscriminate hunting by the natives and to the rather harsh environment in which they must live. In Africa there is a wide spectrum of biotopes in which the elephant can live, ranging from the open plains to the dense rain forests. In Borneo there is only one biotope, a dense rain forest, and in such a setting these animals cannot thrive and multiply.

While rogues are common in Africa, they are extremely rare in Borneo. Expulsion of old members from the herd apparently does not occur and thus rogues do not evolve. However, in Africa it is quite common for older bulls to be ostracized by the herd. Of course, when this happens, they become renegades and will charge without provocation. The smallness of the herds in Borneo probably mitigates against expulsion of any one member since, for self-protection, they require as

many members as possible.

As in Africa, the elephant in Borneo is hunted primarily for its ivory. In Africa, elephants' tusks can weigh up to two hundred and fifty pounds each. In Borneo they will rarely weigh more than one hundred pounds each. It has not been fully elucidated as to why elephants in some regions of Africa have enormous tusks while those in other regions have extremely small ones. Experts have postulated that it is partially genetic and partially due to diet. The ivory of the African pachyderm

is much whiter than that of his cousins from India and Borneo and for this reason is in greater demand on the world markets.

Elephants are not eaten in Borneo as they are in the Ituri Forest region of the Congo where the pygmies relish this meat. They hunt these animals with great avidity and have developed a number of unique methods for capturing and killing them. They also use the hairs and the tails for making a variety of ornaments and charms.

The Indian elephant and the Borneo elephant both walk without flexing their knee joints to any degree. The African beast, on the other hand, takes longer strides and bends his legs at the knees while walking. Both Asian varieties are amenable to training, primarily because of the even temperament with which they are endowed. For this reason, they are the ones that are seen in local circuses. The African elephant, however, is an extremely high-strung animal that does not generally respond well to domestication. While attempts to train the African elephant have been made since 1902 at Aru, on the Uganda-Congo border, the results have not been encouraging.

After trekking for several more hours down the wide elephant trail, we came to the edge of a clearing where, much to our surprise, the herd that had charged us was grazing. Fortunately, this time we were not seen, and since the animals were upwind from us we did not have to worry about their picking up our scent. Martin carefully reconnoitered the area and discovered that we were on the one and only trail that led to and from the clearing. This information was hardly comforting, to say the least. The animals were up a blind alley with no route of escape unless they trampled their way through the foliage.

Everyone was cautioned to remain quiet as Martin set up his cameras on the edge of the trail. I could hear him saying to

Utar in an excited tone, "This will be a wonderful spot to put the cameras, right here on the trail. They will have to come this way sooner or later."

"But, Martin," I protested, "they have no other way out except through the foliage. If they spot us, they're not going to come anywhere but down this trail and then good-bye cameras and maybe us."

"Now, Osa," he cautioned, "you know better than that.

You know that I know what I am doing."

"Of course I do," I responded in a somewhat agitated treble. "But I can't forget that you did the same thing at Lake Paradise in Africa. Sure, you set the cameras right on the trail. But you seem to forget that I had to shoot the lead elephant to prevent you from being trampled. I had to make it with one shot and I doubt very much that I could ever duplicate that feat again."

A mischievous smile crept across my husband's face. "Sure, you can. I have complete confidence in you. Remember that rhino in East Africa. You only needed one shot then."

"Sure I do!" I exclaimed. "How could I ever forget it. Why do we have to take any unnecessary chances? Those animals are liable to turn any minute. Even the wind is liable to change."

It was quite obvious that Martin's mind was made up. He just kept setting up his cameras. However, when he had finished, it started to rain in torrents. I tried to use this as a reason to move the cameras, but Martin would not hear of it. Instead, he asked Utar and me to help him cover the cameras with a tarpaulin. Meanwhile the elephants had gone over to the far end of the clearing where the overhanging branches of several banyan trees offered them some protection from the rain.

As suddenly as the rain had started, it stopped. Martin kept the cameras going, obtaining some truly beautiful pictures. We were all so engrossed in watching him that no one noticed the change of wind direction. We first became aware of this situation when the animals started to look in our direction, their heads swaying and rocking from side to side. We both knew that this was the preliminary to a charge. Martin had hardly finished saying, "Utar, get Osa up a tree. Here, you boys, grab some of this stuff and get up the trees with it," when the elephants started to charge in our direction. Martin was persistent and remained on the trail with one of his cameras, grinding away as the animals came closer and closer.

I was overwrought with anxiety and shouted down to him.

"Martin, hurry, they are too close. I'll have to shoot."

"Hold your fire and don't shoot till I tell you," he shouted back.

The elephants thundered down toward the trail with murderous intent. I had my elephant gun ready but each time I raised the gun to my shoulder Martin would say, "Hold it, Osie, not yet. I'll tell you when." When it seemed as if they were almost on top of him, at which point I was aiming the rifle to fire in spite of what he had said, Martin grabbed his camera and ran toward a banyan tree. Up he went, with the speed of a monkey. His pith helmet fell off just as he reached the safety of a high limb but he did manage to hold onto his camera. On they came, rushing beneath us with trumpeting vengeance. Martin's helmet was flattened like a piece of tin.

I put my gun down, took off my helmet and, leaning my head against a tree, thanked God once again for having saved us. It was several hours before we were able to descend from those trees. It was extremely uncomfortable sitting on a limb for several hours but, self-preservation being the overwhelming force that it is, I was compelled to do so. When we finally did come down out of the trees, I scolded my husband for the unnecessary chance that he had taken. However, as expected, I received the usual answer that was always forthcoming in

response to such chastisement.

"We have to get really good pictures," he said. "The only way that we can do that is the dangerous way. I know what I'm doing. I never take chances in the jungle. You should know that by now."

Quite obviously, what was dangerous and a chance to everyone else was merely part of a good day's work for Martin. Danger, as well as adventure, was an integral part of his life. He was truly happy after that charge for he knew only too well that he had obtained some truly remarkable pictures. This was later confirmed when we returned to camp and developed the film.

We packed our equipment and, assembling the boys together, left the elephants' grazing grounds and headed back to Abai. Martin decided to follow the trail since it was bound to be easier than hacking a new path through the jungle. We followed it for several hours and, when it became twilight, camped for the night. The following morning we got an early start and arrived back at Abai by midday. Martin was beside himself with joy when he saw the pictures that he had obtained. He declared a holiday and ordered that everyone take it easy for the rest of the day. What we had just been through in attempting to photograph those elephants was truly deserving of a protracted holiday of several days.

Martin liked fishing and knew that I loved it. So, in order to please me, he volunteered to take me out in a small dugout. We sailed up a small stream where we knew that the fishing was good, loaded with our rods and plenty of bait. We had not been fishing for more than half an hour when we heard some loud crashing coming from the opposite side of the

stream.

"What do you suppose that could be?" I asked, as I strained

my neck in an attempt to see what was causing the noise. "Look over there to your left, Osa!" whispered Martin excitedly. My visual fields were soon filled with the gracefully moving forms of three adult elephants. Being a little facetious, I said to Martin, "Now, you see what you've done. You made them so angry that they've decided to come after you."

Martin laughed and, putting his fishing rod back into the boat, headed back to camp as fast as he could. He was not running away from the elephants. Rather, he was running back to camp in order to get his camera. When he finally arrived back with all of his equipment, the three elephants were there, just waiting for him to photograph them. Apparently they had come to the truson in order to wash themselves. They completely ignored our presence, much to our delight, and this enabled Martin to get some exceptional pictures.

"Can you beat that?" said Martin, shaking his head. "Here we almost killed ourselves yesterday attempting to photograph them and today they nonchalantly oblige us by coming down to have their pictures taken." He smiled mischievously. "They must be female elephants. You can never tell what

they'll do."



CROCODILES AND ORANGUTANS

On the following Monday I decided that I would take a short trip into the jungle, about a mile from camp. There was a small stream in that area which had been difficult to reach on other occasions because of the dense vegetation. This stream was cushioned by a dazzling quiltwork of sinister and alluring palms, arching their verdant limbs with determined exuberance over the ribbonlike waterway. The riotous range of green shimmered beneath the lacquer of the daily rains and created a mystical and silent aura of black-green gloom. The forest was enveloped by the pungent perfume of cyclical decay and flowering growth and re-created itself in an infinite pattern from the unseen carpet of life-giving humus that lay beneath its feet.

This awesome army of perennials, ominously still yet vibrantly alive, exhaling puffs of steaming vapor and clawing with a blind urge at the sky, was determined in its purpose to life. Many times before our offensive into this area had been repulsed by barricades of dense brambles and creepers and thick walls of bamboo and hardwood forest. But this day we were determined to cut a track through these savage forest regiments. Slowly we cleared a narrow path through the twisted forest mass.

As we moved along I happened to push my hair back from my face, and in doing so met with the soft, slimy anatomy of a leech that had attached itself to the back of my neck. I yielded to my first impulse, which was to scream and, after having thus experienced the frightening emotional aspect of the encounter, turned to the immediate practicality of removing the annelid. It turned out to be a two-inch-long leech with a light yellow hue.

As we proceeded, the forest attacked us with more and more of these creatures until both the boys and I were covered with them on every aspect of our anatomy. Every boy who has experienced the delights of hanging his clothing on a hickory limb and of tossing his naked self into a muddy-bottomed pond is familiar with leeches. These aquatic members of the class Hirudinea are related to the medicinal leeches used so frequently by medieval physicians and are not as aggressive as their closely related cousins, the land leeches. The latter, which abound in Ceylon, Borneo, Sumatra, and the Asian subcontinent, are avaricious blood suckers which not only cause much loss of blood but which also leave behind an inflamed ulceration after they have dropped off.

They manage to attach themselves to their host without being noticed and once adherent to the surface of the skin begin their grim task of imbibing blood. It is extremely difficult to dislodge these animals once they have been discovered and any attempt to do so will usually result in a serious ulceration. Unfortunately, the one that I removed from my neck left behind a wound that remained with me for several weeks. I soon discovered that the least painful and most effective way to remove them is by burning them off with the lit end of a cigarette. It causes them to drop off immediately and, while a small ulcer is the sequela, this ulcer is of far less magnitude than the one caused by mechanical removal.

Our progress was constantly hindered by the presence of a heretofore hidden armament, the *nanti dulu*. A low-growing bramble with strong and sharp crooked thorns, it thrust its piercing arms between the columns and arches of the wood, forming a threatening impasse to all who would encounter it. This bush grew by the thousands, festooning its creeperlike branches across our path, snagging our clothing with angry tugs, and tearing our flesh with piercing and painful thrusts. My hair was constantly being caught by the grasping tentacles of this monstrous plant.

We cut our way through the matted jungle for a half mile at which point we came into a gloomy somnolent swamp. On we went, waist deep in the stagnant waters, the acrid odor of decaying timber filling our nostrils. The grasping roots of aquatic trees and the jagged stumps of vegetation long since dead grabbed our legs and scratched at our ankles. The depth of the water was unknown and it was anyone's guess as to what we would step into next.

In spite of all this, however, I would not concede defeat to the green gloom. The men were with me. So on we continued until we came face to face with nature's last and strongest defense. A solid jungle wall of tangled foliage, arrayed in its full battle dress of various verdant hues, rose high above our heads. Beautiful and defiant it erupted before us in massive pillars and sweeping arches reinforced with buttresses of festooned creepers and thorny brambles.

The call to battle was sounded and the men raced at the impenetrable fortress with their parangs unsheathed. The battle was brief, but victorious. We emerged through the wall and onto the edge of the hidden stream, that stream that had never before been gazed upon by the eyes of any other human being for that matter. It carved its silver path between cliffs of radiant foliage, dipping softly and slowly over the undulant face of the land. Tall bamboos and stately nipas dipped across its murmuring face while proud cedars and whispering olives stood erect as sentinels against the downward slope of the surrounding plateau.

Hundreds of dazzling butterflies, deep blue, pearly white, and royal crimson, danced around the great trees like engaging entertainers in attendance upon a host of maharajas. The gibbons chatted and the brocks stared at our intrusion in disbelief from the upper reaches of this sanctuary of nature. Clear beads of moisture dripped down from the foliage above like tears shed in mourning over our desecration of this holy enclave. The trees were filled with the sounds of parakeets and tree ducks, sandpipers and cormorants, hornbills and kingfishers, all chanting in unison.

I stared for a while and then, sighing my excitement and pleasure, commenced the return trek to camp. We had started at daybreak for this Eden and after a grueling battle waged against nature we had finally emerged victorious. What lay but a mile from our camp had required an entire day of arduous labor and unflinching perseverance. My head was aching, my body throbbing with pain, and my skin torn with lacerations. But I was happy and excited over my discovery of the hidden stream. The trip back to camp was not too difficult for we followed the same path that we had forged through the heart of the forest earlier in the day. When we returned to Abai, I told Martin what we had seen and, to say the least, he was quite impressed. The following morning he agreed to come with me back to the truson and to take a look at it himself. His reaction to my discovery can be best described in his own words, which I found contained in a letter to a friend some time later. He wrote:

Osa and the boys cut their way through the thickest and toughest jungle that I have ever seen. She found a wonderful stream. It looked like the Garden of Eden and was unspoiled by man. She insisted that I go back with her the next day which I readily agreed to do. She had the boys bring the dugouts along, which they did, carrying them on their shoulders. This day they were able to do it because the path to the stream had already been cut.

The walk to the stream was certainly a hard and nasty one, but once on the waterway in our boats, it was as beautiful as she had described it to me. At the point where the path broke through a wall of thick jungle the stream is about fifty feet wide. It becomes wider as it flows downstream. Upstream it is so narrow that a dugout is unable to pass through.

We explored the stream in our dugouts from daybreak to dark. We saw beautiful, exotic birds, scores of monkeys, and hundreds of butterflies, covered with all combinations of colors.

Upstream we saw a group of timbadu (Borneo wild buffalo) bathing themselves. We kept clear of them because they are one of the most dangerous animals in Borneo, stampeding and charging for no reason at all. On the shore we saw several wild pigs roaming about and a dozen Borneo deer.

The stream is lined with graceful nipa palms which are so close together that scarcely any breeze gets through into the stream. The water is extremely calm and clear. Its surface is so clear that the trees and palms are reflected in it as if in a mirror. It is truly a magic land. I took several pictures of the area which, when developed, posed a problem as far as telling which side was up and which side was down.

Martin was obviously pleased by my discovery. We sailed up and down the stream for about ten miles. The monkey population seemed greater than the day before. The birds were all about us, singing their harmonious chants that echoed across the dancing tops of the nipa palms. The boughs of the trees that stretched out across the stream were alive with the active movement of screeching lizards and nervous canaries. Orchids, large and small, elongated and round, purple, white, and gold, hung in orderly patterns amid the radiating green leaves. One tree alone contained over five hundred orchids, all for the asking. But unfortunately, the current of the stream was too strong to enable us to stop and gather some of them up for ourselves. There was Martin Johnson, a man in a position to give his wife five hundred orchids, without cost, and forced to pass them by.

Giant trees, sagging beneath the heavy burden of their ripened fruit, dipped their pendulous branches down onto the face of the water. There were juicy oranges and shaddocks, ripe bananas and guavas, rich tangy lemons and pompanos, custard apples and delicious papayas, grendilla and mangoes, mangosteins, and many others. Borneo is luxuriant with all manner of tropical fruit, most of it growing in great abundance. Of all these tempting products of nature, I liked the mangostein best. Frank Maryyat, a jungle explorer of great renown, said of the mangostein more than a hundred years

ago:

It is impossible to describe the peculiarly graceful taste of this cool and refreshing fruit. It is a mixture of sweet and

bitter, blended together in the most luscious manner. It is in size somewhat larger than an apple with a skin which is very thick and bitter and dark purple in color. This, when dried, is a remedy for dysentery. The inside, which is nearly white, is divided into four parts, resembling in substance a firm jelly. In my opinion it gives one the idea of what nectar was, or ought to be, better than any other food that enters into the mouth of man. We decided that it was here that the gods assembled and in the ancient days, ate mangosteins, called nectar by the Greeks.

Bananas were there in all their five varieties, one more delicious than the other. The large red banana, which is used in cooking, is shaped like the ordinary yellow variety, but is much larger. The small yellow sugar banana while smaller than the other species is none the less sweeter than it by far. The small red banana, which is equal in size to the yellow banana, has a pungent taste. The green banana, even when ripe, never acquires a yellow hue. Last but not least was the ordinary yellow variety which is grown widely throughout Central America.

Growing in the midst of this varied assortment of fruits and flowers was an equally spectacular variety of vegetables, ranging from juicy, red tomatoes to leafy, green spinach. Since we were not botanists, there was a wide assortment of fruits and vegetables which neither of us was able to identify.

While there was a paucity of large crocodiles on the stream, there was, however, an impressive number of juveniles and young adults. Compared to Africa, one sees few crocodiles in Borneo. This is due in part to the fact that the government will pay a small bounty for each head delivered to it. Some tribes in North Borneo look upon the crocodile as a sort of demigod, while others treat it with contempt. Many of the tribes in Sarawak greatly fear this reptile even though it has a status equivalent to that of a guardian angel in Christianity. The superstitions and fears which have grown up around it are too numerous to mention. One particular tribe of Dyaks believed that a man could change himself into a crocodile and that the opposite could also happen. Quite naturally, they had great respect for the animal and on no pretext would they ever be a party to its death.

Some tribes claimed the crocodile as a relative. This belief stemmed from a legend which told of the metamorphosis of an old chieftain into a crocodile. The legend related that there was once an old chieftain who was afflicted with a pruritic skin disease. Because he scratched the lesions continuously, it was not long before they bled and became indolent. In order to ease his pain and discomfort he would bathe in the Kinabatangan each day. On one such day a group of villagers, watching him from the shore, saw a crocodile approach the old chief and, to their amazement, seemingly converse with him. Day after day the old man was seen swimming in the river, surrounded by crocodiles. The villagers firmly believed that he was able to converse with the animals and, furthermore, they postulated that his skin was slowly turning into that of a crocodile. One day the old man went down to the river to swim with the crocodiles and was never seen again. From this happening the villagers deduced that he had finally changed himself into a crocodile so that he could live in the water all of the time.

If one lie propagates another then one legend can be said to engender another. From the original legend there have arisen many others, some of which tell of natives who conversed with the chief after he became a crocodile. Others tell of the warnings and advice which he gave to the tribe in times of crisis and which, in the end, proved to be for its benefit.

There is another legend along the Kinabatangan River con-

cerning crocodiles which could be aptly called "The Crocodile Tears Legend." This legend relates that many centuries ago there lived a crocodile which had fallen in love with a beautiful Dyak maiden who, while liking the animal, did not love him. She was deeply in love with a native boy who lived across the river from her village. One day as she was standing on the bank of the river, wondering how she would get across, the crocodile appeared. Seeing her sorrowfully looking out across the wide stream, he began to cry. Tears came to his eyes and rolled down his face. He so sympathized with her that he agreed to carry her on his back across the river. The girl accepted his offer and within a few minutes found herself on the other side of the river.

From that day until the day she married the boy who lived on the opposite shore, the crocodile always appeared on the bank and, desiring to show his willingness to carry her over, would cry. The young maiden always knew that this was an invitation to hop upon his back and ride across. It was not long before the story of the crocodile's love for the maiden spread up and down the river. There were many Dyaks who told me that their ancestors actually saw the girl riding across the river on the back of the crocodile.

When the girl married her true love from across the river, the crocodile became embittered. Unaware of this state of affairs, natives would approach the animal when he appeared on the shore and would converse with him. Whenever a girl or a boy would appear on the shore, the crocodile would come out of the water, look at them, and begin to cry. Thinking that this was an invitation to ride across the river, they would hop onto his back and for the most part were never heard of again.

The chief of the tribe, alarmed by what was happening, ordered some of his warriors to secrete themselves in the rushes along the river's edge and to spy on the old animal. They soon discovered that as the crocodile swam across the river with a passenger he disappeared below the surface with his cargo before reaching the opposite shore. Upon reporting this to the chief, they were ordered, after due consultation with the tribal spirits, to kill the crocodile who cried.

The legend goes on to relate that the warriors returned to the river where they ambushed and killed the old crocodile. They brought his body back to the village where, upon opening it, they found the bones of many children whom he had devoured, including the chief's son. A council of war was called and it was decided that all of the crocodiles in the river should be hunted down and killed. Arrayed in their battle raiment, the warriors waged their relentless war against the giant reptiles until virtually every crocodile within miles of the village had been killed.

While the majority of these legends are, for the most part, fictitious, they nonetheless do contain some grains of truth. The crocodiles along the Kinabatangan River are man-eaters. Martin and I did not need any legend to tell us that grim fact for we had witnessed a shockingly horrible accident in which one of our own men was eaten by a crocodile.

We were paddling upstream with several of our gobongs trailing behind. The water was extremely rough and, since we were going against the force of the downrushing current, we were encountering great difficulty in maneuvering the boats. One of the natives, in an attempt to change his position, fell overboard. The swift current carried him downstream very quickly. I ordered my boat to be turned around and, while the rest of the safari continued upstream, I raced down the river after him. With my three oarsmen we paddled as fast as we could, but the native seemed to be carried faster than our boat could travel. Suddenly he slipped down beneath the tossing

and swirling face of the running river. Looking across to the opposite bank, I noticed eight crocodiles sliding into the water. It was impossible to conjecture how many had taken to the water before we had seen them. With the boys rowing as fast as they possibly could, I raised my rifle and fired for I knew only too well what they were after. I managed to kill four of the brutes before they reached the water, but the others disappeared into the rushing stream.

We watched the water, hoping against hope that our native boy would come to the surface, but, as feared, he did not. I now knew that he must have been dragged to the bottom by a crocodile and that all hope of saving him was gone. We waited around for hours, hoping for a miracle that never came. During this time I spotted several crocodiles coming up out of the water on the opposite shore. I fired at all of them and this time my bullets found their mark. By the time that I had finished there were seven of these reptiles lying dead on the shore. I had the boys pull my boat over to the shore in order to examine them.

One of the Chinese boatmen in our party went onto the bank and decapitated all of the dead crocodiles. For these he was entitled to a handsome government bounty. Since the Chinese relish the entrails of crocodiles as a superb delicacy and for the making of a variety of medicines, he proceeded to disembowel all of the animals. When he opened the abdomen of the largest crocodile I shrieked in horror. A human leg, which had been bitten off at the knee, fell from the animal's stomach. The horrible conclusive proof as to what had happened to our boy lay before our eyes. We were not able to recover the remaining parts of his body and there was no doubt in our minds that they lay somewhere on the bottom of the river. The presence of such large numbers of these animals

in the river mitigated against our dredging the bottom for the unfortunate native's body.

Both in Africa and in Borneo, the crocodile is a cannibal. On many occasions I have seen a group of these reptiles attack and devour a wounded comrade. Juvenile crocodiles generally segregate themselves from the adults because of this habit of cannibalism. Crocodiles have extremely powerful jaws which operate with a spring trap type of action. When they are observed in a threatening yawn, one is able to see those devastating rows of razor-sharp fangs which are capable of amputating a man's leg in one swift stroke. They do not possess either a tongue or salivary glands and hence they must take to the water in order to digest and swallow their food.

We sailed away from the scene of the tragedy. Martin decided to return to camp in order to develop some of his exposed film and then to rejoin the party later in the day. We anchored our boats on the banks of a small truson where I ate a somewhat improvised lunch. The natives in the party used this time to do a little fishing and I must say that, after seeing it, it was most unusual.

Their bait consisted of small balls of cooked rice mixed with the powdered tuba of a poisonous tree. They dropped these balls into the water in areas where they anticipated that the fish would be. When the unsuspecting fish nibbled on these balls they were rendered unconscious and within a short period of time rose to the surface. The boys then merely paddled back and forth across the stream, picking up the floating fish. The poison that was used did not kill the fish nor did it in any way alter its edibility. Interestingly enough, however, the boys waited for the fish to revive before they killed and ate them.

After I had completed my lunch I decided to take several of

the boys with me and scout the surrounding jungle. The warm floor of the jungle coughed steaming clouds of convulsive vapor. We scrambled through a bamboo forest, then across a ravine wearing a heavy mantle of giant trees sprouting fragrant orchids, and finally through the miasma of a decaying swamp where the negative cycle of nature's balance dominated. Oftentimes, the muddy ground gave way and I found myself waist deep in the slime. We finally emerged into a small loamy clearing where the challenging footprint of an orangutan stared us in the face. Judging from its size, there was no question that the ape was a large one indeed. We followed the winding trail of footprints until they brought us to an abrupt end at the base of a rather large tree. It stood in the center of a cohort of tall trees, festooned with sinister lichen and snaring lianas. The boys scouted the tops of the trees. But, alas, no orangutan.

"Memsahib, he was here!" exclaimed Utar, one of our natives who was skilled in trailing animals. I rushed over to where he was standing and soon discovered the animal's furtive trail. On we went, following the trail of the giant ape. We had no way of knowing where it would lead us or for how long we would be following it. The trail led from one group of trees to another, a clear indication that the animal was taking to the trees from time to time.

The earth, soft from the recent rains, impeded our progress, but at the same time displayed the clearly etched form of carpals and phalanges. Further and further, deeper and deeper, we went into the nipa, across a winding trail barricaded with twisted roots and dangling lianas. The hours marched on as we stumbled and fell in our attempt to push onward after the elusive ape. The trail seemed without end, but we could not stop to yield to that throbbing desire to catch our breath. The trail slammed into a barrier of twisted and matted palms with

broad skirts of pincushion brambles and thorny lianas. Believing that the orangutan had jumped over this barrier, I ordered the men to hack a path through its challenging face.

We crawled through the dark, manmade tunnel and emerged into a broad clearing where, in the failing yellow rays of the retiring sun, we were met with the shockingly fierce form of the orangutan. He must have weighed at least three hundred and fifty pounds. I retreated in dread as the ferocious ape stared at me with his large and savagely fanged jaws. A cowardly shudder ran down my back and it required all of my nerve, courage, and strength of will not to succumb to the driving desire to run away. In our fearful surprise we all stood still. If he had come at us he could have easily torn several of us apart before I could have even aimed my rifle for a shot.

Looking at him in those brief minutes, surrounded by all of the fierce trappings of his wild environment, I realized why the natives called him the "Wild Man of the Forest." (The Malayan word for orangutan is orangoutang which translated

means the "Wild Man of the Forest.")

But now back to our encounter with the terrifying beast. He stood there, completely still, looking at us and probably wondering who we were. With the utmost contempt, he proudly turned away from us and leisurely made his way over to a large tree where, after a dutiful pause, he climbed to the top. The roof of the jungle was his home and he certainly had no difficulty in reaching it. With nimble agility he swung himself higher and higher until he reached the very top of the tree. There he was, three hundred and fifty pounds of anthropoid ape, perched atop an unassailable tower.

There was no time to waste. I ordered some of the boys to keep a close watch on the animal while I ran back to camp in order to fetch my husband. Down the loamy trail we dashed, through the stinging brambles and slapping creepers, into the

heart of the brooding bamboo forest and across the heaving, misty swamp. There was no barrier that could stop me now, no impasse too painful to be avoided, no snaring invention of the matted jungle so great as to defy conquest.

I burst into camp just as the sun was taking its final step to the engulfing horizon. Martin was just about to begin developing his last roll of film when he heard his name being called out in an excited and gasping tone. By the time I reached the dark room I was completely out of breath. Somehow I was able to gasp out what had happened. "Martin, come with me quickly. I have the largest monster that I have ever seen treed about a mile from the truson!"

Martin's face flushed with excitement and surprise. He had waited a long time to photograph an orangutan. Unfortunately, the day was almost spent and finished as far as making photographs was concerned. It was impossible for him to leave the pictures that were presently in the developer and so he had to defer all hope of photographing the ape until morning.

Upon my insistence, he supplied me with a dozen more men, food, axes, water, and camping supplies and allowed me to return to where the orangutan was treed. Jim Laneri and Joe Tilton, alerted by all of the commotion that I had created when arriving in camp, agreed to come with me. My parting words to Martin were, "We'll cut down all of the trees around him, build fires, and keep him there till morning." He smiled and replied, "Be careful, Osa."



THE WILD MAN OF THE FOREST

Since this was Martin's greatest experience with an animal, I present it here as he, himself, recorded it in his Borneo diary.

I gave Osa permission to go ahead with her plans, but I could not understand where she obtained the stamina to even consider making another trip through the swamp.

The camp rang with her excited activity as she collected the men together, filled the tins with water, and gathered an impressive array of sundry supplies. Within fifteen minutes she and the natives were off again into the forest. A lonesome silence descended upon the camp, broken only occasionally by the faint whisper of their parting echoes. Even though I knew that I should have remained in camp, I became so

imbued with Osa's excited enthusiasm that I decided to follow after her.

I rushed the developing and in the process underdeveloped all of the film. I then hurriedly collected a few more of our boys, supplied them with flashlights and gasoline lamps, and set off after Osa and her party. The trip through the darkened swamp was a hellish nightmare. Fortunately, Logan, who was running our outboard, had taken Osa and several of the men to the spot where the big ape was treed. He had returned to the landing to collect the remaining natives just as I arrived. I jumped into the boat and sped down the narrow truson until we came to the spot where Osa and her party had disembarked. I waded through the heavy decay of the silent swamp and within a few moments saw the lights of Osa's party moving through the shadowy darkness of the tangled forest ahead. I managed to catch up with them and together we approached the clearing that held the orangutan.

From the edge of the clearing I was able to make out the immense silhouette of the animal, ominously etched against the sparkling sky. His unaesthetic features were framed by great jowls that parted at the forehead. The face, set with piercing black eyes, was totally devoid of hair, covered only with a pink-brown skin that was conspicuously mottled. His head, which was about three times the size of a human head, was crowned with a massive patch of rust red hair that flowed down both sides of his neck in matted strands. His massive chin terminated with a broad beard that parted abruptly and then flowed downward, covering but a small part of the large throat pouch that rested in deep folds on his chest.

Orangutans differ widely in the types of beards that they possess. Some are luxuriantly long and flowing, some are short and stubby, while others are barely visible at all. Some of these animals, such as the one that we had trapped in the tree, were the proud owners of handsome moustaches.

His head was set between a pair of massive shoulders that were encircled with steel-like bands of muscles. His body



TOP: An orchestra of Murut headhunters. Having seen *The Spirit of Africa and Borneo* flying over their territory, they traveled for hundreds of miles through the jungle to find it. Their peculiar wind instruments are made of bamboo and rattan.

BOTTOM: Murut headhunters stalking game. The Muruts were extraordinarily accurate with the blowgun and the bow and arrow.



Baby orangutans. The Johnsons once sighted thirty-five orangutans in one day. This inquisitive twosome was later brought to the United States.

Typing a letter in Borneo often proved to be an onerous task. Here the attempt has been temporarily halted by a visit from three of Osa Johnson's pet gibbon apes, one of whom has decided to sit directly on the type-writer.





This young gibbon ape has just starred in a film sequence. The camera is a hand-cranked Universal, the first motion picture camera used by Martin Johnson.

A brock monkey. This pensive old fellow does not seem pleased by the fact that he has just been photographed. Brock monkeys abound in Borneo and although they possess an uneven temperament they proved to be ideal objects for the camera because of their inquisitiveness.



A Murut warrior. Each tattoo on his body represents a human head taken in battle. In his left hand he holds a parang (jungle knife), decorated with a hank of human hair, and in his right a blowgun.





Upon leaving camp, the Murut headhunters presented Osa Johnson with their most prized possession, a human scalp. Without her knowledge they attached it to her flashlight, which she and Logan here examine with mixed emotions.

Martin Johnson seeks the assistance of a friendly tribe of headhunters deep in the Kinabatangan jungle. Waiting by the plane in the background are Osa Johnson, Joe Tilton and Jim Laneri.



Members of the expedition gather for dinner in the apparent comfort of the camp's dining room. Seated from left to right are: Joe Tilton, Jim Laneri, Osa Johnson and Martin Johnson. In the background are the Johnsons' house servants.



During a leisurely moment in camp, Osa Johnson enjoys a cigarette and a chat with her native friend, Geeli.

A Dyak burial ground. The log coffins are equipped with projecting poles at either end. By this means the natives carry the coffins to the caves, there placing them haphazardly one upon the other.





Osa Johnson directs a small regatta of gobongs along the narrow headwaters of the Kinabatangan River. With these small dugouts, the expedition was able to paddle and pole its way well beyond the point where the river was navigable for the raft.



The raft was propelled noiselessly upstream by paddlers and polers, thus allowing intimate observation of the jungle wildlife. It was equipped with a complete darkroom which Martin Johnson used to develop many of his pictures right on the spot,

was covered with long flowing reddish-brown hair that flowed over the curvatures of his skeleton, giving it the appearance of a figureless hulk. The drooping coat of silklike hair flowed in the breeze with an ominous sheen and seemed to conceal his massive presence by its blaring camouflage. Nature had a purpose in bestowing on him so heavy an attribute in that deathly hot, tropical jungle.

As I stared there in awe, looking up at his shifting and threatening form, I wondered why he did not make an attempt to escape. After all, he had surely encountered all of the challenges that the jungle could offer. Perhaps he realized that his immense weight would prohibit him from successfully fleeing his captors. On the other hand, lodged as he was in his rooflike habitat, he may have been just too contemptuous of us all to attempt to flee. In either case, he was going to hold his ground.

We were new creatures to him and thus he stared at us in nervous anticipation of our actions. We decided that the best strategy of the hunt was to maneuver him to a convenient tree where he could be isolated. "The Wild Man of the Forest" was to face the unexperienced peril of being trapped in an isolated tree. With frenzied determination and excited anticipation, the natives began to cut the undergrowth. They worked with a fever pitch and for once Mendoza did not have to keep after them. Before long the tall tree stood alone with no possible chance of the ape jumping from it to another.

Our aim was to keep the big fellow up the tree until morning at which time we could better tackle the problem of his capture. With amazing speed and agility, he could sweep down the broad trunk to the lower branches from which he could easily have jumped to the ground and escaped. We thought of placing some of our men on the lower limbs for the night, but they were quite naturally afraid. To prove that the animal would not attack anyone, Jim and Joe decided to climb the tree themselves. This was fairly easy since the tree was encased by an entangled pattern of creeping vines.

Jim had brought a tear gas billy with him from camp, believing that it could be used to good advantage. We had brought a couple of tear gas billies and about fifty cartridges with us from America. They had been given to Joe Tilton by a manufacturer of these materials and quite frankly I never thought that they would ever be put to any good advantage. I had debated whether or not to bring them along to Borneo,

but was finally persuaded into doing so.

Jim picked up the tear gas billy and a flashlight and started up the tree. Joe was not far behind him, armed with a revolver and a second flashlight. Joe and Jim kept climbing, but the higher they went the further up the tree the ape fled. Suddenly the animal surprised us all by making a rush at them. Down he came, his wild animal fury lashed to flame. Jim discharged one of the tear gas cartridges in an attempt to abort the charge. However, the animal was not close enough and the thick lianas and branches prevented the pungent vapor from reaching him. Unfortunately, since the gas was heavier than air, it descended on Jim and Joe, giving them the full effects. Oh, what language! That night I certainly learned a few things about swearing that I never knew before. There they were, more than a hundred feet up in the tree, in total darkness, with an enraged orangutan threatening them from above and tear gas burning their eyes and skin and scalding their throats. What a predicament! We were unable to give them any help except to keep our eyes on the ape who had by now retired to the uppermost branches. He had gotten a small amount of the caustic vapor, enough to deter him from the immediate idea of a renewed attack.

Finally Jim and Joe managed to grope their way down the tree. We gave them handkerchiefs soaked in water and did all we could to relieve their burning and tearing misery. Both of them peeled off their shirts that were saturated with the gas. As they gradually got their sight back we all had a good laugh. But our levity with the incident was too premature for within a few moments the tear gas began to settle down

toward the ground. The damp and heavy air carried the poorly vaporized material downward and before long the whole bunch of us were crying.

Except for Jim and Joe, all of us recovered from the effects of the gas within a half hour. I called for volunteers to remain that night at the foot of the tree and to my surprise, everyone wanted to remain. The ground in the immediate area was studded with the jagged stumps of small trees, vines, mangrove roots and sticky thorns. There was not a place to lie down in. The mosquitoes and sandflies were fierce not to mention the millions of ants that had been angrily disturbed by the cutting. All of these odds added together meant that we would be far better off to head back to camp for the rest of the night, leaving a small contingent of men to guard the orangutan. Again we waded through that treacherous swamp. Since we had left most of our lights with the boys remaining behind, we hopelessly stumbled and fell, cutting and scratching ourselves beyond imagination. On arriving in camp, I sent out some of our men to round up all of the available local native manpower that they could muster.

We were up at five in the morning. About twenty new natives had been engaged overnight and we were not long in sending them off to the clearing. I loaded all of my cameras and, taking the most important ones, set off for the clearing with Osa, Jim, and Joe. When we arrived there I was relieved to find that the orangutan was still in the tree. He had built himself a nest for the night composed of twigs and leaves fringed with lianas. I set up my cameras and, with the sun at my back, made some poor pictures of the animal. It was not until then that I began to ponder how we were going to get the ape down not only in order to photograph him, but also to capture him if possible.

The monstrous anthropoid came down to the lower limbs and swung within seventy feet of our heads. During this time I made some pictures even though the light was extremely poor. I must admit that at this close range I was amazed at the enormous size of the ape. He glared at us with threatening defiance, dangling his huge mesomorphic arms as if he were about to jump. All of the men ran beneath the tree, shouting and screeching in an attempt to dissuade the animal from his obvious goal, the ground. While we wanted to capture him we were certainly not in any position at that point to handle an ape three times the size of an average man. This display of blaring cacophony was successful; the animal retreated up into the tree.

During the night Mendoza and the men had done some additional clearing and the result was a painful carpet studded with sharp stubble, thorny vines and the razorlike leaves of nipa palm. It required great effort for any of us to take even a few steps. Every such attempt was rewarded with fresh cuts and bruises. During the early hours of the morning, as we played a game of cat and mouse with the orangutan, I seriously doubted that we could ever capture him alive.

Jim still believed that the orangutan could be handled with tear gas and so equipped with one of my Eyemo cameras and a billy, he scampered up into the tree. The big fellow seemed to remember his encounter of the previous evening. On several occasions he rushed down at Jim, but when the camera was aimed up at him, he retreated away. While this was going on, Osa and I made some excellent photographs of the animal. He was particularly graceful in his movements as he slowly and deliberately swung from limb to limb. He never let go of a branch with his feet or hands until he had another in his grasp. He would give several good tugs at the limb before moving onto it.

About 11 A.M. the big animal decided that he had to get out of the tree. Motivated by thirst and hunger, he rushed down the swaying trunk until he reached a broad limb that rested about seventy feet above the ground. It extended out toward some other limbs but, unfortunately for him, not far enough to make a jump possible. None of us ever dreamed

that he would attempt to jump such a distance. He climbed out as far as he dared, swung the branch as far as he could, and attempted to jump. His first three tries met with failure. I was busily engaged during all of this, grinding away with my cameras. On the fourth attempt he gave a mighty swing that carried him out at least forty feet, and then, to our great surprise, he lunged seventy feet downward toward the ground. The crash of his landing on a pile of branches roared through the forest.

Jim, Joe, and all the men rushed toward him, thinking that all of the wind had been knocked out of him. But we were all mistaken. Within a few seconds he was up and off into the dense nipa palm along the river bank. The orangutan moved slowly, but so did we for that matter because of the inhospitable ground that we ourselves had created. It was like walking on a bed of upturned nails. When we finally caught up with him, he was moving from nipa to nipa. But the fight was not yet over. Before we could get a net on him, he was up into another tree. "The Wild Man of the Forest" was again free and at large in his jungle lair.

One of our boys became so infuriated at the ape that he started up the tree after him. Jim Laneri called out, "Come down, you fool," but, unfortunately, the boy did not understand English. Within a few seconds the ape grabbed the boy by the arm and threw him from the tree like a tossed apple. The boy landed at our feet, and luckily on soft ground. While he was severely stunned, he was lucky not to have sustained

any serious injury.

Our only hope to capture the ape was to get him isolated in another tree. I yelled to the boys to cut down the surrounding nipa. The nipa along the river was soft and it yielded to one determined slash of a parang. They kept cutting down the palms as fast as they could, but the animal was just a little too quick for them. He was one stalk ahead of them all the time. Finally, the orangutan swung into a large tree and raced up to the top. Immediately, we began to cut down all of the surrounding trees which, fortunately, were much smaller than the one in which he was treed.

Within an hour we had everything cleared except for an old, tall, rotted stump that stood about a hundred feet in the air. We left it standing because we believed that, even if he did swing into it, it would break. Well, that is where the ape outsmarted us. He did swing into the rotted tree and it did not break! All of the men, including Joe Tilton, ran to the tree in expectation of its breaking. They stood there gaping up at the snickering animal who lost no time in racing up to the top of the old tree. He deliberately swung it back and forth until it cracked. Down came the gnarled and dead branches. We rushed from under it as the barrage of dead timber rained down from above. Then the tree cracked in half and down came the great ape. He landed with all of his extremities spread out like a cat and jumped into a clump of bushes just before the tree hit the ground. Off he was again, into the jungle. All day long, he went from tree to tree. The boys made a brave effort to capture him, but they always seemed to be just a little bit slower than he was. I cannot say that I blamed them. That creature could have torn a dozen of them from limb to limb with the greatest of ease.

Jim and Joe tried their best and still looked on the tear gas as the final solution. The orangutan led us in a merry chase through the tangled jungle. From time to time, I was able to make some excellent pictures of the chase. Just before dark we chased the animal up another large tree, cut all of the others around it down, and left him for the night with about twenty boys camped around the clearing.

The boys were just as keen about the capture as we were, but I will never understand how they ran around in that terrible stubble jungle without ruining their feet. Jim, Joe, Osa, and I were a mass of lacerations, abrasions, and punctures, but the natives were clean of even the slightest scratch. Mendoza and most of the boys had not had any sleep for

two consecutive nights. However, they willingly volunteered to remain another night, while the rest of us tramped back the weary miles through the jungled swamp to camp.

The following morning we were back at the clearing at sunrise. Although it had rained during the night, the orangutan seemed to be in good spirits. When we arrived at the tree he was breaking off some young branches, eating the tender buds, and throwing the refuse at the boys. He greeted us by throwing a particularly large branch in our general direction.

Of the three great anthropoid apes, the orangutan is the most humanlike. His face is savage and forbidding, with piercing eyes set on either side of a bridgeless nose. But like you and me he has twelve pairs of ribs. The chimpanzee and the gorilla have thirteen. Truly, he is a manlike ape.

The infuriated man of the jungle realized that he was trapped. He played havoc with the tree and, in no time at all, had measured the distance between his perch and the nearest tree. He could not make it. No wonder he raged! We continued to grind out priceless feet of motion picture film, pictures of an animal in all of his magnificent fury.

The natives hacked away at the forest until an area several acres in size had been cleared. The orangutan climbed higher and higher, but in the sky there was no escape. He unleashed his anger on the tree, tearing it to shreds and thrusting down pulverized branches onto our heads. His aim was extremely good, for every few moments someone would yell, indicating that they had been hit. I was struck several times with this flying debris, but Osa escaped unscathed.

Well, it was up to us to capture the orangutan today or give up altogether. The men were exhausted. Osa, Jim, Joe, and I were covered with festering abrasions. Mendoza also knew that it was today or never. During the night he had kept the men awake by forcing them to build a scaffold about fifteen feet from the ground and by directing them to cut part of the tree in which the animal was trapped.

The tree was ready to be felled and everyone had been instructed as to what they were to do. I had the men build a platform about ten feet high above the swamp upon which I set up five cameras. According to our calculations, the tree would fall toward me, missing the platform by a few feet. At the spot where the ape was to land we laid down a thick padding of soft leaves and twigs. The command was given, the last strokes of axes were made and down came the tree with a report like thunder.

But darn it, that monkey beat us again! Just when the tree top was ten feet from the ground the orangutan jumped and, landing in a soft spot of nipa leaves, took off again into the swamp. Everyone went after him. All that we had for our efforts this day were several hundred feet of spectacular movie film that vividly recorded our defeat. Together with Utar, I gathered up the cameras and began to rush off the platform. As I did, the platform broke and down we went, cameras and all, into the murky swamp. Osa stood there and howled with laughter. The cameras landed in the mud, but Utar and I fell right into the stagnant water. Fortunately, Osa grabbed the cameras before they became too wet, during which time Utar and I were trying to extricate ourselves from the mud.

I remained behind long enough to find one camera that did not have its lenses smeared with mud. Off we rushed, in the direction of our yelling men. I say rushed, for that is precisely what we did. When we caught up with the boys, we found the orangutan up another tree. This time, however, the tree was about one hundred and fifty feet above the ground without a solitary branch on the first hundred feet. The tree was naturally isolated, surrounded by small nipa palms and brambles.

This time the old fellow had made a mistake, for the tree that he was in was ideal for a capture. This time we were not going to let him get away. We had done that too often already. This time we were going to wait him out. Camp fires burned and died, dinner times came and went, the sun rose and set, but still he was there. We had the "Wild Man of the Forest" trapped and at bay in his own jungle realm. Early on the second morning, he decided to take a nap, as if in complete indifference and defiance to us.

How were we going to get him out of that tree? That was our immediate problem. Suddenly I had a novel idea. The airplane! That would surely frighten him down to earth. Jim went back to camp and it was not long before we could hear the excited hum of the engines racing over the tops of the nearby trees. Jim grazed the top of the tree, but the orangutan disdainfully ignored him. Again and again the plane skimmed the tree top but, instead of being frightened by this ultra invention of the modern machine age, the ape merely growled his wrath at this air monster. He could not have been less interested. He knew nothing of airplanes and what is more he did not care to. The plane stunt simply did not work.

Therefore, we had to resort to the native way, ropes and nooses. The men made a long pole at the end of which they attached a rope made with rattan, shaped in the form of a noose. They hoped to get close enough to him so that he would grab the pole at which point they would tighten the noose around his wrist and pull him down. The old warrior of the jungle snarled and fought. He did not know what it was, but he did not want any part of it.

He made a grab for the pole and held onto it, not knowing what it was. At last they caught him! The men tried to pull him down but, the wily creature snarled his fury at the rope and pulled away. The men said that he had an antoh, that is, a devil, for no normal creature could fight the way that he did. He was as big as any two men fighting to capture him. More nooses were made with all of the cunning of the Borneo hunters. The animal had not yet figured them out. What did he know of slip knots? But he did know that it had something to do with his enemies, a human trick designed to vanquish

him. The battleground was the distance between the ground and the top of the tree. The natives possessed the cunning, but he had the ferocity and strength.

This master of the jungle had the strength of fifty men. With vindictive fury he pulled at the ropes and brought up several natives at a time into the air. As they fell to the ground, others rushed over to grab the rope. There were fifty men in all, pulling on one end and the orangutan pulling, with one hand, on the other. He put up an incredible fight. What strength! But, alas, he was weakening. He could not long hang on by his feet and match forever the combined strength of fifty men. This was the last noble and yet desperate defense of the "Wild Man of the Forest."

When I drew closer to the tree, the natives were beginning to cut the undergrowth and to pile it in the spot where they believed that the top of the tree would fall, in the event that it would have to be felled. Our first thought was to insure that the orangutan would not suffer any injury when he came down. I set my cameras up on another tree stump a short distance away. What a job it was, trying to direct the capture and at the same time attempting to record it all on film.

The ape strained at the rope, feeling the last tremendous desperation of the jungle wild. He weakened and slowly he was being dragged down. "The Wild Man of the Forest" played out his struggle to the last ounce of his strength. Then down he came, with a terrific crash, stunned, worn out, and panting, but wild with courage and determination. The men

flung a huge net over his hairy form.

Vanquished at last! But wait, is he? The incredible happened. Surely he could not get out of that massive net. But, he did. With that last desperate thrust of anthropoid power, he burst through the net. He was free, gloriously free. But the game was up. Another net was brought over him just as he stood up and looked around. He seized one of the natives by the leg and pulled him over as if he were a toy doll. Be-

fore we could raise our rifles, he plunged his angry teeth into the boy's instep, picked him up, and threw him at us like the twig of a tree. The boy's fall was broken by some of the other natives. He was later rushed back to Sandakan by air where he made an uneventful recovery.

At last, the great orangutan was imprisoned in the nets. Ropes were inserted into the mesh of the nets and through them a couple of poles were lashed. We began our triumphant march back to camp. Our captive was held with great respect, for he had proven to us that he was, indeed, the lord of the forest. The treble of our marching victory chant galloped in resounding echoes through the jungle. The men were jubilant, and they had a right to be. This was the largest orangutan ever to be taken alive!

He rode comfortably, as if in a regal hammock, over the winding jungle trail and across the brooding swamp. The men took turns carrying the great ape because the weight was overwhelming. When we finally reached camp they fell down in utter exhaustion and did nothing but sleep for three days. The conquest of the "Wild Man of the Forest," was their victory and it was a victory deserving of the greatest of rewards.

This was a supreme moment for Martin, leading the tribesmen of Borneo against the unleashed fury of the devil beast of the forest. This experience left an abiding impression not only on him, but also on me. The orangutan, fierce and morose, a captured king of the tropical wilds, was carried in triumphal state through his own untamed realm.

It was three o'clock in the afternoon when we commenced the return journey. Most of the men rode down the truson in a native launch that was filled to capacity. The remainder of the porters, Jim, Joe, Martin, and myself marched through the swamp with our precious prize. In our excited joy we were blind to the inclemencies of the forest and marched on in a state of euphoric bliss until we erupted with boisterous delight into the camp at Abai. All of those who had remained behind came rushing out to see the raging king.

We placed the large ape in a cage that had been hastily constructed for the express purpose of receiving him. It was built of galvanized tin sheeting that Jim Laneri had flown up from Sandakan a few days before. The nets that restrained his freedom and the ropes that bound his terrifying strength were cut, but behind him slammed an iron door that would forever deny him the liberty of the jungle wilds. He was stiff from his long and frightening ride, but slowly he unwound himself, stood up in the center of his cage, and yawned.

He stood there, defiant and curious, looking down at the hairless, skin-covered creatures who surrounded him with strange sounds and unfamiliar tones. It was not long before he forfeited his curiosity in favor of his vengeful contempt. Within a few days he became bored with everyone, ignoring them completely, except for Sai Din who brought him his food.

Whenever Sai Din would open the ponderous door of the great cage, he would tear himself furiously at the bars and then thrust himself backward onto the floor in a rage of convulsive anger. Seemingly exhausted by this activity, he would lie down, apparently to sleep. However, within a few seconds, he would thrust his long-reaching, hair-covered arms at the bars and with frightening ferocity begin to thrash them with his immense hands. He would pull himself forward with a gliding motion until his moon-shaped head was pressed against the interspace of the bars. The powerful fangs that lined his jaws were displayed for all to see and they were frequently ground together in an attempt to terrorize his captors. Occasionally, he would race to the door with a snarling face and in rage, slam and bang his clenched fists against the steel barrier

as if to pulverize it. On more than one occasion we thought that it would yield to this powerful onslaught. But it held.

The natives named the orangutan Abai, after the name of the location where our camp was situated. But none of us felt any more comfortable with him on account of this new connotation. In fact, Jim Laneri remarked soon afterward, "Had I seen this big ape as well as I see him now, I would never have gone within a mile of him."

The cage that had been built for the orangutan was ten feet wide, but he was able to stretch his long and powerful arms across it and simultaneously touch both sides. His arm spread was more than eleven feet and his hands measured eleven inches from the fifth digit to the thumb. The flowing red hair that radiated over his immense form with a glowing sheen measured over a foot in length.

Sai Din placed large bunches of leaves and grass on the bottom of the cage and several gunny sacks on a shelf inside the cage where it was hoped that he would sleep. Since we had neglected to place water inside of the cage before releasing him into it, we had to pour it through an opening in the bars. After a wild display of angry activity that lasted a few harrowing hours, he surrendered. He ate the large quantities of coconut fiber that had been placed in the cage and gulped down an impressive quantity of water. After this he made himself a nest in a corner of the cage, just as he had done every night, for an untold number of years, in the wild freedom of the forest.

WATERHOLE THRILLS

The day after the capture of Abai was delightfully sunny. We collected all of the natives that we could who had gobongs and instructed them to proceed with our Chinese junk and raft five miles down the river to where a small truson emptied into the Kinabatangan. They were further instructed to sail up the truson for about a mile and to wait for us there until the following day.

The next morning heralded a beautiful day and so we packed our cameras together and set out to meet the water safari. We sailed down the Kinabatangan, taking numerous pictures of the beautiful scenery. We had by far too many photographs of the scenery, but the rivers and trusons were so

attractive that we could not resist taking a few more each time we went out.

We found the safari at the prearranged rendezvous and with them proceeded up the truson, reaching a landing just before nightfall. The entire day had been one of the busiest that we had experienced since coming to Borneo. Martin and I moved continuously from gobong to junk, from junk to raft, making pictures all day long.

As we neared the landing, we discovered that the raft and the junk were barely able to negotiate the narrow stream because of the overhanging forest of nipa palm. The water was crystal clear, so clear in fact that it was difficult to differentiate between the forest and its reflection when focusing with the camera. For four successive days we lived on our raft, exploring that part of the jungle. It afforded me an excellent opportunity to fish, which I did, catching several varieties of fish that I had never seen before.

When a week had passed we returned to camp, leaving behind three gobongs and the raft. Martin was anxious to return to the area as soon as possible in order to photograph the riverine monkeys and orangutans. The trees along this stream were full of orangutan nests and abounded with a wide variety of monkeys. The edge of the stream was marked with the numerous trails of deer, water buffalo, and wild pig, all of which were apparently attracted to it by its high saline content.

Martin and I trekked our way back to camp through the swamp, while Joe returned by water with the junk and most of the other boats. Martin preferred it this way as it gave him the opportunity to photograph areas of the jungle that were not visible from the water. During the return journey the weather held out fine, but as soon as we arrived in camp it began to rain. We had indeed been most fortunate.

Our orangutan, Abai, had remained in good spirits during

our absence. Martin had decided to build a new cage for the ape since the original one was much too small. It was constructed by Chinese carpenters, who fashioned it from iron-wood and extra heavy steel mesh. All of these materials had to be brought up from Sandakan since they were unobtainable in the region near our camp. Ironwood is one of the strongest woods in the world, stronger in fact than steel on a weight-to-weight basis.

The door of the new cage was placed adjacent to that of the old one, so that we could lure Abai into his new home. When the cage was ready Sai Din placed pineapples, bananas, oranges, and nipa palm hearts at the far end. Both doors were then opened and needless to say, Abai went straight for the pile of jungle delicacies. While he was thoroughly occupied with his banquet, we closed the door of his new home. His first reaction was one of dislike. He pounded on the sides of the cage as if to test their strength. Fortunately, they held firm. After a while he calmed down and apparently came to realize that this cage meant the same thing to him as his old one. In both he was a prisoner.

The animal's new home had been built, on Martin's specific orders, four feet away from the back window of our bedroom. The reason for this was that my husband wanted to keep an eye on the ape at all times. Obviously he had not given any thought to the fact that being so close to Abai presented a real danger not only to himself but also to me. I was continuously plagued with the fear that he would break loose, especially while we were asleep. In such an instance we would not have had a chance. While these sobering thoughts gave me insomnia for several nights they did not seem to disturb Martin in the least. That my worries were real was proven months later when Abai was placed in a steel cage in the Central Park

Zoo in New York. One night he bent the bars like paper and almost escaped.

After Abai had been locked securely in his new cage, I went down to the river in order to do some fishing. The fish were biting extremely well that day. Within an hour I caught several large fish and, having secured a good supply for dinner, started back to camp. After giving the catch to the cook, I walked over to the house. Much to my surprise, I found it full of monkeys. They were all over the place, inside and out. Succumbing to my first impulse, I grabbed a broom and chased them. When I went back into the house I found that they had stolen my lipstick, my compact, and several pieces of jewelry. They had carried off all of the shiny objects that they could lift. Some of them were covered with powder, others with rouge, and several with lipstick and perfume. Martin laughed hilariously when he saw my plight. But I was quite indignant, as any other housewife would have been to come home and find her parlor full of live monkeys.

These mischievous little creatures were a variety of river monkeys that were quite adept at jumping and swimming. They were equally at home in the tree tops and in the river and, as demonstrated, in my living room. They shone at high jumping and at swimming and after having seen them perform I appreciated the origin of the phrase "monkey shines."

They were capable of swimming several hundred feet under water without creating a ripple on the surface. One day I filmed five hundred of them climbing up a 130-foot high tree and jumping from the top to the hard earth below. I thought for sure that they would kill themselves. However, they seemed to glide to earth with graceful ease, land, jump up in delight for a few seconds, and then run away. As they jumped without looking to see where they would land, their tails

swirled in a rapid rotary motion like the blades of a helicopter. Because of this, Martin always referred to them as "helicopter

monkeys."

As soon as I had finished cleaning the house of monkeys, I began cooking dinner. I was looking forward to a quiet evening with my husband, but this was not to be. Before I had finished preparing supper a loud commotion of human voices accompanied by some weird jungle music crashed through the camp. I quickly looked out of the window and saw that the chief of a headhunter tribe and some of his headhunters had arrived in camp. He had heard via the jungle grapevine that a white medicine man was near his territorial domain and had come with his entire palace guard to investigate the reasons for his being there. He brought gifts for us and we, in turn, presented him with several gifts. We were glad to know that he had come as a friend, but we were quite skeptical as to how long he would remain friendly. After we had accorded him all of the amenities deserving of his rank, he departed. Before leaving, however, he promised to return the following day and lead us to a waterhole in the interior that was frequented by a variety of animals.

That night we posted a sentry. We did not and could not trust the chief. We were suspicious that he had merely visited our camp in order to ascertain how many of us there were, how many natives we had, and what type of defenses we possessed. We were not going to take any chances on his returning to our camp after we had gone to sleep. After posting the sentry and lighting several fires, we went to bed. About midnight, bedlam broke loose in the camp. The noise and the confusing commotion was deafening. Was this the chief returning with his bloodthirsty horde of headhunters? We all said a prayer and then quickly grabbed our guns and ammunition. When we got outside, we found that it was not the chief, but

something almost as sinister. It was a herd of wild water buffalo stampeding with enraged fury through the center of the camp. They tore through the compound with murderous speed and wrecked every tent in their path. Only our rifle fire kept them away from our hut. We looked for our sentry, but were unable to find him. Since that night we have never seen nor heard of him.

After the animals had fled, our fears mounted. We were worried that the chief had purposely created this stampede with the intent of following it up with a full-fledged attack. That our sentry had gone over to the chief was yet another unanswered question. We remained awake the entire night with our rifles nearby.

The following morning the chief arrived in camp and greeted Martin cheerfully. As he did, I noticed a peculiar look on the old fellow's face. He seemed quite surprised to see us. I had the feeling that he had created the stampede and had arrived back in the compound with the idea that it had been totally destroyed. Had this occurred, he would have had all the booty he wanted in addition to having eliminated a rival, the white medicine man. But his plans had been thwarted for there stood the medicine man with rifle in hand, very much alive and now very much to be feared.

The chief then turned to some of the boys and indicated that he was ready to lead us to the great waterhole. We decided to take the risk and go with him, but with great caution. We realized that our fears had been completely unfounded when the chief led us to one of the most beautiful waterholes that we have ever seen in any part of the world. We were the first white men ever to visit this gorgeous spot. The edge of the waterhole abounded with pearl white salt and, quite obviously, this was one reason why so many animals were attracted to it.

Within a short period of time, Martin set up his cameras in a camouflaged spot at one end of the pool. We photographed a wide variety of animals ranging from aristocratic owls to sinister water buffaloes. Owls are quite scarce in Borneo and in all of our travels there we saw only ten of them. They are extremely small in comparison to their cousins in Africa and North America. One small fellow sat on a branch above us and stared down at us in inquisitive silence. He did not in the least seem disturbed by all of the activity that was going on beneath his tree and was totally indifferent when we aimed our cameras at him. I named him "sour puss" because of the dejected sour look that he had on his face.

On the opposite side of the pool a solitary water buffalo wallowed in a refreshing mud bath. He came to the waterhole via a buffalo track that had been forged before by several of his relatives. A track made by buffaloes soon degenerates into a no-man's land, passable only to these cumbersome brutes. They have an absolute standard pace and step with great accuracy into the footprints of the previous passers-by. A buffalo track, after short usage, consists of an endless series of gullies athwart the track with intervening ridges of slippery mud about a foot wide. Submerge the whole under a skim of muddy water and you have a section of country that is impassable to either man or beast, except the buffalo.

This animal, while confined to the tropics, does not like the warm environment. He spends the hotter hours of the day in any pool of water that he can find, the muddier, the better. Nothing pleases him more than a drainage ditch alongside a path or a road. He will wallow in it with so much vigor that, what was once a trim, clear-cut trench to drain off water, soon becomes a glorious pulverized mud bath. This provides him with a relaxing couch for his long siesta until he decides to arise, a dripping malformity, ready to terrorize any passing

animal. He has a double gift of cunning and obstinacy, and there is no wild inmate of the jungle which is not more preferable as an antagonist. In the domesticated state, this animal pulls carts, performs field work, and serves as a means of transportation for the native police force.

Shortly before noon we were honored by the visit to the waterhole of a beautiful red monkey. This animal is extremely rare and very seldom seen in the interior where he lives. He is covered with a golden red coat of hair that stands out from his small body like the quills of a porcupine. When Martin first spied him, he could not believe his eyes. "Look over there, Osa!" he whispered excitedly. Martin took the monkey's picture while he sat in a complacent pose in the fork of a tree. Then, as if satisfied that his picture would turn out satisfactorily, he scampered off into the forest. The one that we photographed was the only one that we ever saw in Borneo and, as proven later, the only one ever to be photographed in its natural habitat.

Martin next photographed a lemur. This animal is equipped with broad suction cups on its feet which enable it to walk on any surface whatsoever. It can perambulate up a glass window, across a plain wall or along a ceiling.

As my husband was photographing the lemur, a small plandok deer emerged from the forest and cautiously made its way down to the edge of the water. The plandok or "barking deer," which is the pygmy of the deer family, has a call which closely simulates the barking of a dog. It grows to a height of a foot at the shoulder and is covered with a gray coat speckled with faint white spots. Plandoks are plentiful throughout Borneo in spite of the fact that they are the prime object of many a hungry python.

Many tribes in North Borneo considered the call of the barking deer to be an omen of ill luck. If the bark of this deer is heard at the time that a wedding is scheduled to take place, the ceremony is immediately postponed until a later date. If the animal were to get beneath the house of a villager, the owner would surely die unless the gods were appeased. The animal is captured in this instance, if at all possible, and covered with coconut oil. After this, a dog and a fowl are killed and their blood mixed with rice. This mixture is fed to the captured deer after which it is set free. Three days after the deer has been freed, a pig is sacrificed. The owner of the house that was originally cursed must remain in the village for seven days. During this time he must remain in his house except for those occasions when he is allowed to go down to the river to bathe.

After the plandok deer had scampered off into the forest, Martin and I decided to treat ourselves to a refreshing drink from a water vine. Since most of the rivers and streams were contaminated with a variety of parasitic diseases, despite their wholesome appearance, this was the only safe method of obtaining a drink. I cut two vines, one for Martin and one for myself. Two feet of this vine contain about a pint of fresh water that is totally free of either harmful bacterial or parasitic contamination.

We did not have much of a respite during which to drink from our vines since a playful honey bear soon bounded into the clearing. The Borneo honey bear is a small animal, weighing only about fifty or sixty pounds. When fully grown it measures about a foot in height at the shoulder. The animal is covered with a substantial coat of thick black fur except for a horseshoe-shaped area around the neck. Here a stripe of honey-colored fur is visible, extending like a collar around the entire circumference of its neck. The animal gets its name not from the color of this collar, but rather from its peculiar manner of feeding. It will break into a beehive and purposely spill

all of the honey over its thick fur. The honey, of course, will attract many flies. At this point the bear will lick both the honey and the flies from off its coat.

Unlike the other representatives of this family of animals, the honey bear is an extremely gentle creature. They delight in rolling on the ground and in playing incessantly with one another. At our camp at Johnsonville I had a mother honey bear and two of her children as pets. We kept them in a special compound that was built close to the house. The cubs were very playful and jolly. Oftentimes, they would stand up on their small hind legs, growl arrogantly, and then march up to their mother as if they were going to devour her. She delighted in lying on her back and in tossing them about in the air, juggler-style, with her softly padded paws. When the trio had tired of play, mother would gather the cubs close to her and wash their fur with her broad tongue. Then they would all snuggle together and take an afternoon nap.

It was an interesting experience to watch the cubs grow to maturity, during which time the mother taught them the ways of the jungle. We allowed them the freedom of the camp during the day, but at night I insisted that they be kept in the safety of their compound. They never made an attempt to stray away from the camp even though they had ample opportunities to do so. While roaming through the compound, the mother would teach the cubs to turn over strips of bark that lay on the ground and to eat the insects that they would uncover there.

They were given innumerable lessons in tree climbing, the results of which were often amusing. It seemed that they were extremely agile at tree climbing. It was making the descent that apparently posed the problem. Their descent usually began with a series of cautious maneuvers that invariably termi-

nated in their tumbling downward like a giant ball of black wool.

The male cub, which I named "Honey Boy," was the friendliest of the family. Whenever he spied me coming out to feed the family he would rush madly toward me with such speed that he would stumble and fall over his own short stubby legs. He and his sister were constantly being spoiled with a liberal diet of sugar, cookies, candy, and assorted cakes. In spite of all the affection that all of the members of the expedition lavished on her, the female cub always remained close to her mother.

Whenever I was away from camp, Honey Boy always managed to get into some form of trouble. This was invariably with the cook who, like myself, had spoiled the cub with his sweets. One day the cub got into a sack of flour and, while wallowing about in it, was caught by the cook. The Chinese cook stood in the center of the kitchen, stamping his feet and jumping up and down. After this he unleashed a flood of dizzy language that sounded like a convention of jay birds. He grabbed a stick and waved it wildly. At this point Honey Boy dashed out the back door. A short while later he returned, probably expecting a whack with the stick. Instead, the cook tossed him a choice piece of banana.

The cub's next run-in with the cook was far more serious. He arrived at the kitchen early in the morning and began to pry about. The cook was busy stirring a bowl of pancake batter which, needless to say, immediately interested the mischievous cub. When the cook went into the yard to gather some wood, the cub seized the opportunity to investigate the bowl thoroughly. He climbed onto the chair and put one paw into the bowl. The thick white batter had an appealing taste so he placed his other forepaw in the bowl. At this point the cook returned to the kitchen. On seeing the ruination of his batter,

he let out a horrendous scream and, for good measure, began to jump up and down in a frenzy. Honey Boy had good reason to be frightened and decided to make a run for it. The chair fell and so did the bowl, right on top of him. He had sense enough to realize that he had better get out of the kitchen, and fast. He headed for the dining room and reached it just as Martin and I were rushing through to see what all the commotion was about. As he fled, he smeared the gooey batter on our legs and all across the floor of the house. None of us was pleased by any of this so we took off after him. Martin finally caught the little scoundrel in a fence corner after a grueling chase. He turned him over to one of the boys who then doused him in a tub of soap and water.

Before being scrubbed, the cub received a good spanking from Martin and me. After his bath he crept up to the house and waited there for one of us to emerge. I had no sooner set foot outside the door then he grabbed me by the leg. Treating him severely, I cuffed him lightly on the ear. He sat down with a most dejected look on his face and looked at me with his big smiling eyes. It was really impossible to be angry with this lovable bundle of mischief. I picked him up, tickled his stomach and in doing so forgot about the incident.

On one occasion, while we were in Sandakan, Honey Boy became the scapegoat for the antics of two monkeys that we kept there. One evening the cub followed the monkeys under the house and watched them as they played with the wires. The house was electrified by batteries that were kept beneath the ground floor of the building. One of the monkeys upset the batteries and in doing so injured himself. After this, he and his companion ran off, leaving the cub behind.

Martin and I were entertaining some guests on this particular evening. When I turned the light switch, the lights did not go on. Martin crawled underneath the house in order to find out what was wrong. As he did so he discovered the cub sitting next to the overturned batteries. Every circumstance pointed to his guilt and so he was severely chastised for something that he did not do. It was not until Martin found acid burns on the paws of one of the monkeys that he realized how hasty his action had been.

A short time later Honey Boy was the principal figure in an incident that was very embarrassing to Martin and me. Next to our house in Sandakan there was a church which, on Sundays, was well attended. Being members of the congregation, Martin and I attended services whenever we were in the city. One Sunday I developed a slight fever and, contrary to my custom, remained at home. Honey Boy, as usual, was in the front yard early in the morning. He had attempted to follow us to church on several occasions and had always been chased home. Since I did not make an appearance, he must have thought that I was already in the church. So off to church he went.

He walked through the open front door and nonchalantly made his way down the center aisle. The preacher was standing at the end of the aisle, singing and directing the congregation through a hymn. The bear just kept on walking. As soon as he was spotted by those in the church, an uproar broke loose. Most of the women screamed, threw up their hymn books, and dashed for the door. It did not seem reasonable that they should have been frightened by a friendly little honey bear, but they were. Honey Boy stood still, watching the commotion, completely unaware that he had upset the service. The only one who did not become alarmed was the minister, who knew that the bear was friendly. He picked him up and carried him over to our house.

As the minister walked into the house with the cub, I was

eating an early lunch. And was I embarrassed! That was one time that I was caught skipping church. The minister, very polite and very calm, explained what had happened. Blushing a bit, I tried to explain my absence from the service. When I was through, the clergyman, dignified and sedate, backed out of the room, leaving me impaled on a stare that can only be described as cold and haughty. I felt so guilty that I did not even think of scolding the cub.

Standing next to the honey bear at the waterhole was a brock monkey. Borneo is a dominant haunt for all primates, from tiny simians to great apes. In Siam the brock monkey is used to pick coconuts from trees. He is actually trained to bring the coconuts down and to give them to his master. In Borneo, however, he performs no such useful work.

Near the waterhole we saw a gibbon ape drinking water. This ape drinks differently from most of the other animals. He hangs from the tree branches and reaches down to the water with his hand. When it is full, he lifts it to his mouth and drinks. This ape always drinks in this manner, even when in captivity. Undoubtedly, the habit was formed from living in the tree tops where this ape gathers rain water from the foliage. Some of the native tribes in Borneo consider the gibbon their protector while others relish him as a savory dish.

As we were watching the gibbon, an anteater came to the waterhole. The Borneo anteater has a rough scaly hide that is almost as tough as that of a turtle. His face is long and pointed and set between a pair of protruding eyes. While his mouth is not very wide, he is capable of scooping up large mounds of ants with his rough surfaced tongue. If he is not able to find ants on the surface then he will dig down for them. Nature has endowed him with long sharp claws which act like shovels

for him when he is digging for ants. The anteater is about the strongest animal for his size. The Dyaks prize him highly for his strength and because they consider him a delicacy.

We were soon greeted by a siamang, which is a variety of gibbon. The extraordinary thing about this monkey is the huge pouch that is carried underneath its jaws. It is part of its vocal equipment. When filled with air, the pouch can produce a tone of its own. When the siamang wants to do some special singing, it punches its pouch in order to produce an added tone.

The Borneo deer is a very delicate-looking animal. He has large ears, a coat of brown silky fur, and a bushy brown tail. His eyes are large and soulful. His legs are extremely delicate and I often wondered how he went among the nipa palm without breaking them. The one that we photographed at the waterhole looked like he belonged to Saint Nicholas and was resting there for his hard winter's work ahead. We later captured three does which I kept for pets around our camp at Abai. They were very gentle creatures. I nursed and fed them for weeks, but eventually the three of them died.

At this waterhole we saw every kind of monkey except the rare proboscis monkey, a species for which we were anxiously searching. I made some inquiries among the natives and, sure enough, was told that we could find these rare monkeys a little to the north. This monkey is a treasure for a naturalist. No proboscis monkey has ever been kept alive in a zoo for any length of time and none had ever been filmed in their natural habitat.

We decided to return to camp and get ready to journey up the Kinabatangan, into the land of the proboscis monkey. We knew that they would be in the interior and chose to travel by boat as it was the best and fastest way there. On our way back to camp we came across an apartment house. Yes, they have

apartment houses in Borneo and also landlords. Because there is plenty of room in the jungle, the apartment houses there, unlike the ones in America, run along the ground for about five hundred feet, instead of vertically skyward. The houses are raised about five feet off the ground in order to protect them from the rain and the dampness of the earth. There are no stoops leading up to these houses, just ladders with three or four rungs on them. Each apartment consists of a very large room which is separated from the adjoining ones by a partition. The roof is thatched with rattan and bamboo. There are no walls in the front and back and hence no windows or doors. The apartment is wide open and anyone passing by can look right into it.

These houses are firmly constructed and can easily support several hundred tenants. Each room is equipped with a fireplace where the cooking is done. Sometimes the cooking is done beneath the house and if it is not too damp or wet outside it will be done in the open. The majority of these apartment houses are back from the river. However, some are right on the river bank and for this reason are built on very high stilts as a precaution against the flood waters.

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PROBOSCIS MONKEYS

Early the next morning we sent our pilot, Jim Laneri, to reconnoiter with the plane and to report back. Jim reported that there were stupendous jungles, forbidding wilderness, and a maze of winding waterways along the truson that we were planning to follow. He doubted that the raft could get through. Martin discounted the peril, so on our way we went, upstream, into the jungle. The Chinese junk was pressed into service for the river voyage. We were on our way with our Malayan crews, by junks, river raft, and gobong. The Malayans are great paddlers, with marvelous endurance and stamina.

Going up the river we passed a few native houses that were built on stilts, safe from the reptiles and the floods. They were excellently concealed and hardly noticeable from the water. Had it not been for the binoculars I was using at the time, I doubt that I would have seen them.

As we traveled along, the jungle became more dense, but we still believed that we could make it with the junk. It was our opinion that the junk could go anywhere the raft could. Ahead was an almost impassable jungle, but on we went. We were in quest of the rare proboscis monkey. We were going deep into his forest lair in the dark backwash of the Kinabatangan River.

The water became shallow, too shallow for the junk. We anchored it, transferred the necessary equipment from it to the gobongs, and then left it in charge of some of the boys. The water was getting shallower, and so we had to anchor the raft. We transferred the material on the raft to the gobongs and left some of the boys behind to guard it. The gobongs were the only boats that we could use. So now it was paddle and song, the Kinabatangan boatman's song. It was weird in its high-pitched tones, but always with a rhythmic beat that kept time with the paddles as they flashed in the dark waters.

The farther on we went along the narrow truson, the hotter it became. It seemed that no breeze could get through the lowlying branches of nipa palm. They formed an archway over the water and became still lower until, for hours on end, we had to crouch low in the gobongs in order to avoid being scratched by the branches.

We would stop every so often because of the pain from crouching and would cut an opening in the jungle where we could stand and relax our muscles. At the same time we would cut some water vines and refresh ourselves with a nice cool drink of water and mop our brows. The water inside these vines is always ten to fifteen degrees below atmospheric temperature.

Whenever we would cut through the overhanging branches

and vines, a million ants would fall out. They would get into our hair and down our clothing. They were red and had a sting worse than a hornet. They would not only fall out of the branches when we cut through them but also when we accidentally knocked them out of their nests as we traveled along.

We were stopping so many times that I decided that something had to be done about the situation. I had my boys paddle me ahead of the rest of the safari. When we came to a small beach I had them stop and cut away some of the surrounding jungle so that we could camp there. When my husband arrived I persuaded him to camp there for the night so that he could stretch out in comfort. He agreed.

The natives beached their gobongs, made their campfires, and cooked their meals. After making sure that all was secure for the night, I cooked Martin's dinner over some of the hot embers left from one of the native fires. The boys watched me carefully and with curiosity as I used the different pots and pans. They were not accustomed to seeing anyone cook in such a manner. To them, this was something very strange. To our regular boys this was nothing new, but to the natives whom we had just taken on it was strange indeed.

It was our policy to take on new crews as we went up the river. The majority of these were raw savages, some of whom had never strayed more than a mile from the safety of their village. Most of them had never seen pots and pans before. They stood around in awe and watched me go through the entire meal. They must have thought that it was some type of white man's magic. This did not disturb Martin, however. While they stared in amazement, he ate and enjoyed his meal. He told me that were it not for the hot meal and the opportunity to rest he would not know what he would have done. He said, "Osa, you know I think a nice, hot meal can do more for a tired, exhausted man than anything in the world."

We pitched our tents and the natives erected their temporary huts. This was a simple matter for them since they merely removed the top covering from their gobongs and erected it on the ground. The gobong is nothing more than a dugout which has vertical poles from which a roof is suspended. The roof is made of bamboo and rattan and slopes down from the center of the boat toward the sides. Just by lifting the poles from the boat and inserting them in the ground, the natives had a shelter for the night. In the morning they would put the roof back on the gobong and then paddle away.

As usual, whenever we made a temporary camp, certain natives were designated to stand guard. This was always necessary in order to protect ourselves from the unforeseen dangers

that might arise during the night while we were asleep.

The night was peaceful and calm although warm and humid as usual. Everyone, including our men, had a good night's rest. It was well deserved by all. The next morning, after a hearty breakfast, we struck camp. It was into the gobongs again and on our way. The river was calm and the weather fine, but the never-ending crouching began all over again. At several places we had to lie down flat in the boat because of the low-lying branches.

Mile after mile, day after day, we continued, always with the thought that we had to return the same way. But the rewards would be great if we found what we were searching

for, the lair of the proboscis monkey.

As the ceiling of trees overhead opened up, we saw increasing numbers of nipa palms. This was an encouraging sign for we knew that the proboscis monkey was fond of the heart of the young nipa palm. The inaccessibility of the site of these nipa palms is one cause for the proboscis monkey being so rare. He lives where his food is located.

After having traveled more than four hundred miles up the

Kinabatangan and having lived for almost three weeks on the raft and in pitched tents along the shore, we felt happy as we came closer and closer to the nipa palms. We were happy because we knew we were getting closer to the home of this rare jungle creature. We came upon towering nipa palms more than seventy-five feet tall. We knew that somewhere in there would be the proboscis monkey. One of our guides told me that we had indeed arrived at the place where the old Murut native had said the proboscis monkey lived.

As we were moving along, we heard gruff, guttural sounds, like a child crying to be fed. We had never heard that sound before. Martin was sure that it was a proboscis monkey and, sure enough, there in a tree was a baby proboscis, crying.

With its mouth wide open, it shook and shook its head.

We beached the boats and stepped ashore. Martin and the boys brought the camera equipment. We went into the forest of nipa palm and did not have to go very far before we found more of them. Above us, high in a tree, was a mother with her youngster, looking down at us. Once again nature gave an animal a coat of fur that blended in with its habitat. From a distance these monkeys could not be seen, but close by they were easily visible to the naked eye. Martin set up his cameras and photographed them. This was the first time that the proboscis monkey had ever been photographed in its native habitat.

From behind we heard some jabbering and the creaking of branches. We turned and saw a large proboscis coming out of the jungle, perhaps the father of those we had already seen. When he saw us he just sat down and stared in our direction. Martin swung his camera around and photographed him. He had long legs and an equally long tail. His feet were enormous and his toes and fingers were twice the size of his palms. His ears were set far back on his head like those of a dog. His eyes were sad-looking and gave a mournful expression to his face.

His nose. What a nose! It was long and bulbous, extending over his lips and down to his chin. Its color was intermediate between the dark beige of his head and the light beige of the rest of his fur. Around his neck was a collar of fur that stood out prominently. Several of these monkeys had collars that were so pronounced that they looked like life preservers. As a rule, the collar on the female is not as outstanding as that on the male.

The females also have long noses, but not quite as long as those of the males. On the female the nose is flat, extending downward to the lips where it curves up to a point. The big males reach a weight of about seventy-five pounds and, like the orangutans, are very paternalistic.

We moved inland a little further and there found a whole colony of these monkeys. Martin named this area "Proboscisville." Few white men had ever been in this area and, before that memorable day, no white woman had ever set foot there.

We saw many of these monkeys sitting about in family groups of two, three, four, and sometimes eight at a time. Here was a dream come true, a whole colony of the rarest of rare simians in their natural habitat. They were there in every size conceivable, large, small, and medium. A short distance away we could see a mother, father, and youngster sitting together. We could tell the father by his large nose terminating in a bulb. The child hugged the breast of the mother so we were unable to tell whether it was male or female.

We had been told before our trip to Proboscisville that no native would look directly at a proboscis monkey, for to do so would bring misfortune to him. Our natives, however, could not keep their eyes off them. They laughed with glee at some of their antics, particularly when one large fellow started to eat a green fruit about the size of an apple. Whenever he bit into it the juice would flow freely down his chin. When he began

to chew it his nose started to wiggle and continued to do so with each bite.

All around us were proboscis monkeys. Some were sitting in the trees, others on the ground, some were walking around while others were eating. We captured several of them and brought them back to our jungle camp with us. We brought back among these, two entire families. They were extremely docile and the two babies in one family would readily pose for Martin. All that he had to do was to put them on a tree branch where they would remain quietly while he photographed them. However, they never seemed to enjoy it.

He put a small female on a branch and photographed her. She sat there as quietly as could be expected. He then placed her sister on the same branch and they cuddled next to one another. Their eyes were always sad and they kept on pining. Two days later they died. They obviously did not want to live away from their natural habitat and pined to death.

The old man of the group soon became listless. He just sat, refusing to eat, determined to die. Martin placed him on the branch of a tree where he remained motionless, staring ahead with a blank gaze. Martin took several pictures of him, showing the sad, dejected, and almost hopeless look on his face. Even when some lights were played on him he did not move.

Martin moved close to him. His breathing was so shallow that we thought at any moment he would take his last breath. We took him down and placed him in the compound with the others. There was not a sound from any of them. That night we put a watch on the compound. They did not move the entire night. When Martin went to look at them the following morning, he found the old man dead. A few days more and all of our proboscis monkeys were dead.

We managed to get these monkeys as far as our camp at Abai, but no further. They do not survive outside of their

natural habitat and for this reason they are not to be found in zoos. We had provided them with everything we could think of, even the transplanting of nipa palms to our village at Abai. But it was to no avail. For them captivity was worse than death.

And so ended our hunt for the rare proboscis monkeys. We found them, but they did not stay long with us.

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A PERILOUS JOURNEY

When Martin had taken all the pictures he wanted of the proboscis monkeys, we went down the trail to where the boats were stationed. We were going to continue our journey up the Kinabatangan River, into the territory of the headhunters.

The river ahead presented a problem. Its waters were shallow and the tall trees lining both sides of it bent over toward one another. Their lower branches extended beyond the middle where they met and interlaced. Covering the branches was a mat of twisted vines, creepers, and moss. The whole entangled mass formed a low ceiling tunnel through which the river ran its course. The branches were thick and gnarled. Some were of the hardest wood to be found in any forest, and it was

impossible for us to hack through it with our parangs and knives.

All of this meant that the junk had gone as far as it could. It could not sail in such shallow water and certainly could not pass through the tunnel nature had formed.

Once again we had to remove all the necessary equipment from the junk and distribute it among the gobongs. The crew on the junk was left behind after the vessel had been securely anchored. Two natives were sent back to our camp at Abai to inform Jim of the position of the junk. We took this precaution so that Jim could fly over there every so often and signal to us from the air if anything went wrong.

Our raft, which was more like a houseboat, was just about able to get through the tunnel. It was no problem at all for the gobongs to travel through the tunnel since they were well

adapted to navigate shallow streams.

Every quarter of a mile or so we would emerge into the open and have a glimpse of sunlight. We would then move on again into another tunnel with its dark interior. A Borneo turkey flew ahead of us, taking off each time we neared him. As we entered a tunnel he would watch us curiously and when we came out the other end he would be standing there, waiting for us. He continued ahead of us all the way to our destination. It seemed as if he were trying to show us the way.

The natives in our boats wanted to catch him since they relish eating wild turkey. These birds weigh about twelve to fifteen pounds. Most of the meat is dark, but its gamy taste makes it unpalatable to most white men. They abound along the Kinabatangan River where they thrive on a diet of insects. They are capable of flying great distances without resting.

Relentlessly we continued on our way toward the land of the headhunters. For several miles we did not have to go through a single jungle tunnel. As we traveled along, the endless walls of the jungle unfolded before us. The equatorial forest of palms, ironwood, tombesy, bamboo, rattan, and spreading banyan trees was dominated by the monarch of the Borneo jungle, the towering tepang tree. This was some of the most beautiful scenery I have ever seen.

In these jungles nature played some of her weirdest tricks. This was truly the jungle of the undreamable, a jungle that contained many freaks. We soon approached one. It was a tree-

climbing fish!

Many explorers and adventurers have told tales of fish that climbed trees. Travelers into the Orient and India have brought back tales of tree-climbing fish, but none had ever brought back proof of such a phenomenon. They described these creatures in detail and it all sounded like a fable, but here they were in front of us.

We took motion pictures of them swimming in the water and then crawling up on land. For the first time we produced actual proof of their existence.

These creatures are real fish and not a form of tadpole or lizard. They are precisely the same order of life as the trout, bass, and catfish. By use of a combination of fin and scale movement, they travel up on land and climb the branches of trees. They are about a foot in length and are brown in color. The two finlike structures which extend from each side of the body are used to propel the fish in the water and to assist it in moving about on land.

They are good to eat and the natives enjoy them. They cannot live long out of water, neither can they live very long in the water. They have become adapted to the special conditions of the Borneo jungles. Here sudden floods overflow the banks and leave the fish up on land.

We caught some and placed them in specially constructed

tanks which simulated as much as possible the environment of their natural habitat. After several weeks in their new homes, they died. We tried several more times before leaving Borneo, but like so many of the other creatures of these jungles they could not live away from their natural habitat.

This, in the opinion of some, is the probable way that terrestial beings came into existence on this planet. The swarming life of the ocean creeping out on the land; fish accommodating themselves to live out of water. One can imagine how, in eons to come, these paradoxical creatures may lose the way of the water altogether and develop into creatures of the land.

We continued our expedition into the land of the headhunters. Deeper and deeper into the jungle we went, through tunnels of nature like dank caverns, over the glossy water of the river of the nether world of Dante's Inferno. Here we found no light fantastic mood of tree-climbing fish. Instead we found rocks, barren rocks, spotlessly clean. On them are bamboo poles with loose grass attached to the tops. We found them every hundred feet or so. Sometimes it was a group of rocks, sometimes a single rock, but always clean and with a pole and grass.

Inquiry among the natives revealed that these were sacred rocks. It was taboo for anyone to touch them. The natives said that every night the good spirits visited the rocks, cleaned them, and put up new poles with grass in order to drive away the evil spirits. They warned us that it meant death to defy

this law of the jungle.

How these sacred rocks were kept clean I do not know. Other rocks along the river were dirty and covered with a layer of moss and slime. We did not see anyone near these rocks at any time during our expeditions. It seems that it was just one more of the mysteries of the jungle.

This story so fascinated me that later in the day when we

made camp I asked some of the boys if they knew the facts about these rocks. One native, who was older than the others, told me a tale about these sacred rocks. He was one of the Malayan members of the expedition. He said that his father had related the story to him many years ago.

According to the story, one of the natives who lived in a village along the river committed an act forbidden by the law of his village. What his crime was was not revealed, only his punishment. The chief and the tribal council banished him to

live alone in the interior.

The native in question had a wife and two children below three years of age. He loved them very dearly and did not wish to leave them. He appealed to the chief and the council again and again until they finally gave him the alternative of

appeasing the gods by making a sacrifice.

Knowing that he was in disfavor with all the natives of the village and burdened with the shame of his crime, the native placed his wife and children in his gobong and started up the Kinabatangan River. He passed two sacred rocks and when he came to the third he stopped. He placed his two children on the rock, and then, getting out, took his wife with him. With the four of them standing on the sacred rock, he asked his wife to jump into the river with him. She balked. She wanted to live, but he did not. He grabbed her by the wrist and jumped into the river, dragging her along with him.

The two children remained on the rock for several weeks without falling off. How they are none of the villagers knew or would tell. According to their legend, the gods were so appeared that they fed and cared for the infants by night until a presing gobern remained the second several than the second second several than the second secon

passing gobong removed them from the rock.

When the children grew up they could always be seen going up the Kinabatangan River to pray at the sacred rock for

the sacrifice that their mother and father had made for them. In time they died, but their spirits can be seen, according to the tale, praying in the moonlight at the same rock. It is said that every night they travel from rock to rock, cleaning them and placing on them the omen of the bamboo pole and the rattan grass.

Legend has it that no one but these sacred spirits are allowed to touch these sacred rocks. To defile one of them would mean death within a few days. No native, whether from the coast or the interior, will touch one of these rocks. So strong is the belief in this legend that, even though no spirit will directly kill him, the anguish in his own mind for having violated the sacred rock will result in his death. If a white man touches one of these rocks nothing happens to him because the effect on his mind is totally different. This is one of the strange things about the jungle and the minds of the men who live there.

On several occasions I have seen natives die for having violated a taboo. I have seen it in the Congo, in East Africa, in the Solomon Islands, among various tribes of savages and headhunters as well as among cannibals. No one touches them and no poison is given to them. The reaction of the mind and the control that it has over the body is so intense that the violator of a taboo gradually dies within the specified period of time. We found the same sort of taboo in these sacred rocks along the Kinabatangan River.

After breaking camp the next morning we continued on our way and, after a short journey, found that the long arm of the river, this meandering truson, had taken us to another of nature's curiosities. Borneo's streams and rivers, salt marshes, inland extensions of the sea, and brackish estuaries are the spawning grounds for a peculiar freak of nature, tree-growing

oysters. The natives collect these oysters as if gathering fruit,

by lopping off branches clustered with them.

In order to harvest these oysters, three natives will go out in a single dugout. While one does the paddling, the other two, equipped with knives, cut the tree branches that contain clusters of oysters. These oyster-bearing branches are then thrown into the boat until it is filled to capacity. The occupants of the boat then paddle back to their village and throw the branches to the natives on shore who then remove the oysters from them.

As the natives have no means of keeping these oysters for any length of time, they usually eat them right on the shore. The gatherers make several trips until everyone is fed. They reserve the last boatload for themselves and then eat their welldeserved fill.

When our water safari reached these oyster-bearing trees, two of our boys, led by Utar, insisted on getting oysters for the entire group. As they handed the oysters to us we opened the shells and ate them. They were refreshingly cool and delicious.

Actually, these oysters do not grow on trees. With the rise and fall of the tides, branches are submerged at high water and at this time the bivalves cling to them just as they might to a sunken rock. When the water recedes they are left high and dry out on a limb. While on these trees they do not die; rather they grow and flourish. Nature has adapted them to a tree-growing life.

On we went, further into this strange land. By the winding river we were able to explore the oddest corners of Borneo. Now we were on an excursion to another madcap phenomenon of this isle of the incomprehensible. On and on we went, through the unyielding jungle, the tropical rain forest that chokes this equatorial land. Ahead of us were vast caves which provided a luxury for a Chinese banquet. These stupendous grottoes yield treasures for celestial feasting.

The dark yawning cavern that opened in front of us was two hundred feet high. Inside the mouth of this cavern the ceiling rose to four hundred feet. We stopped the boats on a small beach and prepared to ascend the steep incline that led to the cave. On the way up it began to rain and continued to do so for the rest of the day. There were no pictures this day, only rain and mud. We entered the caves in order to get out of the rain. The odor inside was not pleasant and it made me nauseated. That night we camped nearby, pitching our tents in the mud. What a place to be in!

The next day we were able to get some excellent pictures after the rain had abated. From the inky blackness within the caves, the outside world seemed a picture of dazzling brilliance. Through an opening in the top the sunlight fell through like rays streaming through the high stained-glass window of a vast, majestic cathedral. Looking through the entrance from inside, we could see the melted gems of sunlight that seeped through the leafy forest roof at the entrance of the cave. They splashed upon ribbons of gaily colored moss, kissed the cheeks of the flowers, and polished the wings of the fluttering butterflies outside. Hundreds of swifts, dressed in striking coats, flitted about, fought, scolded, and sang and then entered the cave. A lazy snake, sunning himself at the edge of the entrance, looked like a heathen image of burnished porcelain.

The stupendous limestone grotto was virtually a hollowed mountain. Its opening could be easily seen in the jungle, looking like a black stain on a green garment. Upon entering it we were immediately struck by its enormous size. It towered above us with jungle vines hanging down like a curtain fringe over the entrance. The inside was full of damp darkness and

fluttering noises whose echoes bounced from wall to wall. Now and then we heard a squeal piercing the darkness as some creature was killed by a stronger adversary.

The floor of the cave was a quagmire and the ceiling a canopy of dripping moisture. The walls and the ceilings were ridged with a series of almost longitudinal indentations worn in the rock formations by centuries of slow flowing moisture. Hanging from a rocky shelf high above the floor was a rope ladder used by the natives to climb up to the shelves that nature had formed around the inner surface of the cave.

Millions of birds lived within this blackness. They were swifts and certainly deserved their name. They were like streaks of cloud as they winged their way in and out of the caves. Predatory birds find a bounteous hunting field here and we saw hundreds of hawks preying on the swifts. Millions of swifts would fly out of these caves each morning and millions of bats would fly into them. The latter prey on the swifts and their nests.

Mankind also preys on these birds. It is from the nest of the swift, laboriously and carefully built, that the Chinese make bird's nest soup. Twice a year the government permits the natives to plunder those caverns that contain the nests of this bird. The trade is strictly regulated and is the second largest one in Borneo. The take from one expedition into one cave may well run over \$100,000. The government and the natives share this equally. A government inspector grades the nests for quality and that provides many a loud Borneo argument between the inspector and the natives.

The birds cement their nests with a kind of mucus saliva. This saliva consists of a tough, gelatinous, translucent substance that exudes from the mouth of the bird as he builds his next. It forms the essence, the prime ingredient of the Chinese soup. The natives believe that the substance of the nest is

dried sea foam which the birds carry to the caves from the ocean. White nests are best since they do not contain any feathers. They have been sold for as high as \$30 a pound. They are gathered three times a year. The black nests, which contain feathers, are gathered twice a year. The blacker a nest is the more feathers it contains, causing it to be sold for as much as sixty cents a pound. During the harvest of these nests, the natives live in small roofless huts which they build inside the caves. Sometimes two to three tons of these light-weight nests are taken from a large cave in an annual gathering. Plundered as they are from these defenseless birds, they are epicurean tidbits for the banquet tables of distant China.

Further on inside the cave we saw what looked like a silver road leading to an underground passage. Moving closer to it, we found that it was a river of guano reflecting the sunlight streaming in from above. Flying high above the river of guano, through the rays of sunlight, were huge bats. They caused shadows to fall on the silver stream below, shadows that moved in their never ceasing movements from one side of the river to the other.

These bats were black, awesome-looking creatures. Their flight within the caves formed a kaleidoscope of motion. The only noise they created came from the flapping of their wings.

Their bodies were about the size of squirrels, but twice as long, with wings that spread out on both sides. Their wingspread from tip to tip was about three to four feet. When they slept in the trees, they would hang down from the branches by their feet with their wings folded in close to their bodies. We saw hundreds of them sleeping in a single tree. A large tree, with sleeping bats, looked like a Christmas tree covered with big black bulbs and ornaments. This reminded me of the same type of bats that I saw when we visited the Solomon Islands.

When we returned to our boats, we found that the current had become very strong and that the waters had risen considerably. So strong was the current that the gobongs had to be moved by pushing the poles along the bottom of the river. Every so often we had to stop and rescue one of the boys who had fallen overboard. Many an hour was lost in such rescue operations but, fortunately, this time we did not lose a single boy.

The current was so strong that we had to fight for hours at a time. When you buck the Kinabatangan you fight every foot of the way. We kept going for we were on the last leg of

our perilous journey.

At times the river was so low that some of the natives would get out of the boats and push and pull against the rapidly moving current while in the water. In some places the water was just high enough to get the boats over, but this was only when there was no rain. When the rains did come, the water in the same spot where the natives had once walked ankle deep would be well over their heads.

We never could decide which was worse: too little water with the natives pushing and pulling or too much water with its strong current and possible crocodiles. Oftentimes the stream was a series of cascades and seething rapids while in other areas it and the surrounding land leveled out. We passed wide sandy flats and marshes, but for most of the journey we saw only water and the thick jungle along the river's edge. In some places the river was almost a quarter of a mile wide, but in others it was so narrow we could barely get through.

We rounded a bend in the river and suddenly, without any warning at all, the noise of the jungle ceased. Neither the screech of a bird nor the caw of a crow nor ever the rattle of a tree branch could be heard. The air all about became heavily laden with silence. A deathly pall hung over the jungle. Mar-

tin signaled to stop, and our paddlers did so, remaining very silent. With the poles held firmly against the river bed to prevent the boats from floating downstream, everyone remained quiet.

The only sound that could be heard was the rush of the water against our stationary boats. What could it be? We all held our guns in readiness, for we knew that such silence in the jungle is brought about only by imminent, lurking danger or death. Looking and searching the walls of the jungle inch by inch, we could find nothing to account for this ominous silence. I picked up my binoculars to get a closer look at the entangled vines and trees, but could find nothing.

Suddenly everyone was ordered to pull over to the shore. Martin had discovered something. He looked through his bin-

oculars, intensely interested.

"What is it, Martin? What are you looking at?"

"Just take a look, Osa," was his reply as he handed me his binoculars.

"I've got my own glasses," I said. "Where are you looking?"

"Just at the top of that hill," he answered. "See that big cave there. There must be something in there."

I looked and saw a large cave amidst a forest of mighty trees, laced together with twisting vines, creepers, and heavy clumps of moss. I saw in the cave what appeared to be many long boxes piled one on top of the other. They were not arranged neatly, but just piled haphazardly as if whoever left them there had done so in a hurry.

"Let's get a better look," said Martin as he prepared to leave the boat.

He grabbed his camera from one of the beached boats and was off into the jungle and up the hill with me not far behind him. We soon learned what it was as we neared the mouth of a cave. It was a native burial ground, a place sacred to the na-

tives, for here lived their ancestors. In this region the birds, beasts, snakes, and natives were quiet, as if out of respect for the dead who were the only inhabitants of these caves.

Perhaps it was the odor of death permeating the air, discernible to the birds and beasts, but not to us, that created the silence. It is a known fact that all wild creatures have a keen sense of smell. This is of vital importance to them since it helps

in avoiding danger and in finding food.

Our climb up the hill was not difficult for the trail had been well beaten down by the many funeral processions that had obviously followed the same path. While Martin and I climbed the hill, the native members of our crew remained behind. For them to visit such a cemetery, except at the time of a burial, would be an act of desecration for which they would be punished and for which they would have to atone to their ancestors and their spirits.

Because we were white and not native, this punishment did not apply to us. But, by the same token, this did not give us the right to remove anything from the caves. We were told, however, that we could photograph these caves without any

harm coming to anyone.

I had read of the various rites that the different tribes along the Kinabatangan had for the burial of their dead. I had also read about the different types of burial grounds and cemeteries that these tribes possessed. Throughout the jungles of the world I have seen many burial grounds, but this one was the strangest of all.

In these caves which are above the ground, hollowed out of the side of a mountain, the dead were piled in wooden caskets, one on top of another. Every casket had a handle at each end for the convenience of the pallbearers in carrying it to the burial grounds. No covers were present and thus the caskets were open at the top at all times. We examined many of them, but each and every one was empty. Although the stench of decaying bodies was all about, there were not even bones remaining in the caskets.

Being curious, I said to Martin, "What do you think happens to the bodies after they are placed in here?"

"Oh, I suppose some carnivorous animal finds its way down here and eats them."

"But there are no bones!"

"Of course not," was his reply. "They are evidently carried off into the jungle by the animals."

Inside the cave we found caskets so old that they had fallen into decay. Many others were turned upside down. The cave extended back for several hundred yards and we found that the caskets at the entrance were the only ones piled on top of one another. Those inside were carefully laid out on the floor. I certainly received the impression that whoever had placed those that were in the front of the cave had done so in a great hurry and with an obvious anxiety to get away from the place. I cannot say that I blamed them. The atmosphere inside was heavy with the smell of death.

We noticed several gongs inside the cave. They were exquisite in appearance and one look at them told you that they belonged to a departed tribal chieftain. Looking closer, we noticed that each gong had been cracked so that it would be muted from then on. Inquiry among our native boys revealed that the gongs of all chiefs are cracked and buried with them. The reason for this is that the sound from a chief's gong is unlike that from any other and, if somehow it were to get into the hands of an unfriendly tribe, it might be used against the people.

Not quite understanding how a dead chief's gong could be used against his own tribe, I pressed our boys for further information. They told me the story of a chief who ruled a tribe along the river many years ago. This man was so kind and good that he soon became chief of several neighboring tribes. It was his custom to summon the tribes together by sounding his royal gong. On hearing the gong, the warriors would all assemble at a designated place to receive the instructions of the chief. Those instructions would either pertain to defense against a nearby warlike tribe or to plans for the waging of war against an ancient enemy.

During the course of time a great battle took place and the tribe was victorious. After returning to their villages, the warriors set about healing the wounded and preparing for a period of peace. Suddenly, out of the night, they heard the boom of the great chief's gong. All of the warriors left their villages and assembled at the village of the chief. He was surprised to learn that the war gong had been sounded since he had not ordered it. He directed the warriors to return to their villages.

When the warriors returned they found that their villages had been burned and sacked and their women and children taken off into the jungle. They then knew that they had been tricked by their enemy who, during the night, had stolen the chief's gong. Having deployed their own warriors against the villages, the enemy had sounded the war gong, knowing that their adversaries would leave the villages and go to the chief.

So great was the devastation that from that time on all the gongs were always closely guarded. Whenever a chief died all his gongs were cracked and silenced and buried with him. In this way they could not be used by the tribe's enemies.

We were also told of the ritual of other tribes who, upon the death of a great chief, will kill the first child born in the village. This is done since it is believed that when a chief dies his spirit returns in the form of the first born of the village. They kill the child in order to prevent such a great spirit from roaming about and being captured by enemy tribes while he is so

defenseless. If they did not do this, he might be captured and subsequently grow up to lead the enemy tribes against them. They feared having their enemies led by such a great and

clever man as their departed chief.

Our native boys also told us that after a burial in these vaults, the women of the immediate family blacken their faces and then set about killing a pig. They will then build a small raft and place the dead pig on it. They then put a small bamboo pole on the front of the raft and attach a piece of calico to it. This acts as a sort of mast and, at the same time, resembles a

They will then go into a weird jungle chant and a rhythmic dance to the point of exhaustion. After the dance they place the raft on the Kinabatangan River and let it float out to sea. This is done to appease the gods and spirits who have taken the departed one and to thus prevent any more of the tribe

from dying.

After returning from the cavern mausoleums of the Borneo jungles, we set about continuing our journey upstream to the headhunters. It was far, far upstream and the farther we went, the higher became the elevation. The river rushed at us like a cataract. It was hard going and we could scarcely make any progress. Every ounce of strength was needed to drive an inch forward. Sometimes we did not go forward at all, but were swept backward. There was too much current, too much swirl. We just could not make any progress in battling the river. The boys got out of the boats since the water was shallow. They pushed and pulled. The rushing current almost knocked them down. Soon the current slowed down a little and all backs bent to the oars and poles. The boys in the water jumped back into their boats. Forward we went, slowly but surely.

Far down the river where we had built our village camp,

seven natives were taken and eaten by crocodiles while we were away. But when we got upriver, the natives said that there were no more crocodiles there. They told us that crocodiles did not like swift water nor did they like water that ran over rocks. When they readily jumped into the water to push and pull the boats, we felt that they knew what they were talking about. That was fine, but ten miles above that spot we saw one of the largest crocodiles we ever saw in Borneo. I certainly would not walk in that water, as the boys did, for anything in the world.

Usually people run away from headhunters, but here we were, struggling with everything at our command to get to them.



AMONG THE HEADHUNTERS

The black curse of this land has been the gruesome pursuit of human heads. That is what gave the island its reputation and created the legend of the "Wild Man of Borneo." British and Dutch authorities have struggled for years to stamp out this dread practice in their districts. Headhunting is severely punished, yet it has gone on for hundreds of years, and I wonder if they will ever be able to abolish it. From what I have seen, I doubt it. Secretly, the old custom still goes on in the remotest parts of the interior of the jungle.

After a terrific and exhausting struggle against the Kinabatangan River, we found ourselves in real headhunter territory. It was the home of the Tenggara tribe. The villages of this tribe were built high up, near the source of the river. When

the river below was occupied by piratical or enemy tribes,

they would move to the nearby hills.

Their homes were very large, each one capable of containing over two hundred persons. They were built of rattan and palm leaves with bamboo poles for main supports. A village or a town might consist of fifteen or twenty such houses. Many families resided in one house. They were separated from one another by only a slight partition of mats, hung from the roof to the floor. Here they took their meals and employed themselves without interfering with each other. Their furniture and personal property was simple. It consisted of a few sleeping mats, cooking utensils, and weapons.

Quite a few explorers have gone into the jungles of Borneo and have returned with tales that they have heard about the headhunters, but have they gone into their remotest lairs? No, they have not and if they did, they have never returned to civilization to tell their story. Here I was, the first white woman ever seen by these headhunters, right in the middle of their village at the headwaters of the Kinabatangan River in

the heart of the cruel jungles of North Borneo.

The Tenggaras were of evil notoriety as cranium snatchers, but they were not cannibals. They were trained fighters who, like the American Indians of old, liked to display their skill at fighting by exhibiting their victims' scalps on their parangs. They performed their rituals openly. Today it is assumed that they have been stopped by the civil authorities, but Martin and I knew differently for we were there. They have been curbed, but not stopped. Today they do not hunt heads openly as they did in days gone by. They are very crafty and perhaps the white man has taught them to be so.

In the past, as today, the headhunters of North Borneo were good natured and apparently peaceable people. This was

so unlike the pirates that the contrast was noticeable at once. They are timorous, almost cowardly, and were it not for headhunting, one could almost say that they are nice people.

Our experience in other headhunter territories had taught us that one never knows when these people are getting ready

to lop off a head.

One minute they are quiet, the next they are foaming at the mouth, with a wild savage look in their eyes. That is the time to leave them! If you do not leave them then you may have your head hanging in one of their secret head huts, while your

scalp decorates a native parang.

Here we were in the middle of their village. There was no retreat now, for coming in our direction was the chief of the tribe. Would he be friendly? We hoped so. Yes, he would be friendly, for he saw that we had some gifts for him. He was not to be outdone by this white man and woman, so he turned around, went back to his house, and returned with some gifts in his hands. He could not let us give gifts to him without returning the favor for, after all, he was chief, king emperor, and monarch of all around him.

When he came to within two or three feet of us he stopped, bowed down, said something which we did not understand, and then took out a parang which he slowly waved across my throat. He then smiled. He presented me with the parang. For a minute I thought that my head would go. Martin had the same thought, but remained calm.

The chief then examined our teeth which, being white with straight edges, were quite unlike those of the Tenggaras. The teeth of his women were black and his own were filed so that each one came to a point. He was obviously puzzled. Some may wonder why I did not run at this point. Not only would it have been useless, but to run in the face of danger in the 180 M Last Adventure

jungle is the mark of a coward. How far would I have gotten with the others all around us? To stand still, which I did, is a

mark of courage to the native.

Whatever one is thinking about at such a moment, he must let his intelligence control his actions. One's thoughts must be subdued. By standing still, I won favor with the chief of this headhunter tribe. He did not know I was afraid. Had he known, I think my head would now be somewhere in the interior of those jungles.

I was then subjected to the usual scrutiny whenever a savage native sees a white person for the first time. I had been through that experience before in Africa and among the cannibals and headhunters of the South Sea Islands. They fingered my hair out of pure curiosity and rubbed the skin on my face and hands to see if it would come off. Although it was unpleasant, I had to let them do it.

The parang that had been presented to me had obviously been used to cut off a head, and perhaps more than one, since several long strands of different types of hair were hanging from it. There was also some hair hanging from the sheath into which the parang fitted.

According to Tenggara custom, whenever a parang has cut off a head, the strands of hair from that head must be attached to it; otherwise the good spirits will no longer favor that parang with success.

The chief then called everyone about him and ordered a feast in our honor. A large fire was built and food cooked over it while the natives danced and drank. The dancing was weird and fierce-looking and the singing was in a high-pitched chant. They cooked several monkeys and then served them.

The Tenggaras love monkey meat. I understand that it tastes just like veal, but neither Martin nor I had any inclination to try it. The natives, however, ate plenty. The drinks

that were served were a fiery rice wine and a real knockout toddy made of palm juice. When they drank, they sang. When they started drinking they looked hardly fierce enough to be headhunters. But the hideous custom of headhunting was not the result of warlike ferocity. Rather it was the result of superstition, to propitiate evil spirits and the supernatural. They worked themselves up to a headhunting frenzy by superstitious rites, traditional chants that were handed to them down through the centuries, and by drinking palm toddy and rice wine.

They celebrated for days and the toddy and wine flowed freely. But the rains came before the party was finished. It rained continuously and everything that was not wet from the rain was wet from the humidity. The jungles about us were steaming with dense clouds of moisture that rose up from the ground and met with the rain pouring down from above.

In the Borneo tropics, rain is rain. Only a complete diving suit is adequate to keep one immune to the amount of rain that comes down in a matter of minutes. Even then, unless the diving suit is air conditioned, the heat of your body will drench

you in perspiration.

We had been in the village of the Tenggaras about six days when Martin was stricken with a recurrence of malaria in the middle of the night. He had originally contracted this disease during the days that he sailed the South Seas with Jack London. The dampness and rain had been too much for his body. He was lying in his cot in our tent when I heard him moaning and groaning. Looking over, I saw him writhing in pain. I immediately arose, went over to him, and felt his forehead. He was burning with fever.

At that moment began, without any advance warning, my fight against that unseen enemy, malaria and all of the powerful and wild elements of a jungle gone mad. I tried to talk to Martin, but his answers were not intelligent. He was delirious from his high temperature. I was gripped with terror. The rain outside the tent was coming down in torrents, forcing streams of mud inside, along the canvas floor. If I did not do something in a hurry, I knew that the inside of the tent would be flooded. The thunder clapped and the lightning rent the black clouds that were massed overhead. The wind howled and increased in violence until it reached tornado violence.

I awakened some of our boys and had them secure the tent with some more rope spikes. I then put them to work shoveling the mud and water away from the tent in an attempt to keep it as dry as possible. I knew that I had a very sick patient on my hands who was desperately ill. His temperature rose to between 105° and 106°. I was petrified. There was no doctor about except some witch doctors. I had to be both doctor and nurse.

Martin was a big man with broad shoulders. In stature he was six feet, two inches tall. I rolled him in blankets and gave him what quinine I had at hand that had not been ruined by the rain. Then began the changing of cots. As Martin's became soaked with perspiration I moved him to mine. The blankets were wet through and through. I gave him mine which were dry and used his wet ones for whatever benefit my body could get from them. I put cold towels on his forehead and gave him massages.

When one of these malarial attacks began he needed about twenty grains of quinine each day in order to break the fever. Rain had seeped into our medicine kit, and the cardboard boxes just fell apart. The wooden boxes and trunks were filled with water that had seeped into them. All of the quinine and the other medicines were ruined. I broke down and cried. For the first time in all our wanderings through the jungle I almost

became panic-stricken, but Martin's groans steeled me and

kept me going.

It was a frightful night waiting in that strange place for unknown things to happen. All about us were savages and headhunters. We were in the heart of the jungles and it was night. The rain came down like a deluge that threatened to inundate the entire village and sweep it down the hills into the raging river. And here was my husband, lying on his back in a helpless state of delirium.

The thunder and lightning was such as can only be seen and witnessed in the jungles of Borneo. What to do? Would the attacks continue? If so, for how long? When would the rain stop? Could the expedition continue, or would this be the abrupt end of it? Would Martin survive this ordeal? These and a thousand more questions raced through my mind.

I went from box to box, ripping them open, looking for some more quinine. Time after time I opened a box that had some in it only to find that the rain had ruined it. Before leaving we had carefully labeled each box so that we would know just where each item was when we wanted it, but now the rain had ruined all our plans. All of the labels on the various boxes were ripped off by the cascades of water coming down, and thus I could not tell which boxes contained quinine. One box looked just like the next one. There was only one thing to do and that was to open every one of them until I found some dry quinine, if any was left.

After what seemed like an eternity, I found a dry box. Tearing it open, I found a small quantity of quinine. It was not enough to pull him out of danger, but it would give him some relief and for that I was thankful. He took the quinine that I ministered to him while taking his pulse, trying to cool his forehead, taking his temperature, and trying to keep him as

dry as possible. This process was repeated over and over again

during a night that seemed endless.

Above the roar and splash of the rain I could hear the jungle noises of the birds and beasts of the forest. Outside it was pitch dark, except for those times when the lightning would light up the darkness. Whenever the lightning and thunder would stop, the night would become still. Then, piercing the darkness, could be heard the discordant notes and screams of animals that sounded like yelling legions of devils as they fought for survival.

And then the lightning again, forked lightning, as if it were held in the hand of Satan and pointed at me as it slashed its way through ribbons of rain with the chaotic cloud-wracked skies thundering their approval. The jungles seemed to shiver in colors of green, yellow, and red as they reflected the light from each streak that lit the earth around us. In the tent the only light came from the Coleman lamp that hung from the center pole.

When the lightning flashed it gave a gray, grim look to the trees as they were momentarily silhouetted on the inside of the tent. This was followed by sharp claps of thunder that caused Martin to become restless. And again the silence came when the birds and beasts ceased their noise. They would then begin again, and again the lightning and then the silence. Over and over this pattern of sound repeated itself until I thought that it would never stop or vary.

I had a grave decision to make, and I had to make it without further delay. I had to get those sounds out of my mind or go crazy. Did I dare take a chance and at once start back to camp with Martin? I knew I could wrap him carefully in blankets and clothes, but it would mean travel by land in that torrential downpour. The river was too high. It was swollen and plunging downward like a cataract. To travel by boat was impos-

sible. If it were to capsize it would mean certain death for Martin and me.

To stay in that tent with the quinine gradually wearing off, and with no more on hand, would also mean disaster. Would that infernal rain never stop? The natives seemed to sense my predicament, for they went into a tribal ceremonial dance to the vulture. This, they assured me, would bring about the cessation of the rain for many hours.

It was a strange sight that night, watching some of the natives shoveling the mud and water in order to keep it out of the tent, while others, half naked, were gyrating in a strange, weird dance step. They uttered a jungle chant or prayer, the likes of which I had never heard before and have never heard again.

Through all of this, Martin was delirious and did not know what was going on. The natives, their brown skins covered only by small loincloths, raised their heads and hands toward the tops of the trees. As they pounded their feet on the soft clay, the rain rolled off their bodies which sparkled as the light from the lightning played on them. As their feet hit the earth, the mud sucked at them, held them momentarily, and then let go with a sploshing sound.

I started to become nervous after hearing their continuous chanting and dancing for more than an hour. It was getting me. I found myself wishing they would stop and in the next second hoping they would not. I was glad to hear another human voice at that time of night, even though in these jungles it was that of a headhunter.

Fantastic as it may seem, I never dreamed in my wildest imagination that I would find comfort in the chant of a head-hunter. But that is just what I did. That never-ending night finally turned into day as the dawn started to break through the overcast sky. It began to get brighter and with it my hopes

became high. At least Martin had come through that dark, dismal night. Some find comfort in the blackness of night, but for me it was as if some evil creature were slowly wrapping itself about us and snuffing out Martin's life.

With the dawn I could still hear the constant, never-ending chants of the natives, intermingled with the cries of the jungle. Then, all of a sudden, the chanting and the dancing stopped, but not the rain. It was coming down just as hard as ever. The natives were moving off in all directions into the woods and I wondered what they were going to do. I called Utar over and asked him, "Where are the Tenggaras going and why are they leaving us?"

"Memsahib," he said, "they are not leaving you. They are going into the forest to get some medicine for you to give to

the sick one."

"But what kind of medicine can they get there, and why didn't they go last night?" I asked.

"No, memsahib, they do not gather medicine for those who are sick at night. To gather it at night will bring evil. To gather it during the daylight will bring good. During the night they dance and sing to the gods for permission to gather the medicine the next day. They have received permission and are

going out to pick the medicine. Soon they will return."

Utar was right, for within a short period of time I could hear a babble of voices outside the tent. Looking out, I saw the chief medicine man mixing some herbs, berries, and small shrubs with some strange substance. While doing this he uttered some incantation which I could not understand. When he finished he offered it to me. Martin's fever was high and his pain agonizing. I looked at Utar. As if reading my thoughts he said, "Look, memsahib, I will eat some. It will not hurt. It will do good."

Testing it myself, I detected the familiar taste of quinine



A boat race, Borneo style. Dyak contestants paddle their swift gobongs over one of the many log obstacles that have been placed in their path. In the background a group of Murut headhunters cheer the contestants on to victory.



The Spirit of Africa and Borneo takes off for Sandakan with a shipment of thermos-packed movie film. From there it was sent by air mail to the United States for developing.



Two headhunters try their skill at operating one of Martin Johnson's motion-picture cameras. The native on the left has a fire-making apparatus suspended from his waist—two pieces of bamboo with slender cores of flint.

Martin and Osa Johnson converse with a group of timid Tenggara women. The style of their hats strongly indicates that Chinese influence was present even in this remote corner of Borneo.





This is the historic first photograph of a proboscis monkey in its natural habitat. Few of these animals have survived in captivity.



Abai stares in defiance at the camera prior to his capture. Three days of exhausting effort were required to capture this orangutan, the largest of his kind ever to be taken into captivity.





LEFT: The wife of a proud Tenggara headhunter. Her ears are pierced with beaded wire and her hair adorned with ferns. Her slipover blouse is made of multicolored fibers which have been meticulously woven to create a pleasing and ordered pattern.



Martin Johnson shakes hands with one of the chiefs of the Tenggara. They are all arrayed in slipover shirts, parangs, pipes and turbans for the occasion.

LEFT: Smoking cigarettes begins at an early age in Borneo. Here three girls puff on homemade cigarettes.



This old warrior organized the party of Tenggaras who scoured the jungle for quinine when Martin lay dying from an attack of malaria.

A Dusun chief and his son. The Dusuns are a placid people who have long since given up the pursuit of human heads. They are excellent hunters with the blowgun. Suspended from the chief's right hip is a quiver of darts with its dangling shell-decorated cover.







TOP: Mr. Watt, manager of the Sekong Rubber Estate, examines the twenty-eight-foot python that Osa Johnson and her porters captured on his plantation.

BOTTOM: Osa Johnson tries to appear nonchalant as this ten-foot king cobra rears its hooded head in front of her. This snake was brought into the Johnsons' camp from a neighboring native village where it had been defanged a short while before.

among a lot of other strange tastes. That was enough for me. If in some unknown jungle manner they put quinine into their mixture then it meant that Martin's life would be saved. I gave him some, watched and waited. After several hours his groaning stopped. At least that savage-made concoction was working for pain. Now, would it relieve the fever? After more mopping of the forehead and more changing of his clothes, for what seemed like the millionth time, I noticed that the fever was slowly but surely receding.

I gave him more of the same native medicine and gave it to him for several days until he was able to get up. He was extremely weak and thin, having lost many pounds during his illness. But he was alive! Martin had been saved by the medi-

cine of the savage headhunters of North Borneo.

The clouds were still tossing and merging, some gleaming white, some gray, and some ominously black. The power of the wind then displayed itself as the storm clouds raced across the jungles, eating their way into the distant clouds. The sky was cleared by the magic fury of the storm. The river, however, was still restless and tossed our boats about. As the clouds moved along, the sun peered through and became visible. It was as if an unseen hand was drawing the curtain of clouds aside to let the sunlight appear on the stage of the universe. Off in the distance, on the lower stretches of land, the sky appeared like a gray wall at right angles to the green floor of the jungle.

My job now was to induce Martin to leave that territory and go to the hospital in Sandakan for rest and proper treatment. However, it was several weeks before I was able to get him to do so. In the meantime, he did rest a few days and then went about taking pictures of the different members of the

tribe.

A famous picture that he took was of some Borneo pygmies

that we found at the headwaters of the Kinabatangan River. They were living with the Tenggara tribe. I had not known that any pygmies existed in Borneo. They were dressed only in a loincloth which they made from the bark of a tree. They peeled the bark in long strips and then pounded it with a smooth rock. This rendered the bark soft and pliable like cloth.

For weapons they carried only blowguns. These were much smaller in length than those used by other Borneo tribes. They were constructed in the same manner and with a sharp metallic blade affixed to the end.

These pygmies were only four feet in height, but they were extremely sturdy and could easily climb to the top of the tallest tree from which they would stalk their prey. As far as I have been able to learn, these are the only pygmies ever found in Borneo by a white man, and the pictures we took were the only ones ever taken of them.

Martin was tiring; he was thin, weak, and emaciated. At last he agreed to go to the hospital at Sandakan. But before starting back he visited Ketow, the old Tenggara chief, and told him that he was going back to get some of the white man's medicine. After he had given Ketow presents of rice and salt, he returned to our tent and told me what he had done.

"Osa," he said, "I will go to the hospital at Sandakan and after I have some rest, I am coming back to see Ketow. I must come back, after I have had a rest, so that he will see me strong again. Otherwise he will believe that his medicine is better than the white man's. And this we cannot allow for the sake of those who will come in later years, exploring this region." I knew what my husband meant.

Orders were immediately given to our boys to pack for the trail. With everything in readiness, we said good-bye to Ke-

tow, promising to return shortly. But Ketow said he believed that we would never return again. Slowly we went down the trail to where our boats were anchored. On the way down Martin started to express his gratitude for my having saved his life. I said to him, "Don't thank me, Martin, thank Ketow and his medicine man."

"What do you mean?" he queried.

I then told him what had taken place and how the mixture that was concocted by the Tenggara medicine man had eased his pain and brought down his fever.

"Now, more than ever, I am going back to Ketow," he said.

"But first to Sandakan and the hospital."

"No, siree," I answered, "not back to that insect-infested region with its sticky dampness. This time you were lucky; the next time you may not be."

But once Martin decided to do something, there was nothing I could do to stop him. However, I was thankful that he would be safe in the hospital for at least two weeks.

I stayed at our residence in Sandakan while Martin was in the hospital. At the end of his period of hospitalization, he emerged looking better than he had for many months.

Then on to Abai to check our equipment and animals. Finding that everything had been taken care of by the natives, under Jim's supervision, Martin decided that, on the following morning, he would leave again for Tenggara country. This time he made absolutely sure that he had plenty of quinine and that it was safely packed against water and moisture. Into metallic containers went the quinine. These were then sealed with wax and adhesive tape so that not a drop of moisture could get in or out.

Up the Kinabatangan River we go again, up the rapids to the Tenggaras, but this time there is no stopping except to rest, eat, and make camp overnight. There was no picturetaking of the scenery and no stopping to capture any animals; that had all been done before.

This was a trip to see Ketow so that Martin could thank him and so that Ketow could see the effect of the white man's medicine. This trip was just as rough as before and just as tiring. The boys had to get out of the boats and into the water where they pushed and pulled the boats against the rushing current. Up and up we went, against hundreds of miles of raging waters that took on a foaming white surface as they crashed against the rocks of the river bed. On and on until the Tenggara village was in sight. There, waiting for Martin at the edge of the water, was Ketow. He had a smile on his face, for he had never expected to see us again.

Once again, Martin gave him and his other chiefs some presents of rice and salt. The chiefs responded with a boisterous festival that was more rowdy than the previous celebration. There was more drinking and more freedom among the members of the tribe. Here and there could be seen three-gallon jugs of rice wine, with a "kick" added to them. These jugs appeared from nowhere. There were twenty to thirty of them. Individual drinks were not served to anyone except Martin and me, the guests of honor.

All of the others who wanted to drink merely went over to one of the jugs and drank through one of the two straws that protruded from the neck of the jug. Sometimes two natives would drink out of the same jug at the same time. This did not seem to bother them in the least. Both Martin and I had a strong feeling that this was not sanitary. We were grateful that as the guests of honor we had individual drinking containers that had been freshly made from bamboo.

While the savages were preoccupied with their drinking and dancing, I would pour my drink onto the ground so that no one noticed me. Martin did the same several times, but a few times he had to drink the wine as the chiefs were talking to him. He could take no chance of offending them.

Martin said to me, "Be careful, Osa, this party is really a wild one. They have more wine than before and Ketow wants us to stay much longer. A savage, no matter who he is, under the influence of too much strong drink is something to be carefully avoided."

"Do you think that they are in a dangerous mood?" I asked.

"Not yet," was his reply, "but it won't be long now."

"Maybe a headhunting mood," I answered.

"You can never tell, but we are not going to stay here much longer, whether Ketow likes it or not. If we stay too long we may never be able to leave. This is one place where treachery and death go hand in hand. These fellers are fanatics when they imbibe too much."

Martin's diagnosis of the party and of the natives was correct. This soon became apparent when the chief brought out several skulls which could not have been severed from their bodies very long ago. I knew that if we both tried to leave at once the chiefs would be offended. I hated to think what would happen to us then. I decided that the plane would be the answer. If we had it there it would cause great confusion and enable us to get away quickly.

The problem, of course, was how to get it. Martin and I

looked at one another.

"Martin," I said, "I am going to leave alone with two boys and return by plane so that we can get out of here safely. If the chief asks where I am going, tell him that I am going to get more presents for him and that I will be back. In the meantime, you wait here for me."

The look on Martin's face told me that he approved of the plan. He smiled approvingly and replied, "Okay, honey, I'll wait here until you return, but do be careful along the trail."

"Don't worry, I won't leave you here for long," I told him. I kissed him and, with a prayer in my heart, I left, hoping that I would have time to get back to Abai, pick up the plane, and return.

Down the trail we went, to the river and our boats. This time, with the rapids helping us, we arrived at our base camp in no time at all. Arriving at Abai, I called to Jim Laneri. He came running for he could detect the anxiety in my voice. As he ran, he hollered, "What's up, anything wrong?"

"Come quickly, Jim, warm up the plane. Martin is alone with the Tenggaras and they are drinking heavily. We have to

get there at once."

Without stopping, he ran quickly to the plane. I was right beside him. We both jumped in and, before the engines were barely warm enough, took off. We headed straight for the Tenggara village as fast as the plane could carry us. On the way I told Jim that I believed the water near the headhunter's village was deep enough for the plane to land, but cautioned him about the floating logs and debris that studded the water. I was especially concerned about the many partly submerged logs that I had seen.

We flew above the village and then Jim brought the plane down directly toward it as if he were going to dive into it. He then leveled the plane off and went up again. He did this several times, hoping that it would frighten the headhunters half to death. Our plan succeeded, for Martin told us later that while the Tenggaras were surprised when they saw the big bird winging overhead, they were absolutely stunned and mystified when it swooped down at them and their village.

Jim made a perfect landing on the water. The flying thunder bird made the Tenggaras go wild. They thought that it was the toddy and the wine and that they were seeing things. In all of their legends, superstitions, and evil spirits there was nothing like this huge, winged monster. The devil bird had floated down and sat on the water. They soon forgot about Martin and our boys.

It was the culmination of their celebration, the arrival of the magic dragon. They ran down to the river and jumped in. It was full of Tenggara headhunters and savages. They hovered around it, trying to understand it. Meanwhile, Martin and the boys had reached the boats. Martin sent the boys downstream. They went unnoticed. He waited until they were out of sight around a bend in the river before he came out to the plane. Finally he reached it. Jim raced the motors to scare the headhunters and to keep their minds off Martin. Martin jumped into the plane. It was time to take off. They may have been deciding, in their drunken frenzy, to take the head of the thunder bird, the largest head ever available to a Tenggara. They yelled and shrieked as the motor raced and the plane started to move. Those who were standing on the banks, jumped into the water. Some became so excited that they forgot to remove the pipes from their mouths and the hats from their heads.

It was a strange sight, seeing those headhunters swimming in the water with hats on and pipes in their mouths. They swam as fast as they could, trying to catch the great bird.

The motor ran smoothly and the plane lifted off the water into the air. We continued to circle overhead to prevent them from taking off in their boats after our boys. We escorted our boats down the river until they were safe and well away from the headhunters. To this day, I wonder what those savages thought of the great winged bird that could open its back and take us inside and then fly off into the air, never to return again.

RUMANAU HEADHUNTERS

At a distance further in the interior and across the Kinabatangan River from the Tenggara tribe live the members of the Rumanau tribe. They are very much like the Muruts in behavior. They are a hill people, but unlike the Muruts they do have dugouts and travel often by water. They live in deadly wild country, high in the mountainous areas of the jungles. They, too, are headhunters.

With our visit with the Tenggaras almost over and with our heads still intact, we decided to go to the Rumanau village. However, before we had that chance we found the Rumanaus coming across the river to visit Ketow and his visitors. I remarked, "Well, Martin, this is the first time we got service in this jungle. Now we can stay put. We are both tired and I'd

just as soon not go over that mountain to their village. Let's find out about them from those who have come to see us."

Since Martin was very tired, he readily agreed and so we remained in the Tenggara village.

The Rumanaus are strong, cunning, and fierce. In addition, they are extremely crafty and treacherous. They can smile at you and at the same time have the thought of cutting off your head. Their dress is very similar to that of the Tenggaras. They look alike, except that the Rumanau man is smaller in stature and the Rumanau woman is huskier.

The chief of the Rumanaus always had a winning smile on his face. "But wait," Martin said. "Look at what he has on his belt! It is a large parang with the hair of a human scalp hanging from it." The knife's handle, exquisitely carved, was made of ivory from the tusks of a wild boar. In one of his hands, he carried his handmade blow-pipe spear. It was a long bamboo pole that had been hollowed out and to the end of which a piece of sharp metal had been attached.

Many times these people hollow out the pole and then use the weapon as a spear or blowgun. But more frequently they use an already hollowed-out bamboo pole. The darts that accompany this weapon are the same as those used by the Muruts and the Tenggaras.

The chief had many tattoo marks on his arm, indicating that he had many heads to his credit. There were many more tattoo marks beneath his clothing. Another warrior had at least six marks on his arms, indicating that he had six heads to his credit.

The women do not carry weapons, and their dress is usually made of the same cloth as that of the men. The women weave this cloth and then dye it with berry juice. They wear this woven cloth about their shoulders and wrap a plain cloth about their waists, giving a skirtlike appearance to the apparel.

The mothers carry their youngsters on their backs in a cloth that is tied about the shoulders. They carry them in a manner similar to that of the American Indian mothers. All the women, even the mothers, chewed a betel-nut juice concoction. The men smoked pipes into which they placed some sort of tobaccolike mixture.

The Rumanau woman places a long twisted rope of tobacco, about the size of a large cigar, in her mouth each morning. She chews it all day until, by the time she is ready to go to sleep, it is all chewed away. I have seen Rumanau women chew tobacco, smoke a cigarette, and eat, all at the same time. The Tenggara women do not chew tobacco.

The Rumanau men are great pipe-smokers. If in any harvest, tobacco is scarce, they will use plain ordinary grass, mixed or saturated with betel-nut juice as a substitute. Like their neighbors from across the Kinabatangan River, they make and drink an ample quantity of rice wine.

Another outstanding difference of the Rumanaus and the Tenggaras is that the Rumanau women nearly always wear hats, where the Tenggara women do not. From an early age, the Tenggara women will part their hair in the middle, bring it close down around the head, and then tie it in the back.

For some reason, which has been lost in the antiquity of time, the Rumanau women wrap a cloth about their waists and tie it in front in a sort of sashlike fashion. Both tribes wear clothes around the lower parts of their bodies which resemble pants in appearance. However, they are merely cloth, wrapped first around one leg, then the other, and finally tucked in front. When wrapped in this manner, they have the appearance of slacks or rather "pedal-pushers," which were so popular in America.

Quite puzzling was the fact that the Tenggaras, who live

right on the river, do not have any boats, while the Rumanaus, who live back in the hills, have many. Every day the Tenggaras could be seen going down to the river to bathe. Not once, however, did I see a Rumanau bathing in the river. Needless to say, the Tenggaras are very clean whereas the Rumanaus are filthy. They had sores on their bodies and a nasty, offensive odor permeated the air around them. The putrid smell from their hair indicated that it had not been washed for some time.

One day, just as I had decided to lie down for a nap, we were visited in our camp by some members of the Rumanau tribe, the Tenggara tribe, and a pygmy. When we saw the women and children we knew that their intentions were peaceful. Whenever they set out on a warlike expedition, they always secrete their women and children. When the women and children travel along with the men, then they are on a peaceful trip. During the visit of the Rumanaus to the Tenggara village, Martin had an excellent opportunity to photograph many of them.

Ône Tenggara belle caught his eye. Her hair was neatly parted in the middle and held closely to both sides of her head with her ears exposed. She wore some jungle ferns on the back of her head. On her ears were numerous ornaments for earrings, while about her neck she had several strands of beads. Draped over her shoulders was the typical Tenggara cloth

which she had woven and painted herself.

Every so often we found a native woman draped in a cloth that made her look as if she were wearing a typical American dress. It was usually of the same cloth and weave as those worn by the other Tenggara women. While the latter have numerous figurations painted on them this particular native had dyed her cloth black and this gave it the appearance of an American dress. She had no hat on her head, although she did wear the Rumanau sash about her waist.

While Martin was photographing the Tenggara belle he noticed three youngsters sitting behind him, smoking their homemade cigarettes. These girls, about eleven years old, were married. Not wishing to disturb them, he swung the camera about and snapped their picture. They never knew that it was being taken, for Martin just kept looking in the direction of the Tenggara belle.

Martin was so impressed with the fine job that they did in the making of the wearing apparel that he insisted I put some on and pose for a picture with some of the women members of the Tenggara. Needless to say, his wish was immediately com-

plied with.

The next subject for the camera was one of Ketow's assistant chiefs. Martin sat him on a log so that he could get a side view which would show not only the sword he had, but also give an excellent view as to how his jacket was held together. (The Tenggara jacket was primarily a long piece of woven cloth with an opening in the center. It was placed on the shoulders with the head protruding through the opening. Both sides were held together by pieces of wire, giving it the appearance of a neat sleeveless jacket.) The sword that this particular chief had once belonged to a Malay river pirate. Together with the fancy pipe that he sported, it indicated that either he or some of his forebears had taken part in the struggle against the pirates. The bells that hung from the sheath had probably been obtained from a Chinese trader farther down the river.

Martin was having a grand time. He was looking around for another subject when I suggested that he get some Tenggara and Rumanau chiefs together for a portrait. He tried, and he succeeded in persuading two Tenggara assistant chiefs and one Rumanau chief to pose for a picture. One had his sumpitan and

parang, but the other two had no weapons at all.

One small Tenggara, who had evidently lost all of his teeth, but who was covered with the tell-tale tattoo marks on his arms and chest, was persuaded to pose. He was quite on in years and must have had some experiences to tell about the tattoo marks. Unfortunately, we could not get him to talk. During this time Martin noticed one lone Tenggara native standing away from the others. He was curiously watching what was going on.

Martin indicated that he would like to photograph him, but was soon informed that he was a wild man who could not talk Tenggara. We were told that he had lived in the jungle all by himself, far removed from the village, ever since he was a young boy. Although there was nothing wrong with his vocal cords, he could not speak nor understand any language. It was rumored among the Tenggara that he talked the language of the wild animals.

My husband next photographed a group of Rumanau women with the typical batch of tobacco in their mouths. One of the pygmies, holding his sumpitan, sat in front of

them.

There are no commercial or savings banks in the Borneo jungles. We paid the workers at Abai, but we did not pay the Muruts in money for anything they did to help us. We gave them ornaments, trinkets, and food.

One Rumanau woman whose picture we took, however, had fifty coins strung about her breast. These were used as ornaments. I doubt if she ever knew that they were exchangeable in the white man's territory for goods of value. In her mouth was a long twisted rope of tobacco that had been saturated with the betel-nut mixture. The juice from this mixture blackens the natives' teeth and of this they are extremely proud. My

white teeth amazed many of the natives of the interior. They wanted to know why my teeth were so white while theirs were so black.

The juice from the tobacco flowed from their mouths and over their lips, causing the lips to become cerise. They did not need lipstick, and they were amazed when they saw me apply mine. Shortly after I applied my lipstick one of the native women approached me and rubbed her fingers across my lips. When my lipstick came off on her fingers she jumped with joy. My lipstick would come off, but hers would not. She grabbed my hand and rubbed my fingers across her lips as if to prove this point.

We noticed that one of the finer-looking Tenggaras had a band of copper rings around his waist. Martin called it to my attention saying, "Osa, look over there, that native with the copper rings around his waist. That shows the influence of the Dusuns, who always wear those rings. I wonder how he got them in this part of the jungle. Get him over so I can take his

picture and maybe talk to him."

Taking his picture was one thing, but getting him to talk about those rings was quite another. From the ivory bracelet on his left wrist, we were convinced that this was a Tenggara who really roamed the jungles for the Dusuns and whatever elephants that were left were many miles apart and many miles from the Tenggara village.

The hats worn by the Rumanau women certainly demonstrated the influence of the Chinese, even in this remote area of the jungles. Here, hundreds of miles away from civilization, we found these natives, who had never seen or been seen by a white man and woman before, wearing hats typical of the Chinese coolie on the mainland. Martin felt that one particular group so resembled Chinese women with the coolie-type hats that he photographed them.

After he had taken all of the pictures he wanted, and when he was extremely pleased with himself, I talked him into getting back to Sandakan.

While at the Tenggara village I noticed some natives returning with fish on spears. Upon further inquiry I learned of the fruit-eating fish that were to be found in their territory. On one of the smaller tributaries not far from the Tenggaras there were small trees bearing a yellow-red fruit. They were so numerous that they gave the tree the same color. I decided to go down and take a look at these fish and at the fruit that they ate. As we approached, large numbers of monkeys scampered about because we had disturbed them while the were eating the same fruit.

Birds and animals like the fruit, but the strangest thing of all was that the fish also had a liking for it. When the fruit is fully ripened fish swim about beneath the heavily laden branches which stretch out over the water. When one piece of fruit falls from the tree into the water the fish swim toward it and devour it. The tree is never cut by the natives. Its name was not known even to our natives, but the Malayans called it crevaia.

Many natives take advantage of this opportunity to catch fish with their spears. As the fish gathered in great numbers the natives would approach the river bank, knock one of the fruit into the water and then spear the fish as they swam toward it. They were very successful at this type of fishing and could be seen often going back to their village with large catches.

BESSIE AND BUJANG

Silent as a whisper, death slipped through the foliage of a giant tree along the Kinabatangan River of Borneo. It rode on the tip of a tiny dart propelled from a deadly blowgun in the hands of a black-skinned native. The dart found its target in the breast of an orangutan, and out of the branches the animal tumbled, dying from the poison in which the dart had been dipped.

Three black men ran to where the ape had fallen and saw her gasp as life departed. One of them grabbed a baby ape that had clung to its mother as she fell.

Thus it was that Bessie, our ape of Borneo, came into the hands of man. This was the usual manner by which the capture of apes was brought about. These natives, skilled in the manufacture and use of blowguns, also knew how to concoct a potent poison into which they dipped their darts. This poison paralyzes the animal's nervous system as soon as it enters the bloodstream. The people of Borneo never attempt to capture adult orangutans, as these beasts are powerful and dangerous when aroused. Rather they kill the mothers and then catch the babies. You can imagine what a great feat it was to the natives when we captured Abai without having to resort to killing him.

Captured when young, however, an orangutan is as easy to manage and train as a child. They are friendly, tractable, and intelligent beasts and try to act just like their human friends. In the native villages they become companions and playmates of the children. The natives treat them with consideration and respect. Perhaps this is because they believe that they are humans of another tribe.

Bessie had been born in the small hut that her mother had built at the top of a tree, deep in the jungles of the interior. Here the tree branches enfold one another as though laced together. After her capture, Bessie was taken to a village of Malays where everyone made a great fuss over her, especially the young members of the tribe. In a short time she lost her fear of these people and began to make friends with them.

However, Bessie did not stay with her native friends very long. One of her captors took her down the river and sold her to an Englishman who operated a rubber plantation on the island. Here Bessie remained for three years, playing about the plantation and learning the ways of man. Although there were always some river monkeys about, the orangutan played in the tree tops alone. She did not like these little chatterers and they, of course, were afraid to mingle with her.

During this time there was one fault which Bessie acquired and which she never lost. That was waking up early in the morning and yelling for food. She would pound the sides of her box, scream, and make a terrible racket until she was fed. She simply demanded food and kept up the racket until she got it. Although she ate almost anything that humans eat, sweet potatoes and cooked bananas were the essentials of her diet.

Martin and I first met Bessie when we took a trip by boat up the river to a nearby rubber plantation. She was indeed a beautiful specimen. She was nearly three feet tall when standing on her rear feet and weighed more than seventy pounds. Her body indicated great strength and power and I was glad that she had a pleasant disposition. It would have been a dangerous thing if she had taken the notion to attack someone.

Bessie had a thick chest, strong shoulders, and long arms. She was bow-legged and looked awkward when walking. Her fur was auburn, almost red, and thick about the shoulders. Her hands and feet were devoid of hair. I do not suppose many would call Bessie beautiful, but that is because they would not think of her in comparison with other orangutans. She had a flat nose, thin lips, and tiny ears. There was a friendly expression about her brown eyes and it was easy to tell, just by looking at her, that she was intelligent and good-natured.

Martin was especially attracted to Bessie and prevailed upon Mr. Watt, the plantation owner, to sell her to us. Since Martin liked to study animals, he saw in Bessie the opportunity to observe an orangutan closely and to watch its reactions to the ways of man. After we bought her, life took on entirely new dimensions for the ape. No sooner were we on the boat on our way back to camp than someone blew the whistle. This so startled her that she jumped on Martin and held him so tightly that she bruised his flesh.

As we started down the river the boat bobbed up and down

with a motion unlike anything Bessie had ever known. She began to feel ill and looked with longing eyes at the green banks lining our path. Martin and I both talked to her, trying to cheer her out of her gloom, but she just continued to whimper and cry all of the first day on the water.

The next day the orangutan became accustomed to the motion of the boat and began to cheer up. I had a gibbon ape named Kalowatt who seemed to puzzle Bessie. Kalowatt was a selfish little monkey who demanded attention all of the time. She liked to have me hold her in my arms and whenever I put her down on the deck she would whimper and act as though she had been offended. Although she was a nuisance at times, Kalowatt was clever, pretty, and lovable.

The smaller ape was timid about Bessie, but extremely interested in the shy newcomer to our boat. I do not doubt that the little gibbon was a bit afraid too, because Bessie was large enough to tear her apart. However, she was determined to be friendly and one day approached the orangutan, slowly, with a yearning look in her eyes. Bessie was lonely and finally picked the gibbon up and held her in her arms. From that time on she took a motherly interest in the little one. The two of them slept in the same box and spent many happy hours together.

When our boat reached Sandakan we took Bessie to our residence and there her education in the ways of civilization began. She seemed to take life seriously and tried to do almost everything that we did. This led to many difficulties for us and a host of problems for the orangutan.

There was a school for Chinese girls near our Sandakan house and Bessie used to watch the children enter it each day. Of course, this gave her the idea that the building was something to go into, so one day she walked over to make a

friendly call. There was a riot as the orangutan started to walk through the door. The children screamed and the teachers shouted. Finally, the door was slammed in the intruder's face and she came home, convinced that she was not welcome there. We received more than one complaint about that adventure.

Kalowatt soon became the playmate of a dog that lived next door to us in Sandakan and because of this Bessie took to spending a great deal of time alone in the trees. She found a convenient niche in which to build a house and started right to work. This task required several days and kept her so busy that she had little time for anything else. When it was completed, her house was a snug place with an opening into it.

Naturally, Bessie was proud of her work and walked into the residence, where she found Martin busy at the typewriter. She tried to attract his attention, but when that failed she started to tug at his arm, something that he did not like very much. Bessie was persistent, however, and finally made my husband understand that she wanted to show him something. He permitted the orangutan to lead him by the hand to the tree, but balked when she tried to drag him up into it. Standing where he was, however, he could see the house and patted Bessie on the head for her cleverness. This orangutan of ours was moved by flattery and liked to be praised.

With many of our animals safely caged on the grounds of our residence in Sandakan, we decided to return to our jungle headquarters at Abai and prepare for our return to America. The first thing on the agenda was the disposal and sale of the various houses that made up the village at Abai. Although this was a chore that Martin did not like, he started on it at once.

For the next few days he was very busy as a real estate broker in the jungles of Borneo. He sold three houses at once, one to a Malayan and two to Chinese traders who plied the Kinabatangan River. He was in the midst of selling another house when I returned from some of my wanderings along a nearby truson.

I had great news for him. I had discovered a whole family of orangutans living in the nipa-palm trees about half a mile from our village. "How pleasant it would be for Bessie if we

could capture them," I thought to myself.

The next morning Martin decided to let the real estate business wait while he went after some more pictures of orangutans in their natural habitat. However, he was not too keen about capturing any more animals since we had quite a few already. After getting cameras, guns, and food together, we set out. We were not long in finding the family and soon learned from one of our boys that the mother had been killed and eaten by some itinerant natives.

While Martin's original intention was only to photograph this family, he now decided that we would capture them. Neither he nor I wanted to leave this family, without its mother, to the mercy of the jungle. If left alone, they would not have lived long. While the father would be searching for food, the youngsters would be left alone in the jungle. During that time, another animal or a hungry native would kill them.

Martin took many pictures of this family. I named the father Bujang and the three young ones See No Evil, Hear No Evil, and Speak No Evil, after the famous monkeys of legendary Chinese history. In fact, in one of the pictures that my husband took that day the three orangutans came very close to posing for just such a picture.

Martin said, "This is where the Chinese got their legend of See No Evil, Speak No Evil, and Hear No Evil. They must have seen these little fellows just as we are seeing them now. You notice, though, that they are not covering their eyes, ears, or mouths, but I'll bet that they will do just that as soon as

they are in some zoo."

After Martin had taken a sufficient number of pictures, the natives started about the job of cutting down the trees adjacent to the one that held Bujang. We planned to use the same strategy we had used in capturing Abai. After several days of cutting and hacking, the surrounding jungle was cleared. Up in the tree were Bujang and one of his sons. The other two youngsters were in nipa-palm trees nearby. They would not leave and they could not get to papa.

We decided to wait until the morning of the following day and then proceed to use a pole with a noose on the end of it. Bujang was not as old as Abai. He was about ten to twelve years old and weighed about two hundred pounds. He had large brown eyes and titian-colored hair. While he was very powerful, he was not nearly as strong as Abai. He showed no fear and was evidently unafraid of the natives and what they

were doing.

The orangutan stripped some of the branches from the tree where he was but, unlike Abai, he did not hurl them down at us. He merely let them drop to the ground, not so much to fight us, but rather to find something to eat. When one of the long poles with a rattan noose on the end had been prepared, one of the boys poked it at Bujang. He immediately grabbed it and held onto it. Several of our men then pulled on the opposite end, but the noose slipped off Bujang's wrist. While he was delighted, the boys were angry. When the noose slipped they all tumbled in a heap onto the ground that was studded with sharp, pointed branches. The ape took pleasure in their discomfort by jumping up and down on the branches and by letting out with a loud yell.

The natives then prepared six more poles and were poking

them at Bujang when he suddenly decided to come down. Thinking that he was going after them, they scampered away. But Martin thought that he was hungry and told me to give him a durian. With fear in my heart, I approached him while he was on the ground and tossed one to him.

He grabbed the durian and ate it. Martin was right; he was hungry. This made the ape happy. He smacked his lips with the juice running down his chin. The durian is one of the orangutan's favorite foods. They also like to eat bananas, and so I gave him several. He sat on his haunches, holding the banana in one hand and stripping off the peeling with the other. After having eaten several bananas he became lazy and in eating the next one merely squeezed the banana and sucked the pulp out.

The natives circled around him and threw some nets over him, but even that did not bother him. After being fed by us he evidently knew that we were his friends. After capturing Bujang it was very easy to capture his three youngsters. We merely let him sit on the ground in the net, giving him all the bananas and durian he could eat. When the youngsters saw that nothing but good was happening to papa they also came down for food. We gave them all they wanted, put them in nets and brought them back to camp where they were put into cages.

The baby orangutan is almost human with its hairless, arched skull, its forlorn-looking eyes, and its small mouth and nose. Its body is extremely thin with spidery arms and wrinkled legs. With its large brown eyes, pink face, and thin lips it

looks like a circus clown in many ways.

No two orangutans are alike. Their natures and personalities differ greatly. Bujang was always concerned about his children and on more than one occasion demonstrated excellent paternal instincts.

Martin and Jim Laneri were very fond of him. Jim trained him and, after a few days, began to exercise him each morning by taking him for a walk around the camp grounds. Jim soon discovered that Bujang also liked guavas and shrimps in addition to durian and bananas.

Every morning Bujang would watch Jim brush his teeth and when Jim had finished Bujang would run his fingers across his own teeth in imitation. After a while this orangutan was so well trained that, whenever Jim or I were in camp, we would let him out of his cage and allow him the run of the camp. At night he would be put back again. The youngsters were always kept in their cages, except when Jim would let them out to play with their father.

Jim would always say to me, "Osa, why don't you take Bujang with you when you go fishing? He can be good company." He said this so many times that I finally took him along with me. He watched me very carefully as I baited the hook with shrimp. One in a while I would toss him a shrimp since he loved them so much. Soon he began to look at me disdainfully when he saw me throw the baited hook into the water. He apparently expected that every time I baited the hook with

shrimp I would give it to him. He seemed to say, "Why do

that? Give it to me."

His constant watching annoyed me a little and so the next afternoon when I went fishing I left him at home in his cage. Jim was off to Sandakan for some supplies. Sai Din, as was his duty, started to clean the cages. When he came to Bujang's he would always let him out while he was cleaning it. The orangutan had always remained near Sai Din during this cleaning, and so on this particular day he had no hesitation in letting the animal out.

When the cage was cleaned Sai Din called for him, but Bu-

jang was nowhere to be found in camp. Sai Din was worried and came down to where I was fishing to report this to me since Martin was working in the developing room and could not be disturbed. I was sitting on the wharf with several lines baited and already in the water.

Between the water and the wharf there was a clearing of about six feet. I had been fishing for about an hour and found that while three of my lines were getting good results two that extended from the wharf were not. I could not understand this since they were all near one another. Every time I baited the hook and threw the line overboard I would look after the other lines. Whenever I returned to the lines on the wharf I would find no fish and no bait on the hooks. I did not know what was happening, but Sai Din soon found out.

Bujang was under the wharf. Every time I threw a line into the water he would wait for me to go to the other lines. When I did this he would reach out with his hand, grab a line, pull it in and then carefully remove the shrimp from the hook. After he had eaten the shrimp he would throw the bare hook back into the water and wait for me to bait it again. Sai Din watched him do this several times and then told me what was going on. I then had Sai Din bait the hooks while I watched these antics for myself. He did the same thing over and over again until we stopped him. He was properly chastised.

For the next several days when I went fishing Bujang came along, but fortunately behaved himself. I thought he had learned his lesson until the inevitable happened. I always had a basket full of shrimp for bait, within easy reach on the wharf. On this particular day, Bujang waited on the wharf while I went over to the other lines. When I reached them he dove into the basket, grabbed some shrimp, and then turned the basket over on himself. The small wharf was covered with

shrimp and Bujang was having the feast of his life. Back to camp went Bujang for some more training in how to behave while someone is fishing.

When we arrived back at camp he ran over to Jim's house. I thought that Jim was at home, but on this day he had gone off to do some hunting. I followed Bujang into the house, expecting to find Jim, but when I saw that he was not there I took the ape to Sai Din for a little more training. Sai Din did what he thought was proper and then, because I was in camp, let Bujang have the run of the place.

Bujang ran back into Jim's house and for three hours he was in there alone. He upset the tables and chairs and plastered all of Jim's hair dressing over his body. His face was covered with tooth paste and shaving cream. He had so much hair lotion on that he glistened in the sun. He was proud of himself, but he was a mess. When Jim returned Bujang was again punished and never disturbed anything again in Jim's house.

Martin was busily going about the business of selling the village and arranging the packing of his camera equipment so that we would be able to begin our homeward journey to America within a few days. Special cages were built for all of the animals so that they could be put into the hold of the freighter. A new cage was built for our great ape, Abai. This new cage, which was to be put on ship, was quite large, affording the ape plenty of room. It was divided into two compartments by a panel that slid up and down. When Abai was in one side the panel was slid down and then Sai Din could enter the other side and clean it out. This cage was constructed of large steel plates into which holes, a few inches square, had been cut.

Sai Din had to be especially careful that Abai was always on the other side of the panel whenever he entered the cage. Abai had long arms and, if he were in the back with the panel up, he could easily have grabbed Sai Din. The bottom of the cage had a sliding floor so that it could be cleaned without entering it. Beneath this was another floor that was stationary.

We had many other cages built for the other animals that we brought back to America with us. There was a cage for Bujang, one for his youngsters, and several for the other orangutans we had capured.

It took a long time to get all the animals and equipment on board the ship. First they had to be crated in camp, then put on board the Chinese junks which carried them down the Kinabatangan River and on to Sandakan, and then transferred to the steamer. At the same time all the equipment we had in our residence at Sandakan had to be transferred to the dock and put aboard the steamer. Although it was laborious work, everything went along smoothly and everyone did his part in the task.

HOMEWARD BOUND

After the job of loading the animals and the equipment on board was completed, there came the unpleasant duty of saying good-bye to many good friends. Martin gave presents to the native boys who had been with us on the expedition. To the many white friends we had in Sandakan, Martin gave some small memento and said good-bye.

At midnight we set sail from the port of Sandakan. The governor of British North Borneo came on board with us. He was paying a visit to Jesselton, which was to be our second port of call. The next day was quiet and peaceful as the boat sailed smoothly over the calm water. Even below deck, in the cages, the animals were quiet.

Late in the afternoon we arrived at Kudat in North Borneo.

We did not stay very long since the ship only stopped to pick up and deliver some light cargo. After leaving Kudat, the ship headed for Jesselton, where she arrived early the next morning. We spent the entire day in Jesselton and had the honor there of lunching with the governor at Government House.

From Jesselton we steamed for Labuan where we arrived on schedule the following afternoon. When we were ready to leave Labuan, after a full day stopover, the Sultan of Brunei came on board. We were glad to see each other after such a long period of time. The last time that we had met was in the hotel at Sandakan where the sultan had stayed with his fifteen wives. He was keenly interested in hearing about our travels into the interior and was extremely pleased when Martin presented him with some pictures we had taken of the scenery and the natives.

Kuching was the next stop on our journey and we arrived there the following morning, passing the S.S. Maradu as she was entering the port. The following Monday saw us in Singapore, where we remained for two days, supervising the transfer of our animals and equipment to another ship, the S.S. Myrmidon.

Sailing from Singapore, we went through the Straits of Malacca to Penang in the Malay States. From there we crossed to Sabang on the northern tip of Sumatra, where we stopped on Saturday. Then we went through the Indian Ocean to Colombo, Ceylon. It took us three and one half days to reach Ceylon. During this leg of our journey, a small gibbon apenamed Git-Git contracted pneumonia.

We next stopped at Aleppi and then at Cochin in India, where we went ashore for a few hours to get our land legs back again. Leaving Cochin, the captain steered the ship toward Calcutta in the Bay of Bengal where we anchored three miles off shore. When the monsoons arrived on the following

Sunday, we learned why he had sought the safety of the Bay of Bengal. The monsoons began at midnight and, almost immediately, Jim and Sai Din became seasick. The trip was now becoming rough for the animals also. A small orangutan, named Brownie, died and soon afterward Git-Git died. Then on Saturday morning a small siamang named Hillbilly died and his death was soon followed by that of Fluffy, a small gibbon ape.

Jim and Sai Din did not feel better until almost a week later. The sea continued to be rough and the air was cold and gray, but on we sailed. As we traveled, we experienced a peculiar optical illusion, common in this part of the ocean where the monsoons live and die. There seemed to be an island, dead ahead of the ship. We would sail into it and then right through it. It was a most peculiar illusion. The waves remained high and the ship tossed and pitched about a great deal. Jim became sick again, but Sai Din managed to remain well.

After leaving the Bay of Bengal we headed through the Indian Ocean and around the island of Madagascar to Capetown in South Africa. One of the reasons Martin had selected this ship was that it traveled the warm route for most of the trip. He did this primarily out of concern for the animals.

At Capetown we bought some fruits and vegetables for our animals. We went into a market and ordered several hundred dollars' worth. When the proprietor inquired as to why we wanted so many fruits and vegetables Martin replied, "Why, we're going to feed some monkeys and apes."

At this point the proprietor was sure that we were crazy, and he notified the authorities. He told them that there were two insane individuals in his market, buying hundreds of dollars' worth of food for monkeys. When the officials arrived, they checked our identification and then checked with the American consul who assured them that we were perfectly sane. The consul himself came down to the market and offered his assistance. The proprietor and the officials apologized and then helped to deliver the food on board the ship.

From Capetown we sailed to Dakar, the capital of Senegal. The sea was still rough. It was a long and tiresome journey, requiring eleven days. During this part of our journey, Little Goldie, another gibbon ape, and Big Blackie, a medium-sized

orangutan, came down with dysentery.

From Dakar we sailed across the Atlantic Ocean to New York City. It was a difficult trip. Bujang caught a cold for which he had to be treated with aspirin and a special diet of warm milk and cereal. Two other orangutans came down with severe colds and died. We really had a tough time of it, but we succeeded in bringing Bujang and his three youngsters home with us. We finally placed them in the zoo in Central Park in New York City.

Fortunately, Abai behaved very well and did not become ill during the entire journey. However, one day while at sea we had a very narrow escape with him. Sai Din had opened the door to the ape's cage to place some food in there and in doing so had forgotten to let down the sliding panel. As a result, Abai was looking directly at him and was just about to reach out his long arm when Sai Din slammed the door shut. The ape ran to the door and pounded on it with his huge fists with such intensity that it sounded like all the gongs in Borneo. I rushed over and asked Sai Din what had happened. He shook like a leaf as he told me the story.

I was angry at Sai Din for his thoughtlessness. If Abai had grabbed him he would have killed him and then been loose on the ship. That would have meant that we would never have been able to get him back in his cage again and would, there-

fore, have had to shoot him with our rifles. God only knows what damage he would have caused and how many he might have killed before we could have killed him. It was just too horrible to think about.

After unloading the cargo from the ship we placed Abai in the Central Park Zoo. We believed that he would be safe since he was put into the strongest cage there. During the night we received a frantic call from the night watchman at the zoo. Abai was bending the strong steel bars. He asked us to come over immediately. We rushed over to the zoo and soon realized that it was just a matter of time before he would open the bars like splinters and then be loose in the City of New York. In order to keep him busy, Martin threw some food at him. We then telephoned the officials of the American Museum of Natural History at their homes and made arrangements to transfer Abai to one of the huge cages at the museum.

The following day Martin made arrangements with the officials of the Bronx Zoo to transfer Abai there. Because of his tremendous strength it was decided to put him into the elephant cage. There was not a cage strong enough to hold him in the ape house. So up to the Bronx Zoo we went. After a while he was transferred to a newly constructed cage in the ape house where he was exhibited for many months. But Abai did not take well to being in a cage, away from his natural Borneo habitat. He pined for some time and finally contracted pneumonia from which he died. And so was written the final chapter in the story of the capture of the largest and strongest orangutan ever to leave the Borneo jungles for an American zoo.

Before leaving Borneo, Martin made arrangements with the American consulate to bring Sai Din, our Murut animal caretaker, to America. Sai Din knew and loved animals and they in turn seemed to know and love him. Martin believed that he would be very helpful in caring for the many animals that we were going to transport to America.

When we arrived in America, Martin had to post a \$500 bond for Sai Din with the immigration authorities. Every morning he would visit the animal cages and personally feed each and every animal. He became such a well-known personage around the zoo in Central Park that many children came to know and love him. Sai Din often received presents from woman admirers who would give him ties, handkerchiefs, and other small articles.

Right after Abai had been safely caged at the Bronx Zoo, Martin took Sai Din to a men's clothing store and had him outfitted with a suit, overcoat, tie, and shoes. Here was Sai Din, a man whose ancestors were headhunters, walking the streets of New York in what we term civilized clothing. At first he was very uncomfortable in them, but after a while he became used to them.

Martin placed a letter in Sai Din's pocket, identifying him by name and address and also including our name, address, and telephone number. This was done so that we could find him in case he got lost. We were very glad that we had done this because one night Sai Din did not return until very late. Martin became worried and feared that his native Borneo boy had become lost in the maze of New York buildings and streets. When Sai Din finally arrived home, he was accompanied by a policeman. Sure enough, he had gotten lost and had wandered all over New York City. Imagine, a Murut lost in New York!

Fortunately, Martin had told him that if he were ever to get lost he was to go to the nearest policeman and show him the letter. He had also taken Sai Din into the streets and shown him several policemen so that he would recognize one when he wanted one. He told us that he had wandered all over New York, trying to find the Central Park Zoo. He knew that if he

could find the zoo he could find his way home from there. Unfortunately, he could not find the zoo and, since it was getting dark, he went up to a policeman and asked for help.

When Sai Din first arrived in New York he was dazed and impressed by the tall buildings and the bitter cold climate. It was in the middle of winter, and as we left the ship there was snow on the ground. Since Sai Din had never seen snow before, he wanted to know what it was. Martin showed him how to make snowballs, and I believe that he must have made hundreds of them since he was so impressed with his first glimpse of snow.

On several occasions we went out to eat in a restaurant. Sai Din was so accustomed to eating with his fingers that he never bothered to use a knife or fork, even though he had seen us using them many times. But now he was forced by pride to learn how to use the knife and fork. At first his efforts were like those of a young child, but later on he learned how to master the art of eating with these utensils. We brought Sai Din along with us on several of our visits to restaurants. By careful observation, he soon became a real gentleman, but whenever he was at home he would revert to his native ways and eat with his fingers.

Before he was employed by us, Sai Din worked for Harry Keith on forestry work in Borneo. He had no family and spoke very little English. Sai Din was a native who readily adapted himself to the ways of the white man. In Borneo he wore lightweight trousers and a shirt that was open at the neck. This was topped off with an old, slouched, felt fedora.

I can still remember the expression on his face when we took him to our home and gave him his first ride in an elevator that carried us all to the thirty-second floor. At first he was puzzled; then he smiled. Later he came to enjoy it very much and I would often find him taking elevator rides up and down.

When we entered the suite I took him over to the window and let him look out over Central Park. He was amazed.

Two days after our arrival in New York, Martin and I had to go to Connecticut in order to talk with Jim about our plane. While we were there Martin and I took Sai Din for his first plane ride. This really bewildered and startled him. At first he wanted to get out, but later on he calmed down and enjoyed the ride.

After several months the inevitable day of parting came, the day when Sai Din had to return to Borneo. Martin and I and several friends went down to the pier to bid him a bon voyage. There were not only tears in the eyes of Sai Din, but also in those of Martin's. I cried openly.

Now Sai Din is back in his native Borneo, and I have heard from friends of how he sits with the other natives and tells them strange and exciting tales of the far away lands that he visited with the Johnsons. He tells them about the tall buildings, the snow, the elevator, and the airplane. They sit quietly and intently, listening to the weird and incredible stories that Sai Din tells them about America.

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EDITOR'S NOTE

The Safari Museum that now stands in Chanute, Kansas, is a living memorial to Martin and Osa Johnson and a repository of their outstanding contributions to the fields of wildlife photography and exploration. Within its halls are housed the fascinating and exciting panorama of people and places, wildlife and flora, customs and rituals, all of which were once part of a world that has now disappeared. Here there come alive all those exotic and far away places which we know well in our imaginations, but which we can rarely see because of the inexorable march of civilization.

This museum is not an enormous one, yet it contains an important nucleus of primitive man's history and a lasting record of the struggle of wildlife for survival. And uniquely present

amid all of this lie the romance of pioneering and the drama of two unusual lives.

The idea of this museum began with Mrs. Johnson herself, shortly after her husband's death. However, during her lifetime it did not come to fruition. Nonetheless, this idea was perpetuated by her mother, Mrs. Belle Leighty, for whom it became a great dream. Nothing tangible evolved until Dr. James Butin, one of Chanute's outstanding physicians and a lifelong friend of the Johnsons, brought the idea before the Chanute Chamber of Commerce.

Under their direction the architect's plans for a new museum were completed in 1958. At that time it was hoped that the construction of the building would be financed by means of a bond issue. Unfortunately, this plan did not meet with success and thus a new approach had to be tried.

The Museum Committee decided to procure a building and then raise the necessary funds to convert it into a museum. In 1959 the Santa Fe Railway donated a spacious two-story building to house the new Safari Museum, thus solving the committee's Number One problem. Shortly thereafter a drive for funds was launched on a local level, yielding \$3,000 by the end of 1960. The majority of contributions came from the people of Chanute.

This voluntary effort did not stop there, however. Men and women from all walks of life and even children donated their time and their skills while local firms supplied the materials in order to turn the building into the attractive structure that it is

today.

The Safari Museum is devoted exclusively to the Johnsons and their travels. Most of the trophies, pictures, pieces of primitive art, and displays have been made available through the generosity of Mrs. Belle Leighty, who has been the guiding spirit of this institution since its inception. It is earnestly

hoped that the vast collections of Johnson memorabilia, now scattered throughout the country, will one day come to rest in their rightful place in the museum.

Since its dedication in 1961, over sixty thousand visitors from all over the world have passed through the halls of the museum. Encouraged by this display of interest, the sponsors continue to hope that the original idea of a spacious new building will some day become reality. But this will only be possible through the support of interested people from all over the country.

The distances between the Safari Museum in Chanute and the jungles of Borneo and Africa are great. Yet all of these places have one important thing in common, even though they are separated not only by space, but also by time. In all of them the adventurous spirit of two great Americans still lives on.

DR. PASCAL JAMES IMPERATO

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