

# **BIRDING OUTBACK GUYANA**

A Chronical of Ecotouring in the Savannas and Rainforests

by  
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This diary along with photographs can also be viewed at  
[http://homepage.mac.com/Donald\\_Green/Guyana/](http://homepage.mac.com/Donald_Green/Guyana/)

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## PREFACE

This journal started as an occasional letter of my birding activities to my daughter, Jennifer Green, who shares my interests in birds and has now joined me on these trips. It is, of course, an aid to my mind, which is all too eager to discard memories. However, these memories are so pleasant that to lose any part of them would be a shame. It is also for my companions to whom I'll try to get copies. If there are unifying elements in this document it is the birds, the birding, and the wildlife. But the travel through rivers, forests and savanna and the ecology of the tropics was as exciting as the birds and I've tried to comment on those aspects that caught my attention.

This account is based on my trip notes, the log of birds seen and locations visited which were kept daily by the participants, slides I took, and the blizzard of photographs which Ilze Belodis took on the first trip and most kindly distributed to each of the participants, those taken by Steve Mirick and Roger Stanley on the second trip, another blizzard of photographs taken by Polly Rothstein and given to us all on the third and fourth trips and Jennifer's journals and records on the Rewa, Maparri and Kwitaro expeditions. Most importantly it has been redacted, many errors corrected, much memory recalled, and extensively improved by Davis Finch, who, after wading through several versions of this journal, continues to modestly refer to his efforts as "micro-corrections". Would, that when I was an editor, I had as careful and effective reviewers as Davis. Would that he had better writers than me! It is not in my nature to agree with even his every assertion. Consequently, I accept responsibility for all the residual errors.

In addition to my fellow participants, the birders and the fisherman who made these trips a delight, I wish to thank Davis Finch for inviting me; Tony Thorne of Wilderness Explorers and his able assistants Karen Weldren and Louis Singh for their assistance in Georgetown and in making travel arrangements elsewhere; Duane De Freitas, the captain of each of these the expeditions and our host at Dadanawa; his able lieutenants, Oscar Dookie, Ashley Holland, Pip Hiscock and Malcolm Miller. For their warm hospitality and friendship; Dianne McTurk our host at Karanambu; Shirley Humphrys at Mountain Point; Sandy and Duane DeFreitas at Dadanawa and Sandy at Kwatamang Landing, and Colin Edwards at Rockview. A special thanks to all who participated in making these travels a happy and birdacious adventure; our drivers, Cecil and Carl Fredericks; our guides on land and water, Duane, Kenneth, Tommy Kenyon, Percy, Michael Phang, Magnus and Placid Stevens, Silveirio and Richard Winter and our companions; Alwin, Andy, young Duane, Justin, Leland, Leroy, Paula, Nikki, Sammy and Stephen. Probably nothing made this trip more enjoyable than the kitchens at Karanambu, at Dadanawa, on the Kuyuwini, Kwitaro, Maparri and the Rewa Rivers. I am pleased to acknowledge the superb cuisine of marvelous Marjory at Dadanawa, Maparri, Kuyuwini and the Kwitaro, and the chef-ly skills of Dookie, Duane and Stephen who, on the Rewa, knew what to do with a fish.

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# I THE KUYUWINI RIVER

**GEORGETOWN.** One A.M., April 7, 1997, the spacious foyer of the Pegasus Hotel in Georgetown, Guyana is alive with clerks, guests, social nighthawks, Tony Thorne's Wilderness Explorers, and us, five birders from North America. We are greeted by an orchestra of chirping frogs resident in the upper reaches of the hall - a greeting unlike any hotel registration I've experienced. It is my first exposure to a country south of the U. S. border and, to the tropics. We are four individuals recruited by Davis Finch to bird Guyana: Travis MacClendon from Florida, Ken Cole from the District of Columbia, Ilze Balodis from Maine and myself, Don Green (New Hampshire). Except for me all have significant experience in birding in South or Central America.

Planning, medical shots, bird-book acquisition and finding a bit about Guyana (for instance, where and what it was!) was precipitated by a phone call from Davis hours after returning from a snowmobiling expedition to western Maine. Notice of three weeks, while short, reduced anticipation to an absolute minimum. Davis and I had met several years earlier as fellow members of the Seacoast Audubon Chapter and our friendship was cemented this winter by several days of futile search in Biddeford, ME for a white-phase Gyrfalcon. We missed it by 20 minutes. So, from the still frozen northeastern U. S. I'd come to within a modest few degrees of the equator. Guyana extends from almost 8° to ~1.5° latitude. It is almost the same length as our state of Florida, and a degree or so wider. While small, Guyana is the largest and westernmost of what was the three Guianas. It was once British Guiana but now, like its immediate eastern neighbor, Suriname, the former Dutch Guiana, it is an independent country. The easternmost of the three Guianas, French Guiana, is still a "department" of the Paris Metropole. The fact that English is widely spoken throughout Guyana makes it an exceptionally hospitable and comfortable place. The weather follows a generally predictable pattern. A major dry season extends for five months from August through November which is followed by an approximately two month Winter wet period until January. From January to April dry weather again predominates until the months of May and July when the most reliable rainy season occurs. The climate toward the end of the Spring dry season was warm and dry with gentle to nonexistent winds. Bug pests were virtually absent as well.

By any South American standard, Guyana is tiny, yet it has a varied topography and ecology. Along its Atlantic shore runs a narrow coastal plain dominated by sugar plantations. Inland the humid tropical forest is threaded by three major north-flowing rivers which are: west to east, the Essequibo, the Demerara, and the Berbice. The western side of the country is walled near its waist by the Pakaraima Mountains. About two thirds of the way to the south along the course of the Rupununi River, a western tributary of the Essequibo, the vast forests begin to break up into two very large savanna regions. These savannas are divided by the ancient east-west trending Kanuku mountains into Northern and Southern Savannas. Following brief stays with birding in Georgetown and a side trip to the spectacular Kaieteur Falls, longer stays were planned in the Northern Savanna region at Karanambu Ranch and at the Southern Savanna's Dadanawa Ranch. From Dadanawa an expedition was to be taken to the end of the southernmost drivable track at the Kuyuwini Landing. The Kuyuwini River, one of the major southern and western tributaries of the Essequibo, is close to the Brazilian border which in the southwest of Guyana follows the course of the Takutu River. At this point we would be just 2° from the equator.

After five hours of sleep, Ken Cole and I are up. The first bird I see is a martin sailing by the patio, then three more. These are **Gray-breasted Martins**, a Great Kiskadee calls and in a deciduous grove lining a nearby road a gray bird, the **Blue-gray Tanager**, hops about a tree top. Soon a black tanager-sized bird with a white wing linings emerges, a **White-lined Tanager**. This before I'm even out of the room! I walk out the hotel front door and am joined by Ken who begins my tutorial confirming the identities of some of the birds I'd seen and pointing out others, such as a rather nondescript **Palm Tanager**, and the **Rusty-margined Flycatcher**. Familiar birds were a rarity on the trip but this morning I saw three; a distant **Magnificent Frigatebird**, **Snowy Egret** and a **Tricolored Heron**. Ken spotted a **Yellow-bellied Elaenia** and a **Ruddy Ground-Dove**. Shortly thereafter we were joined by Davis and Travis who had a **Red-capped Cardinal**, a **Yellow Oriole**, a pair of **Pearl Kites** in a distant tree, and much closer, a **Yellow-chinned Spinetail**. In a large tree to the left of the front door we saw a hummingbird, a **Plain-Bellied Emerald**. Twelve life birds and I hadn't even had breakfast yet! We gathered for breakfast- the first of many splendid meals in Guyana and then boarded the Wilderness Explorers van for the trip to Ogle Airport. Ogle is in Georgetown and suitable for the twin-engined Britten Norman Islander which was to fly us to Kaieteur Falls. At Ogle a whole new cast of birds appeared, among them **Snail Kites** (incredibly close), **Shiny Cowbird** (which I'd seen in Naples, Fla.), **White-headed Marsh-Tyrant** (photographed at its nest), **Smooth-billed Ani**, **Southern Lapwing**, **Blue-black Grassquit**, **Tropical Kingbird** and **Tropical Mockingbird**. Three familiar birds were also present at Ogle: **House Wren**, **American Kestrel** and **Spotted Sandpiper**.

**KAIETEUR FALLS** was our first destination. The journey took us south up the Essequibo River. The Demerara River in the area of Georgetown flows through hundreds of square miles of sugarcane fields. A few dozen miles up the river the country becomes forest with few evident tracks or roads. Here and there are clearings the result of lumbering or mining for gold, diamonds and bauxite which are major economic activities. Our flight approaches a long plateau rising several thousand feet and tilting toward the west. Our flight is up a long narrow valley at the head of which is Kaieteur Falls. The falls is spectacular and all out of proportion to the modest river that feeds it. Its unique feature is the 748 foot free-fall of the water which is claimed

to be the highest un-interrupted fall of any waterfall in the world. Our pilot, Krishna Shankar, makes several passes around the falls then, after a shallow breath-taking dive toward and below the falls, climbs and lands at the small airstrip. We de-plane and led by Davis and our guide, Richard Winter, proceed to explore the area. Richard is an amerindian about 35 yrs old and has been a scuba diver in the rivers for placer gold, a game warden and now makes his living as a free-lance guide. He was very good at spotting birds and other wildlife, composing and taking photographs and describing the area. He tells us that the name of the falls commemorates Chief Kai who canoed to his death over the falls to appease the Caribs, a raiding coastal tribe, and thereby spared his people from annihilation. V. G. C. Norwood confirms this event and says that the vanquished tribe, the once powerful Piaroa (Ature), then fled westward. Kaieteur Falls was also the site where the Piaroas had earlier defeated the Parguaza and Amucaio tribes. The last of the vanquished hurling themselves off the high cliffs. The history of conflict among local tribes as well as with foreign invaders, both amerindian and caucasian, is a constant uninterrupted saga until well into the 19th century.

Our first bird seen on landing is the **Greater Yellow-headed Vulture**. This is the vulture typically associated with dense tropical forest. Davis's immediate goal is to locate a reported **Rufous-crowned Elaenia**, a medium-sized flycatcher, which has only recently been found to occur at this site in Guyana. This is my initial introduction to Davis's bravura performance bringing in birds with his tape recorder. In short order this elaenia was "wired", responding and approaching closely to investigate the intruder. The recorder technique is not only effective in attracting birds but in poor viewing conditions, or with a very active small bird that has many similarly plumaged relatives with distinct voices, is a crucial tool in making the correct identification. Above the river were three types of swifts; the most numerous were **White-chinned Swifts** that flickered in large flocks at great height, among them a few significantly larger **White-collared Swifts**, **White-tipped Swifts** were more readily identified by their clearly delineated white throats. The top of the falls lies on a sheet of gravel-covered ledge that is everywhere saturated with water. Growing directly on this sheet are strikingly large terrestrial bromeliads- one was ten feet high and five to six feet in diameter, many were in excess of five feet high. Richard points out a small yellow frog, *Oxania beebeii*, in the bromeliad leaf wells. Ilze took a good photograph of them. The frog is named for, William Beebe, a well-known naturalist who studied and wrote of the Guianas in the early 1900s. On the path toward an overlook, Richard pointed out a snake under a trail foot-bridge, a "Carpet Labaria", a known poisonous species. A brilliant scarlet **Guianan Cock-of-the-Rock** occupied a lek site just along the trail and posed for several photographs. More gifted ears identified a Red-billed Toucan. A **Red-shouldered Tanager** was seen with a flock of foraging passerines. Richard led us to the top of the falls where I took several photos, then he posed us on a rock ledge and took a memorable photo the significance of which fully came to me only when the film was developed.

After a brief freshening-up, towels and a beer or two at the Islander, we took off for Karanambu. In the co-pilot's seat I had an unparalleled view. The flight was along the plateau edge, then over extremely rugged knife-edged "miserics" and inselbergs all covered with jungle that Ilze describes as "broccoli", as surely it looked. Eventually, the jungle began to break up into scrub and grasslands interspersed with typical riparian gallery forest along every watercourse. Soon we'd flown out over the unbroken Northern Rupununi Savanna. Without discernable preliminaries, Krishna banked once, lined up on a gravel runway and set us down at Karanambu's doorstep.

**KARANAMBU** lies 340 feet above sea-level on the west side of the Rupununi River in a grove of pretty mango trees dominated by one huge cashew tree that almost overhangs the airstrip. Various people have threatened to improve the runway by cutting it down, but that would seem a shame. Our hostess at Karanambu was Dianne McTurk who runs the ranch there. There is a lovely spacious, central thatched lodge and dining hall with several smaller outlying sleeping lodges. Dianne is a pleasant hostess, handsome, spare and tall. She is thoroughly in charge and clearly experienced in running the ranch. Her kitchen and dining operation was exceptional as were our sleeping and washing arrangements which included real showers. Her personality is forever captured by my photo of her on the radio which I call "Karanambu calling." Shortly after our arrival a radio conference commenced with Tony Thorne, Dianne's brother, Mickey McTurk at Ogle Airport, and various others including Guyana Airways Corp, the subject being the distribution of cash, advances, and payments, and the ordering of supplies needed to support us. Was there life before radio down here?

**ON THE RUPUNUNI RIVER** Davis didn't waste any time. After brief introductions, figuring out the schedule and finding our quarters, we launched a boat and explored down the river. An immediate objective was to examine a Jabiru nest in hopes of seeing a young bird. Our guide at Karanambu was Kenneth. He had made a real effort to learn the local birds on our terms and had his own copy of the "Birds of Venezuela" by Meyer de Schauensee and Phelps. Many and possibly all of the young men had some degree of formal education in village schools. Kenneth was clearly making the most of his. The wooden boat, about twenty-two foot long, was powered by a dependable 5-horse Mercury more than adequate to move easily along the river that was fifty to seventy feet wide with a current of approximately 1- 2 mph. The boat had been on shore for some time and so leaked prodigiously for the first day before it tightened up thoroughly. Kenneth had a younger assistant, Edgar, who was usefully employed bailing. This stretch of river is the home of the **Black Caiman**. Some were large running up to seven to eight feet but none to the nineteen foot length of a really big Black Caiman. They are everywhere plentiful but are wary of close approach. Davis doesn't believe they are hunted. They can be dangerous. My first scientific mentor, the anatomist and herpetologist, Warren F. Walker, Jr, had scars to testify to that.

Birding from an open, quiet, cruising boat is a luxury which offers superb uncomplicated views seldom seen in woodlands. An initial surprise was the appearance of **Long-billed Starthroats**, large hummers which, while generally uncommon, on this trip were quite frequently encountered along the riverbank shrubs. Treetops were occupied by **Yellow-rumped Caciques**, **Crested Oropendolas**, and **Swallow-wings**. Wherever the riverbanks approached the savanna scrub-lands **Fork-tailed Flycatchers** were present. This flycatcher, extremely common throughout the savannas, was apparently en route to its wintering grounds in northern South America. A dark crow-sized bird flying across the river was proclaimed to be a Bare-necked Fruitcrow (I didn't see enough of this cotinga to qualify as a sighting). The river sand-bars revealed **Cocoi Heron**, **Little Blue Heron**, **Pied** and Southern **Lapwings**, Spotted Sandpipers and three **Black Skimmers**. River bars were good places to see both **Ruddy-breasted** and **Yellow-bellied Seedeaters**. River snags provided resting places for a **Neotropic Cormorant**, **Ringed** and **Amazon Kingfishers**, as well as for **White-winged** and **Southern Rough-winged Swallows**. More secretive **Green Kingfishers** perched under the overhanging branches. Flycatchers were a constant with **Lesser Kiskadees** and Rusty-margined Flycatchers frequently present, **Boat-billed Flycatcher**, **Yellow-breasted** and **Short-crested Flycatchers** were seen. As well, a Forest Elaenia was heard. **Black Vultures** and an **Anhinga** flew over. In the top of a tall tree two different Columbidae sat; the larger was a **Pale-vented Pigeon**, the smaller, a **Plain-breasted Ground-Dove**. Several Yellow Orioles were seen as well as a **Campo (Orange-backed) Oriole**. Among other species spotted were **Pied Water-Tyrant**, and **Yellow-crowned Parrots**. **Brown-throated Parakeets** were common throughout the savanna riparian forest.

The Jabiru nest was unoccupied so we reversed direction toward the entrance of nearby Simoney Lake, and entered the eight to ten foot wide channel. Shortly, we emerged into an oxbow which is significantly wider than the river and must certainly be a major section of the river during the wet seasons. Here, a pair of **Muscovy Ducks** were resting on the opposite bank. A **Striated Heron** flew by and a **Chestnut Woodpecker** was spotted. A **Striped Woodcreeper** was called in by tape, and nearby we had a good view of a **Pale-breasted Thrush**. Around the bend, a family of amerindians had set up camp with a fish drying rack. Two men were actively fishing, one was tossing a lure by hand-line from their dugout toward the bank and rapidly drawing it to the dugout much as a bass fisherman would cast a lure into the shallows and rapidly reel it back, the other paddled the canoe parallel to the bank. With the briefest of salutes we backed off, so as not to disturb their activity. Dusk, always the best moment for viewing Caprimulgidae, was on us. We stopped to see the first **Lesser Nighthawks**, then navigated the narrow channel back to the main river. On the way we surprised a group of four Capybara which were not more than ten feet away as we came around a sharp bend. On the Rupununi, many **Band-tailed Nighthawks** and Lessers strafed the river for insects. We flushed a **Green Ibis** on the return. In virtually total darkness Kenneth found a **Capped Heron** perched in a tree on the bank. How he could do this remains a mystery. Among the birds heard but not seen were Straight-billed Woodcreeper, Lineated Woodcreeper, Tropical Gnatcatcher and Long-billed Gnatwrens, Buff-breasted Wren, Undulated Tinamou (I have yet to see a tinamou), Collared Forest-Falcon, Red-and-green Macaw, Ferruginous Pygmy-Owl, Pauraque, Glittering-throated Emerald, Green-tailed Jacamar, Red-billed Toucan and Lineated Woodpecker.

A delicious supper, preceded by that marvelous English custom of a "spot of something" (in Guyana almost exclusively rum punch) capped a day of more birds than I've ever seen in one fourteen-hour period. Exhausted and reeling from data overload I went to bed with the assurance of a 4:30 a.m. appointment for nightjars on the Karanambu Runway. The pattern of birding until breakfast, breakfasting, birding until lunch, lunching, then birding in the afternoon, often well into dark, was certainly well fixed by the end of the first day. It was followed rigorously.

By 5:00 A.M. on the runway, Caprimulgidae were everywhere; **Pauraque** called like Whip-poor-wills with streptococcus infected throats, the Lesser Nighthawk bubbled its monotonous trill and the throat flutter of one sitting close by was easily seen with the auxiliary lighting we'd brought. Band-tailed Nighthawks were seen and two **White-tailed Nightjars** were seen and their high pitched whistle heard. The faint (distant?) wail of a **Grey (Common) Potoo** was heard. I found this a very hard call to detect and usually only heard the first very loudest note. I've known for a decade of my high note insensitivity, but this call and Jennifer's detection of a Blue Grouse that I simply couldn't hear last spring in Yosemite convinces me my low register is also weak. Here we also heard a Tropical Screech-Owl and a dawn chorus of Little Chachalacas.

As the dawn crepuscule fled, a pair of **Crested Caracaras** were seen perched on low shrubs just off the runway. In the copse near the generator house, a group of birds mobbed a recording, among them were **Brown-crested Flycatcher**, **Straight-billed Woodcreeper**, **Blue-tailed Emerald**, **Tropical Gnatcatcher**, **Black-crested Antshrike**, **Mouse-colored Tyrannulet**, **Common Tody-Flycatcher**, **Ashy-headed Greenlet**, and **Glittering-throated Emerald**. As we headed back along the runway **Wood Storks**, **Great Egrets** and a pair of Yellow-crowned Parrots flew over the river. **Grassland Sparrow**, **Lesser Seed-Finch**, **Finsch's Euphonia**, **Burnished-buff Tanager**, **Pale-breasted Spinetail**, **Variigated Flycatcher**, and a Yellow-bellied Elaenia were observed in the shrub edges of the river bank. At the compound Alvin, an amerindian fisherman, appeared with a very impressive catch suspended from a branch yoke by a split vine- the standard "rope" of the native. In addition to a fair representation of the types of fish in the river including piranha and cichlids he had a pirowrin, a catfish locally referred to as a banana fish. It had a most extraordinary color, cream flanks, with bright red fins, and a green vermiculated dorsum (photographed by Ilze and me). Dianne apparently arranged to have these fish prepared for our supper. Delicious! Following a pleasant breakfast we were dropped off from a Land Rover at the "Forest Patch".

**THE FOREST PATCH** is a nearby extensive piece of woodland distinct from the riparian gallery forest. En route several raptors were logged, Savanna Hawk (later found throughout the prairie), a pair of Plumbeous Kites, a Black-and-white Hawk-Eagle, a Swallowtail Kite and a Turkey Vulture. Along the forest edge we found White-lored and Slender-footed Tyrannulets, White-fringed Antwren, White-bellied Antbird and White-winged Becard. The more mature trees inside the forest yielded quietly sitting White-tailed and Violaceous Trogons, Green-tailed Jacamar, and a Spotted Puffbird, more actively a pair of Cream-colored Woodpeckers and a Lineated Woodpecker. Groups of foraging small birds included Black-chinned Antbird, White-flanked Antwren and Plain Xenops. A Helmeted Pygmy-Tyrant and a Forest Elaenia (photographed) were lured in by Davis's tape and seen well by all. Davis insists on everyone seeing the bird. His consistent mantra is "Did you all see the bird? Come over here. Stand here. Follow that branch until it crosses.. etc." If truth must be confessed these commands were mostly preceded by "Don". He is the consummate bird-spotter. Because of his familiarity with the particular species he is able to predict how and where a bird will respond to a taped call; the height, directness and closeness of its approach, whether it will perch or flit about or whether it will make only that single pass and disappear forever. The value added by having Davis as a guide is immeasurable.

**LILY POND** was our destination after lunch. We returned to the Rupununi River and boated upstream. As we launched the boat, two raptors were seen in quick succession; a Great Black Hawk seen briefly and a Bat Falcon that sat undisturbed close at hand on low trees at the river's edge. On a modestly steep (45°) bank a Swallow-Wing appeared to be excavating a burrow while in the trees above at least seven more sat--a lek? or was this a demonstration of nest-building skills? Under overhanging shrubbery on the far bank two Green Ibis foraged in the mud. Rounding a corner we surprised a beautifully plumaged adult Rufescent Tiger-Heron which froze in the open perched on a fallen tree presenting a splendid oars-length view as we motored by. A Squirrel Cuckoo, often previously heard, was seen well as it worked the upper branches of a lofty tree. A White-tipped Dove was spotted on the ground in heavy cover. The Brown-chested Martin replaces the Grey-beasted Martin in this savannah river environment. The Lesser Kiskadee was found among roots overhanging steep, bare banks of the river. A Pale-legged Hornero responded to a recording and was lured from a streamside thicket into view. Buff-throated Woodcreeper, Silver-beaked Tanager, Southern Beardless-Tyrannulet and Pale-tipped Tyrannulets were observed. We beached the boat and took the trail toward Lily Pond. In an isolated tree a pair of woodpeckers were perched. These were Spot-breasted Woodpeckers which responded to Davis' tape by making a close approach. Further along the trail a Jabiru flew by, circled and ultimately came to rest in an extremely large tree. What a marvelous, huge, formidable-looking stork! Our next bird was a Crimson-crested Woodpecker. Lily Pond was a gem, completely covered with the elegant, enormous Victoria Regia Water Lily pads, a plant I had not seen previously except in arboreta. While Great Egrets, Snowy Egrets and an Anhinga were there, the primary bird was the Wattled Jacana of which at least two dozen were present in both adult and immature plumages. Lily Pond is the sort of place you'd like to drift or swim around in, although I suspect that cayman or anaconda (neither of which I saw here) might have goals different from mine. Yellow-Crowned Parrots were heard and seen flying in the diminishing light.

April 9 at dawn we were again on the runway. The call of a Lesser Razor-billed (Crestless) Curassow was heard and Roseate Spoonbills were added to our list. To some, birding is listing. It is a sport much like any other competitive activity. Like most sports it runs against time. Thus, the absolute minimum to positively identify a bird, e.g., that requiring the least time, is what is required to "list" a bird. This need only be an impression for a distant bird, what can you confuse with a Jabiru? but for an antwren, an elaenia or pygmy-tyrant the closest excellent view may not be sufficient, the call is the key. These early hours where light is scarce favor those with good ears; Davis, Ilze and Ken (Travis seems to miss as many high notes as I do). For my own purposes (truth be told, I get a kick out of watching birds), I like a real nice view of the bird, sitting, walking, swimming, in flight, the voice, if possible. All of these are rarely achieved at a single sighting, but enough must be there for me to record it as a solid listing. In this text the first occurrence of a bird I have seen sufficiently well to count is listed in bold and underlined type, whereas others, too special to ignore but not seen well, are listed in simple type. Orange-winged Parrots, Rufous-browed Peppershrike, Brown-crested Flycatcher, Grayish Saltator, Barn Swallow and White-tailed Goldenthrout were new birds observed this morning near the runway.

**CRANE POND** was today's destination. Crane Pond is a floodable area which was not flooded at this season. In fact it seemed to have burned recently. Arson seems to be a way of life in the savanna regions. Is it an aboriginal practice or a newer one? Whichever, it is a frequent occurrence. The area did have a well-developed, sometimes flooded forest of the "varzea" sort and interesting birds. On the river the new birds seen were Red-eyed Vireo, White-browed Antbird, Boat-billed Flycatcher, Yellow Warbler and Amazon Kingfisher and for mammals, three wild Giant Otters. Near the trail to Crane Pond, a juvenile Great Black-Hawk was seen tearing a nest apart and its continually repeated call note was recorded by Davis. Along the Crane Pond trail in forest edge trees we identified White-chested Emerald, Yellow-crowned Tyrannulet, Cinereous Becard, Hooded Tanager and Long-billed Hermits. Golden-collared and Ringed Woodpeckers were both seen. At this point the first significant, but brief, rain shower drenched us and Ilze photographed the umbrella-shrouded party. As we returned to the boat, I spotted a new raptor, a Yellow-headed Caracara, in an isolated tree. Sightings of Little Blue and Striated Herons completed the morning.

On returning to the Karanambu Landing a domesticated Giant Otter (it reportedly sleeps in a barrel near the compound) was cavorting around two workers beating laundry over an upturned dugout. We took several pictures. His name is

Peter, and is enamoured of Dianne (as are we all) , and is a real charmer, obviously very curious about us but clearly confident that safety lay in proximity to the laundry team. There is no doubt that animals recognize individuals of other species; recently psychologists that work with rats have found that rats can distinguish the humans who feed them from those who experiment with them. This must be a long-time error in experimental design. Indeed, recognition ability extended to a wide range of species including non-mammals. There are, however, limits. Scallops just don't distinguish!

After lunch we explored a trail close behind the compound and found a very dull **Pale-bellied Tyrant-Manakin**, a **Streaked Flycatcher** and a female **Blue-backed Manakin**. The high trees near the river had some surprises. Below a large termite mound attached to a tree trunk several small bats were found by Kenneth. These bats had a distinctive pair of lighter parallel zig-zag stripes on their backs. Davis has identified them as White-lined Sac-winged Bats. This was a really astute job of spotting which reinforced my opinion of Kenneth's amazing intuitive sense for detecting wildlife. Overhead I glimpsed a **King Vulture** and several Wood Storks through gaps in the canopy. White-bellied, White-browed and **Dusky Antbirds** joined White-fringed Antwrens in mobbing a Ferruginous Pygmy Owl which sat stoically for a good view in a dense thicket.

**THE GAC AIRSTRIP** is several miles downstream and closer to the nearby mountains than the Karanambu Ranch airstrip. An afternoon treat was a drive to several open marsh habitats close by this Guyana Airways Corporation Runway. En route, typical savanna birds were seen including the very plentiful **Eastern Meadowlark** (singing a dialect), **Double-striped Thick-knee**, **Eared Dove** and Tropical Mockingbird. At the marsh, four Jabirus, a dozen Roseate Spoonbills, forty plus Great Egrets and 20 plus Snowy Egrets were seen. At least one hundred **White-faced Whistling Ducks**, fifteen **Black-crowned Night Herons**, a dozen **Cattle Egrets**, two **Buff-necked Ibises** and a **Limpkin** were seen. An **Aplomado Falcon** and a Snail Kite coursed over the marsh. Toward sundown a flight of **Red-bellied Macaws** passed well overhead heading for a distant roost in the river forest. While searching for an elusive Wedge-tailed Grass-Finch, we nearly walked on top of a **Burrowing Owl**. We had super views of dozens of **Least Nighthawks** in their buoyant flight over the prairie. In a thick brushy area Davis recorded a **Rufous Nightjar** calling in a voice reminiscent of a Chuck-will's-widow. A second one could be heard nearby as, of course, could the ubiquitous Parauque.

**TRAVEL ON THE SAVANNA.** An early morning walk near the "Neopelma Woods" produced **Lesser and Plain-crested Elaenias**, Pale-breasted Thrush, **Brown-chested Martin**, **Tropical Screech Owl**, Mouse-colored Tyrannulet and **Barred Antshrike**. After breakfast, we boarded the two Dadanawa Land Rovers and set off for Mountain Point with Duane De Freitas, Malcolm Miller, Julius and Elizabeth Denny, and the five of us. Duane, the manager of Dadanawa Ranch, is a self-reliant sailor/cowboy/ explorer. He's a natural leader, experienced in the region, and top-flight organizer. The perfect man to get us to the Kuyuwini River safely and back on schedule. Malcolm Miller, "Malachy" to Duane, is rail-thin, quite laid back, a very pleasant guy who loves fishing. We have that in common. Duane tells me he appreciates Malachy as a loyal friend and advisor. Especially valued because he says what he thinks straight out. I liked Malachy immediately. Not only because he shared my weakness for the occasional cigarette. The Dennys, are a young couple, he from England, she was brought up in Guyana and educated in England. Both are engaged in a world-spanning, year-plus, sabbatical. Traveling in these Land Rovers is a throwback to the early days of the automobile and for the same reasons; you're pretty much on your own a long way from the nearest service station and the roads are about what you could expect in the early 1900s. An added element is the age of these much repaired machines, possibly 40 years old. They're like the old ax; been in the family for 200 years "the same one, except for 30 new handles and a dozen blades." As a consequence, it was not ten miles before we had our first, as Travis elliptically put it, "mechanical", a flat tire. This one was easily predictable since I'd seen the flayed tire in Karanambu and wouldn't have driven out of the compound if it had been on my car. By the end of our Land Rover travels in Guyana we had all lost count of the mechanicals. I lost count at 10 (others claimed 14!). Passing out of the Karanambu Ranch land we spotted **Red-breasted Blackbird**, an **Osprey**, and the typical open savanna vulture, the **Lesser Yellow-headed Vulture**.

This was a day of travel and one in which my notebook inexplicably, but understandably, hid itself (writing in a moving Land Rover is an exercise in frustration). I'll extract data later from the party's notes. The route was along the western edge of the savanna, the Pakaraima Mts. on one side and eventually the Kanuku Mts. on our eastern flank. Our objective was Shirley Humphry's at Mountain Point. Just northwest of Shirley's, the Kanuku Mts. peter out in their westward extension. Along the way a Giant Anteater was seen knuckle-loping out in the savanna and Duane launched the Land Rover in hot pursuit eventually coming close alongside the animal. Close enough for Ilze and I to get good photos. I worry to myself, and Duane, about the effect on this animal of being chased by an auto. Such a large hairy critter must, I think, have a major heat disposal problem in this climate. But Duane assures me that this is the typical pace of the Giant Anteater.

Unlike our Great Plains, once described as an unending sea of grass, the savanna has much variety: minor water courses are fringed with Mauritius Palm, palmetto-like palms, tall grasses, flowering iris-like plants and various deciduous shrubs. Away from constant water the flatter terrain is close to barren. Small grass peduncles (6 inch high by 3 inch diameter) dot the plain separated by a foot or so. In the dry season these are fringed with a crown of last season's dry grass. On some slopes nothing grows, on others a well-developed shrub community exists. The savanna is not treeless but the trees seem to have a size limit, ca. 10-15 foot high. Curatella is the common tree I recognize. Complex leaves on others suggest legumes and acacia affinities. The overall image of the savanna is one of a starved land. It is starved, not of water as deserts are for in a climate of

180 inches of rainfall per year the savanna does not lack for water. But rather it is nutrient starved. This is the consequence of several factors: the soils are derived from ancient mountains whose roots are deeply buried by hundreds (perhaps thousands) of feet of mineral-depleted alluvial soil, the relative absence of geological and volcanic activity precludes the addition of new nutrients to the surface soils, and the intense rainfall carries away what minerals do leach from exposed rocks.

The singular difference between savanna and the adjacent rainforest is the latter's complex plant community. So tight are the nutrient economies in the rainforest that virtually all the nutrients are essentially always in plant, bacterial, fungal and animal matter. Thus, the rainforest is impervious to nutrient leaching by one of the highest rainfalls in the hemisphere. Such miserly grasping of every last atom of mineral by the forest community assures that its mineral nutrient inheritance will be passed to its heirs intact. In contrast, savannas lack the plant mass to protect a significant portion of their nutrients from leaching and thus are doomed to a nutrient impoverished state. Of course the rainforest can invade the savanna but in doing so the rainforest brings with it its own economical handling of nutrients. Both Stanley Brock (in *Jungle Cowboy*) and Duane De Freitas (pers. com.) commented on the habit of local amerindians of spontaneously burning the savanna during the dry season. This is also done in Australia by aboriginal tribes and was practiced in the Great Plains both of which are generally arid areas. Burning off is generally imagined to rejuvenate the grasslands by removing dried shrubs and recycling nutrients. Where major herbivores exist burning might improve grazing and ultimately lead to the redistribution of nutrients. But, if the ability of the savanna to sequester and retain mineral nutrient in the face of the tropical rainfall is so poor, perhaps freeing nutrients from the biomass and thereby increasing their ability to be leached is precisely the wrong thing to do to protect the limited supply of nutrients.

As we approached Lethem we drove on what was the most destructive road imaginable. The laterite soil, brick-hard and broken into uniform-sized rounded pebbles formed an endless series of moguls at right angles to the road much like those seen on an ungroomed snowmobile trail, or a beach washed by gigantic waves. The resultant wave action was sufficient to break a spring on one of the Land Rovers causing yet another "mechanical" which was jury-rigged on the spot. As so often is the case, our misfortune caught the attention of travelers who stopped to offer assistance. The first scheduled stop was at Lethem where an excellent lunch was served at the Savanna Inn about noon. Radio contact with Dadanawa both alerted them to our progress and insured that a new truck spring would be available along the route. Ilze, "hors de combat", peacefully stretched out on the patio keeping the dogs and lizards company. Land Rover travel is not without its hazards, but at this stop the beer was plentiful and ice cold. At Lethem, Malcolm introduced me to his son, a good-looking young man. Duane stopped to chat. As everywhere else information is valuable, but here in the outback knowing the condition of roads, bridges, recent rains, who is where, and where they intend to go, can be the difference between a trip and a disaster. As a consequence, Duane and Co. spend what anywhere in the U.S. might seem an inordinate amount of time "jawing."

Leaving Lethem we drove around the western end of the Kanukus to reach Macusi Village. This amerindian community is close by the western edge of the Kanuku Mts. and is a pleasant settlement of substantial thatched shelters, pigs, cows, horses, and people. A clinic and school building were evident. The trip listed relatively few new birds. Along the road **Crested Bobwhite**, **Vermilion Flycatcher**, **Grasslands Yellow-Finch** and **Yellowish Pipit** were seen. At Macusi Village I had my first look at **Brazilian Ducks** and **Fork-tailed Palm-Swifts**. There is a small but well-developed marsh that features low-growing vegetation on the right of the road and higher growing marsh plants on the left. The Macusi marshes seem a natural focal point for migrants passing between the savannas. Along the route, burning the fields was being practiced on this date. From Macusi Village we traveled southeastward toward Dadanawa and the turn-off to Shirley Humphreys's compound. On the drive two Buff-necked Ibises flew close over our Land Rovers.

**AT MOUNTAIN POINT** Shirley Humphreys's compound is set on the plain near a few wet spots and occasional patches of woods. Her ranch is a poem in isolation. Nearby here the Rupununi River flows through the Kanuku Mts and divides the savanna into Northern and Southern Savannas. To the south-west the Kanuku Mts are represented by a series of discreet isolated monadnocks that march off over the savanna into the sunset. The higher peaks separated by possibly 20 miles of savanna suggest "islands in the desert" similar to the Chiricahua and Huachuca mountains of southeast Arizona and hint to me of the possibility of unique species. The elevation at this site is 210 feet above sea-level. As our caravan drives into the yard we are met by Shirley with a graciousness and hospitality all out of proportion to her diminutive stature. Shirley lives here with only her pack of five or six indian hunting dogs but on the occasion of our visit a staff of cooks and assistants were helping her. Hers is a minimalistic life without electricity very little propane and much isolation. In a nearby grove is her husband's grave. He was a manager of Dadanawa Ranch who died following a tragic accident. She is a gracious, solicitous hostess and an aspiring bird-watcher. One of Davis' objectives in this trip was to deliver to her a copy of *The Birds of Suriname* by Francois Haverschmidt and Gerlof Mees. This is a very large, gorgeously illustrated and important book on the birds of the area. It weighs just under 7 lbs and as such constituted 28% of Davis's weight allowance! It was a most impressive gift which she clearly enjoyed.

As dusk enveloped us, the plain filled with more than fifty of the small Least Nighthawks with their light, bouncy flight. Among them were a few much larger nighthawks. These were **Nacunda** and were easily distinguished by their deliberate, slower wing beat, and comparatively almost ponderous (if any nighthawk's flight can be described as "ponderous") flight. We sleep this night for the first time in hammocks (backs willing). The hammock is second nature to the Guyanan, but takes a moderate amount of getting used to. Total exhaustion is perhaps the greatest aid in the use of the hammock by the uninitiated. This night it helped, indeed. In the morning stars, Ken, Travis, Davis and I set out to walk the prairie near the

Humphreys's ranch. This particular savanna gave the impression of being flooded for a part of the year and was clearly used as pasture for the horses which are Shirley's primary, possibly sole, source of income. Resident in the higher, thinner short grass/forb growth of the pasture was a 4-inch mini-flycatcher, the **Bearded Tachuri**. This slim, crested, little fellow is very hard to spot due to its small size and coloration which blends well with the grass stems on which it perches. In addition, this ventriloquistically-talented bird seemed to me to be calling from farther away than it was. When Davis played its song on a tape, there was a distinct "brrrrrr" at the end of the taped song. Examination of the bird actually singing showed that the end of the song was punctuated by a rapid fluttering of the wings and a plainly audible burping noise was associated with the wing action.

At breakfast a large **Bicolored Wren** searched along the thatch of a nearby out-building. All had a good close view. A walk about the marsh behind the compound revealed a pair of Yellow-chinned Spinetails and the usual marsh birds (Brazilian Duck, Buff-necked Ibis, Jabiru, Great Egrets, and White-headed Marsh Tyrants). Following breakfast we drove to Sawariwau River, a small creek nearby which drains into the Amazon Basin via the Takutu River on to the Rio Branco and the Rio Negro. At this point we are at North 02° 56' 655 and West 59° 40' 444. On the way the flat short-grass fields were pebbled with termitaries so many that it was impossible to drive there without neatly planing the tops of those in our path. Unquestionably, termites are the major tropical herbivore. They were not absent from any of the environments we studied. In the varzea, termitaries were characteristically on tree trunks high above the flood levels and long tunnels connected them to the ground. Along the creek, whose bed was alternately dry and pooled but not perceptively flowing, we found Green Kingfisher. On the banks and at the water's edge grew patches of a wrist-thick single stalked arum. This water plant is called "mucca-mucca" the poultice of which is alleged to be an effective demulcent for the treatment of hemorrhoids (Preparation H, look out!). Straight-Billed Woodcreeper, Black-crested Antshrike, Common Tody-Flycatcher, Pale-Legged Hornero and Variegated Flycatcher responded to a Ferruginous Pygmy-Owl call, as did the real McCoy! A **Plumbeous Seedeater** was spotted here as well.

**AT DADANAWA RANCH.** At about 2 P.M. on April 11 we set out on the short run to Dadanawa. It is a slight climb to Dadanawa at an elevation of 340 feet. The savanna here was quite open and the horses, a herd of mares with foals, were strikingly beautiful. Most seemed larger than those the Wapashana rode. On encountering the amerindian cowboys it was clear that the descriptions from Stanley Brock's "Jungle Cowboy" were right on the nose. The equipment included hand-braided rawhide lariats, two-toed stirrups, saddles and hats. Though Stanley Brock's book has a great deal of popular interest material about pet jaguars, tapirs, cougars and much more, there is probably no more accurate depiction of the Dadanawa Ranch (North 02° 50.005, West 59° 31.339'). Little seems to have changed from his descriptions, its people or the Land Rovers which I'm sure were the exact same vehicles described in the book. I felt at home and the staff did everything to insure that continued. Probably reading that book prepared me better for every aspect of the trip than anything short of actually being there. For its medical insight the book is equally valuable. Shortly after arrival my notebook turned up in the bottom of my bag and a more accurate record was restored. A quick stalk along the Rupununi River was arranged. Davis called in a **White-barred Piculet**. Ilze spotted a large, dark, peregrine-like falcon so high that no color could be seen. The most likely large falcon encountered would be an Orange-breasted Falcon, not a peregrine. Still, not enough detail seen for me to list it. A characteristic fast warbler-like call was answered by tape and revealed a **Flavescent Warbler** in dense stream-side brush. Further along we lured in a male Blue-backed Manakin, a missed target bird for much of the Karanambu stay. Burnished-buff Tanager and **Bananaquit** completed the day. Early the next morning we returned to the normal routine. A walk along the road to the ranch gate turned up a **Black-collared Hawk**, a rather sedentary, slow-moving large bird. We didn't see it soar but its heavy flapping flight down the course of the river suggested it was anything but light on its wings. Although the call of the **Striped Cuckoo** had followed us everywhere this was my first good view of the bird. Two **Little Woodpeckers** were first glimpsed and later seen very well. A Yellow-breasted Flycatcher and a **Greenish Elaenia** were identified. In response to the tape, a socially-minded **Little Chachalaca** flew over a river pool and almost instantly disappeared after landing in a tree. While we heard this bird each morning in every riparian forest this was our first good view. Unlike South Texas's heedless Plain Chachalaca (*Oreortyx vetula*), I suppose it is hunted and has developed wariness.

**BUSH ISLAND** was our first objective for the day. "Bush islands" are isolated forested patches surrounded by the savanna. Although during the wet season some might be inundated, their islandness has to do with their being surrounded by grass, not water. The trees were quite lofty, but not so much as a well-developed rainforest and except near the edges they had the open gallery character of woodland. Our guide "Silveirio" did a good job of seeing that we didn't get lost. He had the eyes of a hunter and missed very little, but I don't believe his heart was into bird-watching. Here we lured a pair of Buff-throated Woodcreepers to us. The incessant loud stridulations of many cicadas over-whelmed the songs and call notes of the birds making detection of birds simply impossible at times. Cicadas were also visible and I did get a decent close photo of one cicada with the sun shining gold on its long wings. Their size is at least twice that of the northeast's Seventeen Year Locust. Also seen were White-winged Becard, Ashy-headed Greenlet and Red-eyed Vireo, always an attendant at mobbing scenes in summertime New Hampshire and in Guyana. A Brown-crested Flycatcher was seen as were **Gray Seedeaters**. The savanna near Bush Island is grassy and supports a species of Curatella trees, so called "sandpaper trees." These trees follow a strategy to discourage herbivores by depositing silica in their leaves: this sort of energy expenditure probably works only in the tropics where leaves can persist for a year (or more?) but might be wasteful for large temperate-zone trees where leaves are shed regularly after only five months. The use of silica is frequent in many other life forms, for instance, radiolarians, diatoms, sponges, horsetails (Equisetium) but in higher life forms it is a minor component of bone and cartilage. The Curatella scrub habitat, especially the

weedy hillsides overgrown with chest-high grasses, is an indicator for the Amazonian Scrub-Flycatcher a pair of which Davis found readily.

After lunch we went on the Guyanan equivalent of a New England "Snipe-Hunt." Two young boys had spotted a "Harpy Eagle nest" not five minutes walk and a small paddle from the ranch buildings. So we went over to check it out. If ever they were there, they left without a trace, even taking their nest with them! Later, it turned out, the boys did locate a Black-collared Hawk's nest. On this afternoon Davis had planned a trip to Towa Towan a nearby isolated bald - we'd call it a "Cap" in Maine. However, I was overcome with an undeniable urge to not confine my alimentary canal to the back of a Land Rover! Thus, I missed a unique sighting...Sharp-tailed Ibis which had rarely, if ever, been seen in this neighborhood and was not to be seen again on this trip.

**THE KUYUWINI EXPEDITION** was the *piece de resistance* of this trip and the next morning (April 13th) we set off for the Kuyuwini River almost due south of us. The party consisted of Duane, Malcolm Miller, Carl Fredericks (driver extrodinaire), Pip (who was that masked man, anyway?), Elizabeth and Julius Denny, our kitchen staff comprising Marvelous Marjory Antone, the very helpful Stephen Raimondo and we five in two Dadanawa Land Rovers. The overall logistics for this trip was truly impressive: at least 18 individuals, three vehicles (including a tractor), three campsites, a boat, radio and solar panels, food and incidentals for all. We drove first to Aishalton where we were met by the village captain, Tony James. Here arrangements were made for fuel to be deposited there from Dadanawa for our return trip. The trip over the savanna with a deep ford near Aishalton was dry. So was the general store..no beer. But we sat about and, as usual, hospitality in the form of cool juices appeared. We were honored royalty. Again, the protocol of jawing, admiring the new addition, trying out the new radio, or appreciating the new solar power supply was an essential feature of the trip.

Aishalton left, we drove to a nearby boulder field where an astonishing variety of petroglyphs had been inscribed and, more recently, highlighted in chalk by the local school classes. These were on large (30-50-foot diameter) smoothly rounded breast-shaped black boulders. The source of these boulders is likely the nearby ledges but what agency has smoothed them. Are they the work of man or some other agency? Water seems unlikely. Could heat spallation do it? Were aeolian forces responsible? Nowadays the eastern winds couldn't do it. Perhaps before the Andes rose 20-30 million years ago these rocks rested on some shore and were blasted by western winds. These petroglyphs are a marvelous feature, made more mysterious by our sudden insights into the possible meanings, the recognition of a cicada, other animals, or of sun and water, and certainly of people.

The trip continued through another Wapishana village, Karaudanawa where Magnus and Placid Stevens, two of our most competent guides, lived. Both were already ahead of us at Kuyuwini Landing. En route, we were to stop this night at a camp on the Parabara Savanna. Our path intersected a number of small streams which generally had little water at this time but were surrounded by riparian forest and edged with jungle. Occasionally we had to plunge into brush covering the road, or ride on corrugated ditches. Generally the trip was uneventful with only four or five of the usual pauses for flats, break-downs and stuck vehicles. The last pitch was through "Thirteen Mile Woods" (actually less) a mature forest of really tall trees. Our trip was made simpler by an advance crew consisting of Joe, Percy and two or three others who with a tractor had been sent ahead and broken trail, removed logs and cleared brush. The savanna raptors were: Savanna Hawk, American Kestrels, Aplomado Falcon, White-tailed Hawk, Swallow-tailed and Plumbeous Kites and Yellow-headed and Crested Caracara. Vultures were Lesser Yellow-Headed, Black and Turkey. Pigeons seen were Pale-vented, Ruddy and Plumbeous while doves seen included Eared Dove the ubiquitous Common Ground-Dove and, in riparian forest, the White-tipped Dove. Swallow-wings were throughout.

**AT PARABARA SAVANNA** (02° 11'. 956, West 59° 22'. 262) we birders eloped to the forest while everyone else set up camp. The forest here is composed of really high mature trees with tops approaching 100-120 ft. We hear howler monkeys some distance away vocalizing and thrashing about the treetops. It is a fully birdacious place. Red-and-green, Red-bellied, and Red-shouldered Macaws were seen, as were Caica, Dusky and Blue-headed Parrots, Spotted and Pied Puffbirds, Long-tailed Hermit and Black-eared Fairy, Squirrel Cuckoo, White-tailed Trogon, Channel-billed Toucan (my first sighting of a non-captive toucan) as well as a probable Yellow-throated Woodpecker were seen in these deep woods. I excitedly called out a "large black" bird resting on a limb which turned out to be a much more modest sized Purple-throated Fruitcrow. Several of these cotingas were subsequently seen. The most commonly heard and most identifiable noise in these deeper woods was the Screaming Piha. This dowdy bird distinguished by its total lack of distinctive marking illustrates the complementarity principle that the duller the bird the more spectacular the voice, the bower or the display. It is a difficult bird to find in spite of its voice, I have yet to do so.

Buff-throated and Lineated Woodcreepers were seen and heard. A Mouse-colored Antshrike was seen. A Rufous-throated Antbird was heard by Davis the only record of this bird on the trip. A Thrush-like Antpitta was heard. Among the flycatchers, several Mouse-colored Tyrannulets and a pair of Sirystes were seen. The Sirystes were a novel find for the area although not an unexpected one. Forest and Yellow-bellied Elaenias, Painted Tody-Flycatcher and Yellow-breasted Flycatchers were only heard. A Helmeted Pygmy-Tyrant was observed well. A White-breasted Wood-Wren and a pair of Fulvous-crested Tanagers were found. Attempts to call a Pectoral Sparrow into my view were fruitless, although I suspect the rest of the

party at least shared a glimpse. I nick-named this elusive but quite vocal bird of the dense jungle edges, the "spectral sparrow." I have yet to see it.

Davis spotted a Lineated Woodcreeper and we watched it deposit nesting material in a hollow 60-70 feet up in a 100+ ft high deciduous tree. As we stepped backward off the road to reduce the angle we were suddenly assaulted by wasps. I think three of us (Travis, Davis and I) were stung. In my case I was wearing a short-sleeved shirt for the first time during the trip. A wasp worked his way to my left armpit and stung me at least five times there. The wasp is called locally "marabunta", the similarity to the term moribund was not lost on me as the sting site eventually became infected. Percy who was guiding us at that time pointed out the wasp nest, about the size of a standard baseball, and covered with small black wasps which were about half the size of our typical *Vespa*. The nest was suspended from a leaf in a shrub a meter from the road edge. In reviewing our Land Rover ride to the Parabara Savanna several of us had been "bitten" by what were thought to be "fire ants." Small bites or stings, but essentially ignorable. These were apparently marabunta stings that did not penetrate our clothing sufficiently to inject venom well.

Our camp at Parabara was a simple, well-built rectangular, gabled shelter, roofed with an orange polyethylene tarp and hung with hammocks. A spring hole nearby had adequate water for bathing and, in retrospect, for drinking. Between the vehicles and the shelter we all fitted in and the night was anything but warm. I'd bet it went into the mid-sixties. The clear night gave a good view of the Hale-Bopp Comet just above the northern horizon, the Southern Cross in the opposite quadrant and a host of stars on which Davis expounded from his wealth of astral knowledge. In the morning, April 14th, we toured the camp environs and then returned to the woods road. In a near fruit tree **Blue-backed** and **Opal-rumped Tanagers** were found. On our return to the forest road we observed two woodpeckers; **Waved** and Golden-collared. A **Black-capped Becard** is called in. A new jacamar is seen, the **Paradise Jacamar**, not at all bright colored but its "sharp at both ends" profile is unmistakable. This is a really birdy high forest with macaws and parrots flashing by over a towering 100+ foot canopy. Antbirds of various forms abound: a pair of Dusky Antbirds, a **Black-headed Antbird** is seen and its Tufted Titmouse-like call is repeatedly heard, a **Slaty Antshrike** responds to our call. A **Reddish Hermit** is seen visiting a near flowering tree. Among the first birds seen while we walked along the road were **Black-banded Woodcreeper**, a **Blue-black Grosbeak**, a **Fork-tailed Woodnymph**, and a Pied Puffbird. High in the tree-tops a **Green Oropendola** was seen and several glimpses of the whitish **Cayenne Jay** ultimately coalesced into a complete picture. Dusky or Caica Parrots flew by and a Chestnut Woodpecker was seen well. Among **Flycatchers** were Streaked, **Yellow-throated** (recently separated from White-ringed), **Painted Tody-Flycatcher** and the *Sirystes*. Very obvious in the highest treetops the profiles, the electric-blue color and the brilliant red legs of **Red-legged Honeycreepers** were seen. Unquestionably these were Red-legged Honeycreepers but two birds we saw had very short bills and suspicions are raised that Short-billed Honeycreepers could be here as well.

About 12:30 PM we set out from the Parabara Camp embarking over the swampy savanna. The path followed the center of the savanna for a way then took a sharp turn to the left up a long slight rise which turned out to be very soft ground. Inauspiciously, the lag vehicle managed to get stuck on level ground before we reached the rise. Bailing out of the vehicles, pushing and walking were the order of the moment. Finally both vehicles managed this stretch which traction-wise was one of the worst sections of road. Now the track went into woodlands out onto the savanna again repeatedly as we traversed ever-larger stream and creek beds. Their direction was from north to south but at this season none had a significant flow of water. Each stream bed was heralded by a steep decline into a ravine followed by an equally steep ascent. There was plentiful evidence of at least occasional human occupation including tree carvings with anatomical details that only Larry Flynt dare publish. Near one of these streams was an abandoned and deteriorating simple thatched lean-to sufficient for not more than two people. In the stream itself was the bony shell (approximately 18" long) of a large turtle. During the wet season, I imagine the smaller streams are occupied by much larger and more accessible prey. Weirs and nets across these streams at the beginning of the dry season must be an effective way to harvest retreating fish and turtles.

The path had its share of swampy land, corduroy road and overhanging vines. These vines are sometimes "razor grass", the equivalent of organic barbed wire, which like barbed wire can cause real damage as one drives through the jungle. Calling out the hazard and ducking were essential for those in the rear of the Land Rover. As we approached the Kuyuwini River Forest there was a major (30 min) "mechanical." In the middle of one creek the second Land Rover slipped its gear-shift linkage and remained stuck in reverse. The pause was an opportunity to bird so we struck out up the trail. In a creek bottom we found **Sulphury Flycatchers** and a few of the common species. When the repair was made, the trucks approached us as we continued out of the jungle into the savanna. There Travis made the discovery of the trip. High in a distant emergent whose umbrella top towered over the forest canopy sat a large reddish crow-like bird. Glasses and Ken's scope revealed this to be a **Crimson Fruitecrow**, a bird not listed in our guide but one that I had read about in D. W. Snows' *The Cotinga* from Maggie Wittner's library. As we approached it across the field, it took off and flew in level powered flight across the next creek. According to Davis it is a rare bird with a rather limited and small range. As dedicated a South American birder as he is, Davis had seen it only twice before. A real high moment. We were all thrilled but Davis was ecstatic! This bird was at North 02° , 08'.987, West 59° ,16'.172.

The track continued in forest, breaking out from time to time into small savanna glades frequently marked by the Mauritius Palm or Palmettos. In one we spotted our first **Black Caracara**. This bird seems to prefer the smaller savanna

clearings. Finally the trail continued through pretty much continuous high gallery forest with occasional dips into broader ravines. The last pitch up to the Kuyuwini River from a nearly dry streambed was imposing; slippery with wet clay, deeply rutted, and at least a 30° climb for 150 feet. The lead Land Rover hung up about 20 feet up the trail, tires blocked to prevent slip-back, it sat unmoved by human pushing. The first idea was to winch it up, but firmer minds prevailed. A hawser was provided and a dozen stalwarts were organized by Ilze, in her very best summer-camp counselor form, on either side of the rope. We then pulled the Land Rover up the hill with some grunting and much elation. The second, pulled by the first, came more easily. The run from there to the Kuyuwini Landing was without incident. Kuyuwini Landing (North 02° 05.53', West 59° 15.03') is a hardrock ledge that crosses the river and at extreme low water is probably wadable. It provides a good spot to launch boats and Duane had a 20-foot aluminum river boat which he had hauled in. As well, the amerindians had several dugout canoes. Percy and several other workers cleaned fish and later Placid and Magnus hunted for paca. Our gear and, in time, we ourselves were transported about a mile down the nearly currentless river to our campsite at Farine Pan Falls (North 02°, 14. 229' West 59° 15.00). The elevation at this point was measured by Davis at 600 ft above sea-level. The track on our map (1975 edition) continues for 25 miles ending at the Kassikaityu River but now there is no evidence of it beyond the Landing. The forest exerts its claim over the land rapidly.

**THE KUYUWINI CAMP.** We settle into the camp, bathe in the river, dry, and bird for a bit around camp. The shelter is the standard open rectangular gabled frame structure, tarpaulin covered and apparently newly constructed or re-constructed. At one end a thatched cooking area faced the building and a platform of logs had been built to bring the cooking equipment to waist height. This equipment was placed on "boards" made from two inch thick tree bark and the immediate cooking area was framed by similar bark boards to protect it from the elements. The bark is light colored but all of it had been gouged on the external surface to make an attractive design of red marks. This design could be art plain and simple, but may denote tribal "ownership" or even represent some traditional rite respecting the tree. It would be interesting to know. Just behind the camp we found the trees from which the bark had been cut. These were a relatively smooth-barked species possibly thirty to thirty-six inches in diameter. They had been dropped with a chain saw, sawed into five or six foot logs and the bark then cut in the long dimension and peeled off to make the boards. The tree is a latex-rich species (bulletwood?) and the cambium region of the stump was ringed with eruptions of latex some piled up to four or five inches in height.

After sharing rum punch we ate a supper of fresh fish caught in the Kuyuwini and "bakes" prepared by Marjory. A novel beverage appears. It is made from the millimeter thick inner layer of a brown nut of a palm said, probably incorrectly, to be "Cokerite Palm". Released by boiling, the resulting milky fluid is barely sweet and tastes faintly like a malted milk-shake. Bates reports a similar potion, milky with a nutty flavor, from the pulp coats of the "Bacaba tree", a palm he identified as "*Oenocarpus distichus*." A closely related palm, called "manaka" (*Oenocarpus bacaba*) occurs widely throughout Guyana and is probably what we had. A drink of similar type is also prepared from the fruit of *Euterpe oleracea*, called locally "lu". No one has any complaints. That night is spent in a hammock. There are several potential positions that can be assumed in a hammock but all are uncomfortable, and mine seemed to defy gravity. On April 15th in the 5 A.M. dawn, I struggle out of my hammock and mosquito net and, completely disoriented, begin a search for the john. Happily, success is not too far away, nor too long in coming. But once up, I stay up. April 15, today we go back up the river to the Landing and hunt the road for birds. Here, more than anywhere, Davis insists that I'll see the bird - and we saw them. On the boat to the Kuyuwini Landing we saw Amazon Kingfisher, **Band-rumped Swifts**, White-winged and **White-banded Swallows** and Gray-breasted Martins, **Scarlet** and **Blue-and-yellow Macaws**, **Golden-winged Parakeets** and Orange-winged Parrots. At the landing four **Red-fan Parrots** were present. Among parrots these are the most spectacularly patterned with a light grey beige streaked head, vermilion feathers edged with blue on the nape and breast, back parrot-green and primaries and tail dark. Unlike most of the parrots which we saw only in fleeting passage, these birds remained conspicuously sitting in a tree near the landing flooded by great early morning light. The road transects a riparian forest first through the thick shrubs near the river, then through the jungle tangle along the more open edges, and farther along the trail into the much higher trees characteristic of the rain forest. Where the road has created extensive openings various stages of successional growth are obvious. Along road edge were found Streaked Antwren (a male), White-flanked Antwren and finally the **Thrushlike Antpitta** was detected sitting on a log on the forest floor doing its best to passively respond to our tape by vocalizing. This is a hard bird to see!

Magnus was our guide today and really just let us do our thing while he whittled. Curious about the objective of his work, I enquired. What was the wood? Leopard wood. An attractive wood named for its reddish black-spotted grain. What was it? The shape was dagger-like and as he worked a familiar shape appeared. Unmistakably, a net-shuttle virtually identical to one I'd whittled out of an old shutter piece in my youth when I was into net-making. A useful tool considering the supply of fish needed by the 18 of us. Keeping the hands occupied seemed to characterize Magnus and Placid. Placid made several wallets and bags from palmetto leaves, and Magnus prepared plant stems slit into strips 1/8th inch wide and 40 inch long for basket weaving.

**Amazonian Antshrike**, a male **Great Antshrike**, **Pygmy Antwren**, a female **Rose-breasted Chat**, **Wedge-billed Woodcreeper**, Striped Woodcreeper, and Yellow-throated Woodpecker were present. **Buff-cheeked Greenlet**, **Sooty-headed Tyrannulet**, **Golden-Spangled Piculet** and **Long-billed Gnatwren** were seen. Another of the region's honeycreepers was found, a pair of **Green Honeycreepers**. **Blue Dacnis**, **Grayish Mourner** (rivaling the Screaming Piha in its dowdiness), several **Cinnamon Attila** and a female **Black-spotted Barbet** sporting a brilliant red throat, were seen. A pair of Yellow-

crowned Elaenia were observed as was our only Sulphur-rumped Flycatcher of the trip. Also listed anew this day were Wing-barred Piprites, White-bearded Manakin, Coraya Wren, Slate-colored Grosbeak, Violaceous Euphonia and, while it had been seen by everyone else yesterday, today I saw my first Guira Tanager and a Spotted Tanager.

One casualty of my early morning struggle with hammock and sleeping net was the loss of my hearing aid. I'd searched for it to no avail and then mentioned it to Steven who looked for it. Later Placid and Percy hunted for it. Percy found it by digging in the dirt beneath my hammock where I had apparently stepped on it and buried it completely. Thus, I was very pleasantly surprised when Percy and Placid walked up to me in the woods at Kuyuwini Landing and presented me with this still functional treasure.

In the afternoon we birded briefly in the jungle behind the camp, found a Scale-backed Antbird and tried unsuccessfully to lure a vocalizing Black-faced Anthrush. We then boated from below the Farine Pan Falls a mile or so down the river. The river here has high banks and presumably because of the flood stage they are mostly bare and overhung with vines, pendulous shrubs and branches. In contrast to the Rupununi River no caiman were seen here although fish and other prey were plentiful. I wonder if they are absent, or more wary here where they might be less protected and more prized as game. We found a Red-throated Caracara in a high tree. Also seen were Red-billed Toucan, Grey-breasted Sabrewing, Spot-backed Antbird, and a Green-and-Rufous Kingfisher. A tropical thunderstorm threatened us and out came the umbrellas but little rain fell then. Much more fell during the night. The meat at supper included a labba (*Agouti paca*), a very tasty rodent, shot by Placid.

April 16. Dawn bathing calf-deep in the Kuyuwini River is a quiet experience. First sounds are the chuckle of water flowing around the rocks at Farine Pan Falls and the all-night persistent "Brrrap" of two nearby treefrogs singing in, then out, of phase, counterpoised by the murmur of Marjory to Stephen and his response, as they prepare the morning meal for birders too single-minded to object to a 4:30 A.M. rising. The extremely low, quiet voice of the Wapishanas and even the ranch workers has been a shock. So below the range of the normal sounds of the civilized north where aggressive sound is a constant from the over-lugged tires roaring by to the blaring of TVs, car radios, emergency vehicles. Even the normally reserved New Englander is an order of magnitude louder than the Wapishanas. I realize how much hearing I've lost when I can't understand even Duane or Malcolm when they're speaking to me in their normal tones. Like the Wapashana, they murmur. A very far off roar of red howler monkeys slides into my consciousness. Now there's a noisy primate!

My mind, seeking symmetry, locks on civilization and I suddenly realize how this civilization I now view near the edge of the Amazon basin is in ways a more matured one than that in which I normally reside. It has survived fairly intact, however dramatic the changes, only slowly changing with the centuries. The escape velocity at which modern industrial civilization proceeds insures that nothing lasts. Everything is re-born, re-worked and destroyed in the process. My own research area is a testament to this, it has been "back-watered" and hardly any problem in bacterial virology or basic bacteriology is now funded although many significant problems still exist. Studied issues have moved on to trendy and admittedly more utilitarian, medically significant or potentially more lucrative projects on eucaryotes. In contrast, this quiet civilization at the edges of the "busy" world has had the opportunity to define itself, to integrate its behavior with the environment and evolve a compatible life style. There are even more isolated first people, the Wai Wai, thirty miles to the south where the old track from the Landing once ended, who retain even more of the original way. The Wapashianas have integrated their society into the cattle industry thus making use of their hunting skills since cattle ranching in the savannas of southern Guyana is mostly a hunting skill. The ease with which Placid, who with his New England Firearms 12-gauge "Pardner", has provided us with a Labba (*paca*) each day testifies to that skill. They, at least the men, are consummate horsemen. Percy, who has been with us as a helper, carries a bow and three fifty-inch long, steel-tipped fishing arrows. A very lethal looking set-up. Subsequently, Percy showed up at the ranch in the typical vaqueiro equipment. Ecotourism (that's us) is an even more compatible paradigm which is now being adopted by the Wapashana. When I discussed this passage with Davis months later, he wrote me "Yes but believe me, we are among the very first ecotourists these people have seen." A carefully regulated ecotourism may do more to preserve their natural environment than any superimposed view of civilization.

Now more noise from the camp as our party rises. The first truly audible bird noises, the loud notes of, my guess, a Cinereous Tinamou come to ear. It is still too dark to find soap, toothbrush, or dop kit on the Farine Pan rock shelf, just light enough to find my clothes without a flashlight. Last night it rained and the camp on the Kuyuwini River is in mild disarray. Hammocks hung in the open at dusk have been jury-rigged under the shelter pretty much in any way they'll hang. Malcolm is laid out flat, asleep on one bench of the table sheltered from the rain by the thatch of the cooking hut. Marjory and Stephen work quietly around him. I sit down at the opposite side of the table, sip coffee and wait for Davis to muster the troops for a quick birding foray into the nearby woods. One of Davis' trail kit requirements, in addition to water, is an umbrella. Last night I'd put mine, opened to dry out, on top of the tent tarp and in extracting it this morning I loosened a few gallons of cold rain water from the tarp suddenly and unexpectedly on Davis' head. A cold wet morning shower! Sorry, Davis.

From 5 to 7 A.M. we birded behind the camp and turned up a Spot-backed Antbird, a Gray Antwren, and a Buff-throated Foliage-gleaner. The plan today is to go across the river to a nearby small savanna through low, thick jungle into a rather open and thin forest. Placid wielding the typical Guyanan brush tool, a cutlass not different from a pirate's, had cleared

the path through to the savanna yesterday and the going was easy. Initially we spotted **Fasciated Antshrike**, had good looks at Coraya Wrens, and spent some time listening to the differences between Plumbeous ("Why' don't you' go?") and Ruddy ("Acapulco") Pigeons. A **Strong-billed Woodcreeper** was seen. While we'd barely glimpsed Red-throated Caracara yesterday, today we managed to be mobbed by them. Their loud scream was easily imitated and at least four of these excited birds kept a constant tree-top screaming--earning the name by which our guides, Magnus and Placid, call them, "the anti-man" bird. Somehow we finally lost them and while concentrating on identifying some monkeys, we heard a harsh bray. Quickly, Davis' tape came up with a response, a **Capuchinbird**, an unexpected bird new to the area. It was the size of a crow, but stouter and grayish. It flew in, perched and calmly looked down on us from the upperstory. The call is such that this bird is accurately nick-named the "calf-bird." This thin, medium height wood produced a pair of **Red-necked Woodpeckers**, sporting flame-colored heads, tan-washed underparts and yellowish bills, and after some search, a **White-necked Thrush**. The **Olive-backed Foliage-gleaner** was also found. At the edge of the savanna in fairly thick cover we encountered a foraging mixed flock of birds. In this part of Guyana the composition of these foraging flocks is, according to Davis, reasonably predictable: **Saturnine** or **Dusky-throated Antshrike**, Gray Antwren, **Chestnut-rumped Woodcreeper**, **Cinereous Antshrike** and Olive-backed Foliage-gleaner all were present in this group. As we approached and entered the small savanna we found **Black-headed Parrot**, a Black Caracara, a perched **White Hawk** and soaring; two Black Vultures and three King Vultures. This environment with its Mauritius palms seemed to Davis to be **Yellow-green Grosbeak** territory and in short order, Davis called one in. In the dried muddy spots in this savanna were the characteristic three-toed tracks of the tapir- the largest native jungle-grazing tropical mammal in South America. After a brief exploration of the savanna we hurried back to camp with Placid and Magnus for lunch.

In the afternoon, we went up the river stopping at the Farine Pan Farm on the left hand bank. Here, in a thatched structure, a large shallow 5-6 foot diameter steel pan rested inverted on a bricked fireplace. This is used in the preparation of farine for drying and baking the washed and strained manioc root. "Matapi", tubes woven from palm frond that are used to press the toxic cyanide-laden juices out of the mashed root, hung from the rafters. The expressed juice when boiled is a non-poisonous sauce called "cassareep" that is an essential for stews, soups and the general pot-luck meal. Neither manioc plants nor farmers were in evidence but a bunch of ripe bananas was left on a table presumably as an exchange item. White-bearded Manakin, Black-headed Parrot and Mouse-colored Antshrike were among the birds seen in the afternoon. For supper our hunters had shot a labba. Duane had earlier promised me to prepare a curried labba. I assumed that he'd kept his word. In addition to the curry, the labba was served as roasted pieces. What is there to say? Great location! Great food! Great company!

On the morning of the 17th we broke camp and, in order to get us out of the workers way, we were quickly paddled up to Kuyuwini Landing. Along the way, Dusky Parrot, Blue-and-yellow Macaw, Black Caracara, Neotropical Cormorant, as well as Green and rufous and Ringed Kingfishers were seen. The ever-present voice of the Screaming Piha was heard as was that of the Little Tinamou. A unique audible here was the Slaty Grosbeak. In the high trees along the river Red-billed Toucan were obvious and in the trees just at the edge of the jungle **Guianian Toucanet** and **Green Aracari** were seen well. Showers moved us back and forth between the jungle path and the shelter at the landing. On one foray in quick succession we found two exciting birds: several **Spot-winged Antshrikes** foraged in the low trees surrounding the clearing at the beginning of the Landing Road, and a **Rusty-breasted Nunlet** was found sitting motionless and silently just inside the jungle edge. Both species were new for Guyana.

**RETURN TO DADANAWA.** We left Kuyuwini Landing at about 10:30 A.M. The trip out was as eventful as that going in. Placid on his bike made considerably better time and was ahead of us most of the time. At one point he returned to say he'd found a flock of Gray-winged Screammers, which we failed to find. We lunched on the road. As always Marjory pulled a fine meal out of her bag of tricks. We suffered at least one rope-pull and a general dismounting at the marsh road near the beginning of the Parabara Savanna in which I managed to plaster myself with a goodly coating of mud while assisting a Land Rover. Luckily, the spring there was an effective bath for Stephen, Duane and me. Placid beat us to the Parabara Savanna camp and we found him collecting palm nuts for his family. His task was well along by the time we arrived. We stayed only long enough for a group photo at the Parabara camp. Shortly after our departure we encountered the marabunta, probably the same wasp nest at the Lineated Woodcreeper tree. Most of us escaped with minor stings, but Davis was stung on his right forehead and swelled up considerably, nearly closing his right eye. The drive out from there was easy. In an open grassy area of the savanna we stopped to wait for the second Land Rover which had lagged out of sight. A brief walk into the grassland turned up good views of three **Wedge-tailed Grass-Finches**.

On the road just short of Karaudanawa Village, Duane suddenly and inexplicably braked hard on a clear road. Those standing in the back were heavily thrown to the bar supporting the roof tarp. Ouch! The cause was a small puppy wandering in the road through the uninhabited Savanna. We picked it up and it found a new home with Magnus. Magnus's house was pleasant and filled with family of a dozen at least. Magnus has ten children and clearly grandchildren aplenty. After a brief visit we left at about sundown, picked up Placid at his house, and headed for Aishalton. On the approach to Aishalton we lost contact with Carl Fredericks' s Land Rover. When we sent out for a few beers we learned that he taken a wrong turn and (most surprisingly?) when they accidentally encountered the local waterhole they settled down. One of the "modern" acquisitions in Aishalton is a very loud, full-bore, major stereo system in the town center. In contrast to my appreciation of silence on the Kuyuwini River, Aishalton on a Thursday night was a decibel hell. The last leg of the trip was in the dark, Carl's Land Rover with a defective

alternator/generator lost its headlights. A spare battery provided the power to light his way to Dadanawa where at about 11:30P.M. we arrived, to be fed and bedded.

On the 18th after breakfast we decided to run out to Towa Towan with Carl Fredericks and Placid Stevens visiting the ponds and marshes along the way. A medium-sized animal was glimpsed along a marsh edge and we all loped off after what turned out to be a Coatimundi. While beating the marsh grass for it, we turned up a **Pinnated Bittern** in addition to Brazilian Duck, Jabiru, Great Egrets and a Striated Heron. Towa Towan has several mucca-mucca-lined pools at its base which were dark with streams of swimming tadpoles. It is apparently a frequently used campsite. When we arrived we found a log smoldering and plentiful skeletons of fairly hefty snakes. While crossing a dry grassy stretch between two groves of trees most of the party carefully stepped over a long vine lying on the grass. I gave it a second look and it came alive. It was a **Vine Snake** (*Oxybeli aneus*). The body was evenly tan color, very long (6-7 ft) and slender, no more than 3/8ths of an inch diameter at any point. The head was quite pointed, the neck was extremely thin, the throat yellow, and a dark horizontal line ran through the eye. In spite of Travis's best efforts to grab it the snake slid up a tree and before our eyes vanished so perfect was its camouflage. Since this ground had been pretty well worked, in spite of the fact that birds were plentiful, we saw no birds we hadn't already seen.

**MANARI, LETHEM AND GEORGETOWN.** Around 3:00 P.M. we said farewell to Dadanawa and headed for Lethem and Manari Ranch where we would stay with Louis (Louie) Orella. At Macusi village we found several **Purple Gallinules** in the marsh (not life birds for me, but a bird I'd not seen for 50 years). In Lethem we stopped briefly at the Savanna Inn to meet Louie who had stopped there for a refreshment with the unrealistic objective of transporting two dozen eggs by motorcycle to the ranch. Eventually we transported Louis, the eggs, and the party to the ranch by Land Rover.

Travis had commented on a foot problem. There seemed to be a swelling on the edge of his footpad. Duane quickly identified it as "chigoes." The problem is the egg case of a sand-flea which is implanted on the footpads and at the edges of hooves in a variety of mammals. As the eggs develop they enlarge and cause irritation. This seemed to confirm my conviction that wearing socks to bed at night was a reasonable prophylaxis. An operation was undertaken to remove the egg case. In short, Duane used a sterile needle to lift the epidermis, probe the egg case and pry it out. This is one of the several operations described by Stanley Brock. Travis survived. I took a shower instead of joining the watching gallery. About this time I began to feel the effects of my wasp stings and found it painful lifting my arm.

Up at 4:30 a.m., Duane left us birding at Lethem's "luxurious" Guyana Airways Terminal where we found no novel species. While waiting for our flight, Davis and Travis chatted with George "Laurice" Franklin, a native guide noted for his knowledge of Harpy Eagles and their nesting sites. At 8:00 A.M. we departed on a DeHaviland High Wing 20-passenger turboprop plane landing 20 minutes later at Annai en route to Georgetown. During our 9-minute stopover we met Colin Edwards who runs "Rockview" an Ecotour Resort and other biologists boarded. At 9:42 A.M. we arrived in Timehri Airport in Georgetown where Karen and Louis of Tony Thornes's staff met us. As we reached the outskirts of Georgetown, we found a **Rufous Crab-Hawk** perched on a transmission wire over a salt marsh. Good view.

My infected bursitis-plagued shoulder was steadily deteriorating such that I couldn't lift my arm much less hold three pounds of 10 power binoculars with it. Ken Cole had been concerned about the fact that shoulder pain is often associated with cardiac problems. But this was pain and immobilization due to swelling and I decided that a physician was in order. Tony recommended that I visit his own physician who was also the Pegasas Hotel doctor. I was chauffeured to Dr. Balwant Singh's clinic by Louis with Karen where I was thrust ahead of everyone in the waiting room. In short order Dr. Singh examined me, prescribed and gave me a week's supply of an antibiotic (Cephalexin) and three days supply of pain-killers (Voglaren), commented on my weight, told me to lose forty pounds, charged me \$28.00 U.S. for the visit and in 8 hours I was virtually cured. Absolutely the most effective medical treatment I've ever had, and, by far the cheapest since I was about eight years old! I have since made arrangements to add a suture and antibiotic kit to my travel pack and lost twenty pounds!

After lunch we were shepherded to the Georgetown Botanical Park. This park has a variety of open, forested and aquatic habitats and is an easy and interesting spot to bird. Here we found a number of new species: **Greater Ani**, **Scarlet Ibis**, **Long-winged Harrier**, a **Great Horned Owl**, **Black-throated Mango**, Spotted Tody-Flycatcher, **Black-capped Donacobius**, **Variable Seedeaters**, **White-bellied Piculet**, Blue-Gray, **Hepatic**, **Silver-beaked** and **Turquoise Tanagers**. One specialty of the area which we did not see is the Blood-colored Woodpecker. A particularly impressive sight was a kettles of more than thirty Snail Kites that sported over us for several minutes. In a heron rookery we observed manatees in the shallows under the nests possibly seeking minerals. We also had a fleeting look at a mongoose.

Finally feeling the effects of my failed arm, I begged off and headed for the hotel. I had the distinct impression that Davis felt I'd be all right if I could just see one more bird. The rest of the party headed for the seawall for shore and sea birds. After a couple of hours of sleep I awoke totally refreshed and with marginally restored use of my arm. We dined at 8:00 in the Pegasus, and left for a brief nap only to arise at midnight in order to arrive in Timehri Airport by 2:00 A.M. so we could take off at 6:00 A.M. At 2:00 A.M., the airport is the definition of chaos. A tradition among Guyanese is to "see off" their relatives, friends etc. All of Georgetown was there. The only unsatisfactory aspect of the Guyana trip was our exposure to the embarkation process which is primitive and tedious. The four-hour hyphen from 2:00 A.M. to 6:00 A.M. was spent actively. First a long line

to check passports and tickets, then an even longer process to ascertain that visas were in order and a "departure" tax had been paid, then a visit to the duty-free shop where happily I was introduced to a genuine exportable treasure of Guyana, El Dorado- a 15 year old Demerara Rum.

In the plane I sat next to a Guyanese transplanted to Queens, New York, a fireman, he had just finished a whirlwind one-week stay in Guyana. It is a requirement on return that you meet every relative you've ever heard of, and then some. But there are other activities, too. He and his cousin paid an overnight visit to the gold fields "up north" where drinking, carousing and prostitution are much bigger business than gold. He seemed as satisfied, even exhausted, with his adventure as was I with my, rather different, adventure. Uneventful describes my flight to New York and subsequent shuttle to Boston, and bus to Portsmouth.

This trip to the Kuyuwini River in Guyana was a fantasy. It would have been unimaginable without doing it, simply an experience without parallel in my fairly long life. Certainly, it was the kind of experience I look forward to repeating.

## II THE REWA RIVER

I first heard the Rewa River mentioned by Duane De Freitas and Davis Finch as we approached Manari and Lethem in April, 1997. To our southeast loomed the wall of the Kanuku Mountains. Beyond them in the great central bowl of the Southern Rupununi District was a very interesting river, the Rewa (Illiwa, on some maps), only accessible by boat. It was tempting new birding territory, offering prime fishing as well and clearly worth exploration. Before we left Guyana, the Rewa was much on our minds as a future destination. The Rewa River is a major tributary of the Essequibo River. Collecting water from the eastern slopes of the Kanuku Mountains via the Kwitaro River and from the south- central rainforests south to the Kuyuwini River watershed, the Rewa joins the Rupununi River near Rewa Village, 25 miles downstream from Annai. In contrast to the Rupununi, which is primarily a riparian corridor through extensive savanna, the Rewa is a typical amazonian "blackwater" river draining an area of more than 5000 square miles of untracked, uncut rainforest. As a consequence, the two differ distinctly in color, the Rupununi is tan, opaque with prairie silt, while the Rewa is clear composed of forest filtered water.

By September, 1997 our planning was sufficiently advanced that three of us had enlisted: Davis Finch, myself, and my oldest daughter, Jennifer. Subsequently, Steve Mirick, a very accomplished birder, signed on. On November 8th, Jennifer flew from San Jose to connect with the Guyana Airways Corporation (GAC) flight at JFK in New York. The next morning Steve and I left a chilly Portsmouth at 5:30 A.M. and met Davis on the C&J Trailways bus in Newburyport en route to Logan Airport in Boston. We were at JFK by 10:30 A.M. and when the GAC office opened up at noon we found Jennifer. The flight to Georgetown via Curacao was uneventful. We were met by our driver, Louis Singh (the world-class Scrabble player) and Karen Weldren, the Wilderness Explorers agent and, in Tony Thorne's absence, its acting manager. Check-in at the Pegasus was quicker than last time. The hotel's restaurant had suffered extensive fire damage since our last visit and the repair was the occasion for renovation of the pool area by the new management (Le Meridien).

**GEORGETOWN** lies on the south bank at the mouth of the Demerara River. Nowhere does it rise significantly above ocean or river. The view from the Pegasas Hotel is of flat land from the mudflats of the ocean to the land. Palm trees, large deciduous trees and lower buildings form a skyline over which the eight-story Pegasas, clearly the highest immediate structure, presides. Gray-breasted Martins circle the hotel. November 10, in the usual manner we were up at dawn's light and out to bird the hotel grounds and the sea wall. The ocean was quiet on my previous visit, as it was on this trip. There are always interesting birds in Georgetown including some we rarely see inland, and this morning such birds included, Whimbrels, Pearl Kites, Grey-lined Hawks, Snail Kites, and Plain-bellied and Glittering-throated Emeralds. Along the seawall we encountered the rarest "accidental." There we met Arthur "Art" Mudge an AID consultant working briefly in Guyana, a dedicated birdwatcher and an Audubon Society of New Hampshire member from Hanover. Davis and Steve knew Art by name and share many acquaintances but neither had met him before. We arranged supper plans at Cara Lodge forthwith.

**THE BOTANICAL GARDEN** was our main order of business after breakfast. We found the Botanical Garden much changed from our previous tour. A scheme has been floated to develop the Botanical garden into a series of six or seven friezes roughly portraying each of the major biotypes associated with environments of Guyana. The plan for this "Biodiversity Park" had succeeded to the extent of destroying a very large part of the park's natural habitat without any evidence of new environmental development. Indeed, the commission responsible for the proposal seemed to have vanished with the foliage. One evident advantage of the desecration was that the birds which remained had much reduced options for feeding and roosting and so were more apparent than before. The summer rainy season had been unusually dry, greatly lowering the water levels in the pools and lagoons thus providing extensive muddy edges. Here we found Pectoral, Solitary and Spotted Sandpipers, as well as Greater and Lesser Yellowlegs, Striated Heron, Limpkin, Pied Water-Tyrant and Black-crowned Night-Herons.

The lagoons, thick with algae of a bright green color, were indistinguishable from home-made pea soup. They harbored spectacled caiman (*Caiman crocodilus*), turtles (sp.?), and Caribbean manatees. The spectacled caiman is yellow-green with dark edged scales and plates and is smaller than the black caiman. A **Peregrine Falcon** soared above the garden. My major objective here, shared with Davis, was to see the **Blood-colored Woodpecker**, a local specialty, which had eluded us on our prior visit to the garden in April. A calling male responded to tape and subsequently joined in a mobbing situation and so was seen by each of us at every angle. Lineated Woodpeckers were seen and heard, as was a White-bellied Piculet, several Yellow-chinned Spinetails (one within the 9 ft focusing range of my binoculars!) and both Barred and Black-crested Antshrikes. We had especially close looks at a pair of Southern Beardless-Tyrannulets feeding a juvenile in a tree over the path. Both the diminutive size and absence of rictal bristles (beardlessness) were apparent. A number of small flycatchers were present: Mouse-colored Tyrannulet, Yellow-bellied Elaenia, Spotted Tody-Flycatcher, Common Tody-Flycatcher and Yellow-breasted Flycatchers along with other species such as: Short-crested, Rusty-margined and Boat-billed Flycatchers, **Great Kiskadee** and Tropical Kingbird, a pair of Cinereous Becards and several Pale-breasted Thrushes. Tropical Mockingbird, Smooth-billed Ani, Yellow Oriole, several Shiny Cowbirds, and many **Carib Grackles** were noted. Gray-breasted Martin were abundant overhead and resting on trees and wires. Tanagers were represented by Blue-grey, Turquoise, Palm and Silver-beaked Tanagers and a male Violaceous Euphonia. A pair of Grayish Saltators, six Red-capped Cardinals, three male Variable Seedeaters and several Blue-black Grassquits were identified. Two northern migrants were present: Yellow Warbler and Northern Waterthrush (heard), as well as the familiar ubiquitous resident House Wrens. Also heard was an Ashy-headed Greenlet. The Botanical Garden was especially good for parrots. Red-shouldered Macaw and Yellow-crowned Parrots were seen and Orange-winged Parrots were heard here. Most exciting was the discovery of a small group of **Green-rumped Parrotlets**. At five and a half inches, about the length of a warbler but much chunkier, these are among the smallest members of the parrot family in Guyana. I marvel at the extraordinary range of size in the Psittacidae from the 35" long Red- and-green Macaw to these miniature parrots.

Lunch at the Pegasus was a special order of sauteed fish provided with the assistance of a very cooperative waiter. It was a delicious meal which we all enjoyed. At this point I had no premonition that I would ever approach a limit to the amount of fresh fish that can be enjoyed in the human diet. I had yet to meet the Rewa River fishing contingent of our party. The roof of the Pegasus gave a spectacular panoramic view of the mouth of the Demerara River, the harbor and the Georgetown Bight. Hundreds of **Laughing Gulls** flew by. Far out in the shallows, a few dozen poles had been placed to hold fishing nets and on some of these were perched **Royal Terns**, while on another was a **Lesser Black-backed Gull**. This is the first of these gulls I have seen although I have chased them around New Hampshire, Massachusetts and Maine for the past three years. While even with Steve Mirick's Kowa scope I couldn't see critical fieldmarks such as yellow bill and legs, no other gull typically occurs on these shores with which a distant Lesser Black-backed can be confused. The afternoon was devoted to hunting the elusive Rufous Crab-Hawk along the seawall, lagoons, polders and drainage ditches toward Ogle Airport. That quest failed, but did turn up raptors such as Snail Kite, Roadside Hawk, Crested Caracara, Yellow-Headed Caracara and Great Black-Hawk. Two Southern Lapwings were observed in a field along the seawall and almost every field contained Cattle Egrets (our estimated total was 200). On the seaside mudflats we found Snowy Egrets (300+), both mature and immature Little Blue Herons, (40) and Tricolored Herons (60). Following the birdlisting ritual, most of us (Jennifer demurred in an attempt to pay off her sleep deficit and nurse the cold she was introducing to South America) joined Art Mudge at the Cara Lodge for supper and conversation. Karen Weldren met us briefly there and we met the manager, Gavin O'Brien, an old friend of Davis'.

**KARANAMBU.** We got up before dawn for the drive to Timehri and our flight by fully loaded twin-engine Otter to Karanambu. As always, Louis Singh was prompt, efficient and a great comfort in enduring the small trials of GAC travel and we left a significant amount of less treasured overweight with him when we departed. The flight left just after 6 A.M. and took 70 minutes to the GAC airstrip at Karanambu. There we were met by Dianne McTurk, Cecil, Kenneth and the Land Rover which transported us to the compound. As before, Fork-tailed Flycatchers and Grassland Sparrows were present along the road to the ranch, and at least one Savanna Hawk. At the ranch the usual flock of about forty resident Black Vultures were perching in nearby trees and several Turkey Vultures soared overhead. Stephen Raimondo, who had been Margie's right hand on the Kuyuwini trip, met us at Karanambu where he was assisting Dianne. Although he had been scheduled to start work at Don and Shirley Melvilles's store in Lethem in the coming week, it was instantly clear to me that Stephen was dying to go to the Rewa with us. Happily, Dianne insisted he go with our party "to care for Jennifer." This was a good thing too, since his exceptional skills as steward and quartermaster turned out to be essential and his gentle, pleasant helpfulness most welcome.

After the usual bountiful breakfast, amidst the hundred or so Red-capped Cardinals to which Dianne is also host, we were off to the "Forest Patch" for birding. Our previous visit to this locale in April was shortly after an exceptionally wet "dry" season. This visit followed an unusually dry season. Despite the difference of the seasons, the Forest Patch appeared much the same although the birdlife seemed less abundant than before. These unusual 1997 weather patterns are attributed by the press and some meteorologists to a profound "El Nino" associated with an extremely warm pool of Pacific equatorial water. The phenomenon is allegedly cyclical, but its underlying cause remains to be discovered (at least by me). The fact that each of the last three El Nino events has been longer and more severe than its predecessor suggests that they could reflect global warming.

A pair of Green-tailed Jacamars was called into the roadway for an intimate examination. In contrast, a clearly audible Spotted Puffbird resolutely refused to respond to its call. Buff-throated and Straight-billed Woodcreepers and a Pale-breasted

Spinetail were seen and Crimson-crested Woodpecker were heard. At the woodland edges were Brown-crested Flycatcher, Gray Seedeaters, a small group of Bananaquits and Ruddy-breasted Seedeaters, including one very showy male. Brown-throated Parakeets, the typical savanna psittacid, and Swallow-wings were encountered. Swallow-wings are the absolute reagent indicator species for edge environment. They are common wherever high forest cover meets the open savanna or the broader river stretches. With the exception of Turquoise Tanager and Violaceous Euphonia, the tanagers here were those species seen in Georgetown although the call of Finsch's Euphonia was first heard here. The only Striped Cuckoo detected on the entire trip was calling here, as were Squirrel Cuckoos. As on the last visit, a Ferruginous Pygmy-Owl responded to a tape of birds mobbing a Ferruginous Pygmy-Owl. Remarkably, Jennifer and Steve were able to pick up this bird sitting high in a dense tangle of branches and Steve was able to put the scope on it, a really terrific job of spotting. Violaceous Trogon, Glittering-throated and Blue-tailed Emeralds were present in the Forest Patch and antbirds were represented by Black-crested and Barred Antshrikes as well as our first **Slaty Antshrikes**, a pair and a juvenile. White-flanked and White-fringed Antwrens and Dusky, White-browed, Black-chinned and White-bellied Antbirds were seen and, in all cases heard as well, elsewhere at Karanambu. In the Forest Patch we also found a Slender-footed Tyrannulet near where we'd seen one in April and we heard a Yellow-crowned Tyrannulet for the first time. Curiously, it would not be until our last two days on the Rupununi that we finally saw this tiny bird. Helmeted Pygmy-Tyrant and Pale-eyed Pygmy-Tyrants called in the understory; the latter is not commonly encountered outside of Karanambu. On both trips it was seen here, but on neither trip was it seen elsewhere. A Slate-headed Tody-Flycatcher, three Blue-backed Manakins and two White-tipped Doves filled out our list.

Back at the compound we were treated to a visit by Dianne's pet Giant River Otter, Peter. This gorgeous full-grown male is extremely friendly, at least when Dianne is about, and insists on being carried by her to the river for their afternoon swim. I took a photo which shows the trusting bond between them. The vibrissae and eyebrows of the otter are impressively stiff and strong and certainly serve dual sensory and protective roles during underwater exploration. This is the same individual photographed last April with the laundry detail. I have a wonderful portrait of Dianne and Peter who posed for an intimate embrace. After lunch a walk in the "Neopalma Woods" is de rigueur. This is a brushy area close behind the last houses to the left of the road toward the Forest Patch/GAC airstrip. The brush here grows thickly to a height of about 15-20 feet at the edge of the savanna. It is a location for a Karanambu specialty, the Pale-bellied Tyrant-Manakin (*Neopelma pallescens*). We cut a short tunnel through the brush and stood in a gallery among narrow-stemmed shrubs. After several tries, Davis was successful in luring this fast-moving bird into view. Tape-luring has its good and bad sides. An accurate identification can be made since in all probability, the bird is responding to the call of its species. However, such a bird is "wired", aggressively searching for a newcomer, whether a rival, companion or mate. Actively searching for the intruder, it does not stay in one place for long and is not easy to see. In contrast, quietly stalking birds that are engaged in other activities offers better and more leisurely views. The silent stalk is both more difficult and less effective since fewer than half the species present in an area can typically be detected. Tropical Gnatcatcher also responded to mobbing sounds in the area.

In the neighborhood of the ranch buildings we observed Crested Oropendola, Campo and Yellow Orioles. Walks on the river trail and the Karanambu runway produced my first really good view of **Capped Heron** and we also found Pale-vented Pigeons, Brown-chested Martins, two **Giant Cowbirds** and Green Kingfisher. At dusk a few flying Least Nighthawks appeared. Along the river at the Karanambu Landing we heard a loud crashing in the brush and in short order a **Red-rumped Agouti** emerged in plain view onto an open bank. Under the rocky ledges to the left of the Landing, at least a dozen **Long-nosed Bats** roosted. Dianne's usual gracious Karanambu hospitality was enjoyed at dinner.

Wednesday, November 12. All too soon it was up, a sip of coffee, and out to the runway for dawn birding. This is the time for Caprimulgidae. Lesser Nighthawks were seen and Band-tailed Nighthawk were heard but our very best views were of feeding Pauraque and White-tailed Nightjars. These had different feeding styles: Pauraques sit in the open on the ground, looking (and perhaps, listening) for passing insect prey, and fly straight up to capture it; whereas, the White-tailed Nightjar hawks for insects, slowly flying low over open ground much like a Harrier or Short-eared Owl, settling down for a while and then repeating the exercise. As dawn approached, we heard a Collared Forest-Falcon, a species I have yet to see, Little Chachalacas and, around the ranch buildings, a Double-striped Thick-Knee. Pale-vented Pigeon, Eared Dove and Common Ground-Doves were seen and a Ruddy Pigeon was heard. Red-bellied Macaws, Brown-throated Parakeets and pairs of Yellow-crowned Parrots dispersed from roosts. In the brushy grassland between the airstrip and the river forest we saw a White-tailed Goldenthrout, a Glittering-throated Emerald and a Lesser Seed-Finch and heard a Laughing Falcon. Davis called in three Plain-crested Elaenias, a species characteristic of Curatella grassland and edge areas composed of grass and chest-high shrubs interspersed with thickets of small trees and vines. Botanically, this transition area is a more complex area than the typical savanna brushland. In the riparian forest canopy several Cayenne Jays hopped about. A familiar Barn Swallow flew by.

**TO ANNAI** A pleasant breakfast was followed by our departure for Annai in Dianne's Land Rover packed to the gills with luggage, tire and seven occupants, we four plus Dianne, Stephen and Cecil. The road to Annai passes east of the GAC airstrip along the side of semi-permanent sloughs. At the first slough was a bonanza! Two dark wading birds with legs placed well forward were probing the marshy grasses, the **Sharp-tailed Ibis** which I had missed at Towa Towan in April. Here we saw the first of many Cocoi Herons, twenty Great Egrets, thirty Snowy Egrets, four Little Blue Herons, thirty Wood Storks, six Wattled Jacanas and a Jabiru. Also present were Vermilion Flycatchers, Red-breasted Blackbirds, White-headed Marsh-

Tyrants, the only American Kestrel seen on this trip, two Ospreys and a White-tailed Hawk. Along the road we flushed Eared and Common Ground-Dove and later near Annai, we taped a Plain-breasted Ground-Dove into view.

The ride to Annai was, to say the least, brutal. For much of the way the road follows the northern edge of the river plain just above the maximum flood level skirting the edges of hills. While generally pot-holed and rutted, it offers no challenge to a Land Rover. However, because this particular vehicle lacked canopy supports it was impossible to ride standing. On such a road at the speeds favored by Cecil each jar was transmitted with the utmost directness to the seated passengers. Moreover, even when Cecil approached a pothole he couldn't slow down since, like all of the Land Rover's I've ridden on the savanna, it had no brakes! We all agreed that this trip was the low point of the expedition. We did list six Lesser Yellow-headed Vultures on the trip. Doubtless their anticipation was a reflection of our discomfort.

At Annai the road skirts around the eminence on which Annai Village stands but we detoured to the village nevertheless to receive any messages from Duane's company. There being none, we continued toward the airstrip and Rock View. Rock View Eco-Tourism Resort is a pleasant two-story mortared lodge surrounded by a number of very well-appointed brick-walled cabins. Considering its location Rock View is really quite elegant. The host Colin Edwards was no stranger to me since I had heard him on the radio frequently both this trip and last. There are "computer junkies" and, in the outback, "radio junkies" and Colin sits firmly with the latter. As before, this trip was organized and competently led by Duane DeFreitas the manager of Dadanawa Ranch. The fishing party that Duane had invited to go with us was international in character. Mike Wilson, Duane's brother-in law from Barbados was, perhaps, the most dedicated (fanatic) fisherman of the lot. In addition there were Mike Lee (Venezuela and Toronto) and his son, Troi Lee-Lawford (London), a computer enthusiast (is prodigy or geek appropriate?), and Roger Stanley (Toronto) with whom Mike Lee works. Mike Lee describes himself as a computer systems theoretician, not a hardware or software technician but someone who figures out how to get the hard and soft stuff to do what he wants it to do. Roger is a high-flying businessman who's cleaning up in Toronto and clearly was having the time of his life in Guyana. Ashley Holland, who works for Dianne at Karanambu, played a dual role as fisherman and river-guide. Ashley, whom we first met in April, is quiet, shy, competent and very much at home in the rivers. Introductions were over cold beer at the Rock View pub. As always there was the standard amount of going back and forth, finding this or that and trading this for that. Finally we drove to Kwatamang Landing (N 3° 55.057' W 59° 06.029') to meet the supporting staff. Chief among these was Oscar Dookie ("Dookie") an all-around right-hand at Dadanawa whom I had not met the last trip. Tommy Kenyon, a skilled woodsman and sometime bridgebuilder, was the birder's guide throughout. Tommy has a farm in the Kusad Mountains to the southwest of Dadanawa and has traveled and lived in Canada. Leland, inexplicably called "Crotchman", and Alwin were general hands who filled out the list of our company. On hand to see us off was an old friend, Carl Fredericks, our driver, guide and companion on the Kuyuwini trip. At Kwatamang Landing the flotilla consisted of three river boats (20-footers, flat-bottomed, square-sterned and sharp-bowed), a 15-ft Mirrocraft, and an inflatable. These were powered by three outboards (two reliable, one variable) and the plan was for two motorized boats each to tow another, while the third carried the birders and, theoretically, traveled unimpeded.

**ON THE RUPUNUNI.** We were hardly at the Kwatamang Landing before we saw our first new bird, a **Large-billed Tern**, a first for me. In the trees at Kwatamang we also found a Hooded Tanager. Early in the scorching hot afternoon we snacked and then launched down-stream on the Rupununi. The river at this season is *café au lait*, about 200 ft wide, and running about 3-4 mph. As it turned out, one of the outboards had a defect that caused it to cut out after a few miles of running. It could be started again after some time, but on the Rupununi it was unreliable, so on several stretches of the run we towed the Mirrocraft. There's something about the Rupununi, Dookie's motor doesn't like! The typical river birds are: Green Ibises, Anhingas, Cooi, Capped and Striated Herons, Jabiru, Osprey, Bat Falcons, Southern and Pied Lapwings, Spotted Sandpipers, Green, Ringed and Amazon Kingfishers, White-banded and Southern Rough-winged Swallows and Red-capped Cardinals. Near Annai the river is broad, shallow and braided by large sandbars which required considerable maneuvering and infrequent wading. The relatively low gently sloping banks are lined with riparian forest interrupted by open savanna or by entering watercourses. Our objective on this afternoon was to camp about eight miles down the river. On the way we passed a small stream coming in from the right. On its bar fed a Solitary Sandpiper and a mystery sandpiper. Could it be a Baird's which would be a new species for the Guyana list or something else? A close approach did not answer the question until it flushed and proved to be a **White-rumped Sandpiper**. Over the river we counted twenty **Short-tailed Swifts** and a single Fork-tailed Palm-Swift. A Black-throated Mango, the first of three, captured insects in flight over the river and a Black-eared Fairy was also identified. Among the new birds added were Cream-colored and Lineated Woodpeckers, in addition to Striped Woodcreeper and Pale-breasted Spinetail. A singing Cocoa Thrush was one of only two heard on the trip of this unseen species.

The Rupununi River is home to Black Caiman (*Melanosuchus niger*) and in the course of our run to the first camp we encountered several very large individuals. One, which was hauled out on a sand-bar, I estimated to be more than fourteen feet long. This individual was resting broad-side to us and only its head and body was visible, the tail, equal in length to the body, being curved behind it. As it turned to enter the water its immensity became apparent. This crocodilian has been reported to reach a length of 19 feet. Regardless of size they do not permit a close approach. There are many anecdotes in the older amazonian literature (for instance; both T. Roosevelt and H.W. Bates) of unwary humans being attacked and even killed by this largest of the caiman. Black Caiman are a dark gray color with four or five eight-inch wide vertical black bands extending down their flanks. In most of its range the Black Caiman is now in danger of extirpation as a consequence of its preference for easily

accessible water such as large rivers or oxbows, because it defers procreation until it reaches the extraordinary length of 12 feet, and because its leather is prized. The fishing party did manage to capture a twelve-inch hatchling now in Duane's reptile park. Certainly, the Rupununi and Rewa Rivers constitute an important refugia for this endangered species.

**CAMP # 1** was at N 3° 52.610' W 58° 59.874' on a shelf fifteen feet high on the left bank of the river. While the crew cleared places for hammocks and started supper, we birders with Duane and Mike Wilson as guides drifted down-stream a mile or less seeing Pauraques, a Short-tailed Nighthawk and Lesser Nighthawks, and hearing a Gray Potoo. Otherwise, it was a quiet, lazy, evening drift. In contrast, the return required considerably more effort since darkness made detection of sandbars and obstructions difficult. We were aground as much as afloat. Travel at the end of the dry season during falling river levels raised the possibility that we might conclude the trip with muscle power in place of motors. Considering Dookie's motor this was a real probability. This was one of only two nights during which we failed to sit together for the birdlist.

I must have assimilated some of the art of hammocking on my last trip for I slept well. Up at 5:30 a.m. on November 13, we commenced birding in a high, liana-draped forest immediately behind the campsite with Tommy Kenyon as our guide. The shore here is composed of dunes covered by large trees interspersed with lower shrubby depressions and wet swamps closer to the river. We glimpsed a trogon, either Violaceous or White-tailed, our first Forest Elaenia and a Red-eyed Vireo. A number of the antbirds seen elsewhere on the trip were present here including, Black-crested Antshrike, Streaked and White-flanked Antwrens, Black-chinned Antbird and an audible White-browed Antbird. By 7:30 A.M. we were back at the campsite for breakfast. In the nearby trees were several interesting bird species: a **Black-poll Warbler** (fresh from Aziscoos?) actively fed in the same tree as did a more elusive Yellow-breasted Flycatcher. Over the river the Black-throated Mango displayed repeatedly and in the woods we found a male **White-chinned Sapphire**. We launched at 8:30 A.M. with the plan of stopping for lunch in the vicinity of Bat Creek (about 18 miles from Annai) and then continuing on to the Rewa River where we anticipated camping. The Rupununi here meanders through flat savanna, with steep, tree-lined banks on the eroding side of the river and shallower, sloping, jungle-grown banks on the depositing side of the river. Our course was usually close along the steep banks on the "working" side of the river. The first avian surprise of the trip was the discovery of abundant **Drab Water-Tyrants**. This bird is known to Guyana but its ecological niche is sufficiently specialized that Davis had not encountered it in his previous visits to Guyana. These small, active, accurately named, gray-brown flycatchers stay close to the 20-30 foot cliff-like clay banks of the river and seem to favor those banks overhung with root mats. Their wheezy, drawn-in call was first detected by Davis the day before and became familiar to us all by the end of this day when we'd seen and heard twenty-one. Most were paired and usually both members of the pair would escort the boat for 100-150 yards along one bank (I presume to the end of their territory). In doing so they would fly a few feet above the water three or four boat-lengths ahead of the boat, perch on a low branch often over the water and repeat their escort when the boat approached. At the end of their territories, they would abandon us by flying up toward the overhang and perching. Only once did I spot an individual on the shallow side of the river. In addition to the river avifauna already seen on the trip we saw the following new species: Rufescent Tiger-Heron, King Vultures, Black Caracara, **Sunbittern**, **Yellow-billed Tern**, Plumbeous Pigeon, Orange-winged and Red-Fan Parrots, Squirrel Cuckoo and Band-rumped Swifts. Two aracari were glimpsed, either Green or Black-necked. The high banks and large tree trunks overhanging the river were the roosting spots for groups of small, very dark bats, usually a dozen or so per roost. We regularly flushed them when the boat came too close to a trunk or passed under it.

We stopped for lunch close to Bat Creek near a large inlet on the left bank and, while two boats fished, we birded in the forest. The terrain at this site was similar to that of the morning site although the forest was more open. There was very little bird activity at this hour. Davis played a mobbing tape which brought in the usual cast of characters and one unexpected one, a nondescript robin-sized gray bird which flew in to sit quietly on a close branch. It was my first sighting of a **Screaming Piha** although I had heard its piercing unmistakable call many times before and looked for it in vain. Its call is considered by Haverschmidt and Mees to be the "most characteristic sound of the forest." The truly remarkable aspect of this sighting was that Steve Mirick saw the Screaming Piha before ever having heard its call! At this place we also heard and summoned in by tape a male **White-winged Becard**.

Our trip down the river was marked by Black Caiman as large as those we'd seen yesterday. They were especially common at the deep pools where the river makes right angle turns. Amerindian fisherman or their dugout canoes also occurred at these spots suggesting that fish were the common attraction. Several turtles were spotted but none close enough to make an identification, and at least one giant otter was seen. On the occasional mid-river sandbars sat Southern and Pied Lapwings and Black Skimmers and almost certainly some of the latter two species were nesting judging from their crouched posture and refusal to abandon their position as we passed. Five Black Caracaras were counted. Generally, the birders' boat led the flotilla although we paused from time to time to check on the progress of the others. Our last of these stops was at a dried streambed a few miles upstream of Rewa Village. Here we had very good views of a number of antwrens and antbirds although nothing new apart from our first **Pale-tipped Tyrannulets** which we saw well.

**ON THE REWA. CAMP # 2.** (N. 3° 52.146' W 58° 46.406') Our travel speed was good and around 3:30 p.m. we approached Rewa Village which sits 40-50 feet high on the right bank of the Rupununi just upstream from the mouth of the Rewa. Navigation here is slowed by a series of rocky fingers that extend from the right bank into the river. This rock seems to

be a uniform uncompressed lava, ash or sediment pocked with frequent cavities and forms the foundation on which Rewa Village rests. In our haste to reach a suitable campsite, we don't stop but passed the village with a few salutes to the several dozen people gathered there. The Rewa River is instantly gorgeous. The water is seemingly cooler and, as advertised, obviously clearer than the Rupununi. The forest begins to take on great height and an unbroken aspect distinct from the savanna riparian corridor. Traveling southward we navigated a small rocky bar a half mile up the Rewa and continued another mile and at 4:50 P.M. set up a camp on the steep bank on the left side of the river. Tommy attacked the underbrush with his cutlass and we threw his cuttings over the bank. In an extremely short time hammocks were hung, Dookie, Stephen, Crotchman and Duane had a kitchen operating, fish were frying on the griddle, libations were poured and I was already hooked on bummed cigarettes. The speed with which this crew arranged a campsite that met our every need was incredible and made our every stop an anticipated treat. I think that both Jennifer and Steve as well as Roger and Troi were impressed; the others, Davis, Mike Wilson and Mike Lee were blasé having been through this drill before. With night quickly upon us we did not bird, but our fishermen began hauling in a variety of fish. During evenings on the Rewa we occasionally heard an explosive, extremely loud, splash. This is one of the methods that black caiman employ to fish. I'm told that the caiman lies still in the shallows and when a foraging fish nudges its side it whips its tail around while turning its head to catch the fish in its open jaws. Touching the side of the small caiman elicited the reflex.

Long before distinguishable dawn light on November 14, the roars of Red Howler Monkeys echoed first from one quarter, then another. Each troupe would chorus for several minutes or so until a descending series of barks from the alpha male silenced them. Then another group would take up the refrain. This went on until it seemed that we were surrounded on all sides by monkey hordes. During the trip we also heard Black Spider Monkeys and on three occasions saw and heard Squirrel Monkeys in trees along the river. Birding started at 5:00 A.M. and continued until 8:00 A.M. in the woods behind the campsite seeing Reddish and Long-tailed Hermits and **Black Nunbirds**. A Yellow-throated Woodpecker was called in and a Yellow-tufted Woodpecker was heard. A **Gray Antbird** and a pair of **Warbling Antbirds** were seen. As we walked along we found a pair of **Wing-banded Antbirds** rummaging among shrub roots. These small, short-tailed, "rail-like" antbirds make themselves known by their active tossing of leaves as they forage nearly buried in the duff. Antshrikes found today were: Saturnine and Cinereous Antshrikes and a second record for Guyana of the Spot-winged Antshrike which we had been the first to see on the Kuyuwini River in April. A female **Pompadour Cotinga** was a novel addition to our birdlist at this camp, as was a **Yellow-crowned Elaenia** called into a thicket overhanging a swampy pool. A distant Channel-billed Toucan was spotted flying across the river and two Green Aracaris were seen perched in a high tree across the river.

Today's run up the river against the current was more leisurely and more interesting. The river had its share of high banks and, here too, the Drab Water-Tyrant was an invariable constant. As we passed close to a steep bank where several trees had fallen into the river, three young giant otters and at least two adults darted out of one log jam and into another with much chittering. Steve took a splendid picture of the young. They were part of a large family, composed of the parent and at least three other adult "aunties." Several of the adults took to the water, protesting, to lure us away, first close, then up the side of the shore and onto the bank. The young skittered back and forth into cover and out but went still when joined by an adult under a pile of logs on the bank. Various counts placed the family at eight or nine. All this we watched from a mere boat-length.

Where tributaries entered there were often significant sand dunes. The high dunes at one of these points showed tracks of large turtles that had come ashore to nest and the tracks and drying racks of visiting fishermen. At the cross-over points where the river changes directions, wide, shallow, sandy flats presented navigational challenges while giving splendid views of the larger fish, among them were stingrays resting on sand in the smooth clear water. The largest of them may have been 18 inches across. Often it was not until the shadow of the boat passed over the ray that it raced off with considerable commotion. These rays have a strong spine near the tip of their tails and when stepped on will whip the tail toward the offending leg. While the ray is not poisonous, the wound is reported to be very painful and has a high probability of becoming infected. When pulling the boat over shallows going upstream, Tommy and Duane splashed water ahead of themselves to alert and scare off the rays. Other big fish seen in the shallows or in pools at their edges were lukunani, a cichlid known to fisherman as "peacock bass", and arawana. Occasionally, small fish, frightened, became airborne, one such leapt over our boat at face level. At the end of one day a five-inch flatfish was found to have flipped itself into one of the boats.

Birds newly seen on this passage up river were: **Gray-rumped Swifts**, two Greater Yellow-headed Vultures, Golden-winged and **Painted Parakeets**, a pair of **Red and green Macaws** and a small band of Red-throated Caracaras. Two pairs of **Crimson-crested Woodpeckers**, heard often before, were finally seen and a Lineated Woodcreeper was heard. The most common raptor along the river was the Bat Falcon. Many were paired. At one stop Davis recorded a particularly vocal falcon which was nearly drowned out by the enthusiastic jubilation of those fishing in the lagging boats. Next most common were Great Black-Hawks and **Roadside Hawks**. All of these raptors are edge specialists. The Bat Falcon specializes in chasing down bats, a task which may be easier in the open vistas of the riverbed than over the forest. Both Collared Forest Falcon and Laughing Falcon were heard but not seen. Ospreys, winter visitors from North America (all of which had left New England by mid-October) are commonly seen, often carrying fish, along the river.

Along a wide stretch of the river we spotted five Muscovy Ducks in a small lagoon on the shoreward side of a large sandbar. Duane motored over to the far shore, while Tommy, thinking of fresh meat, hefted the single-shot 12-bore shotgun and waded up to his armpits across the river. By staying below the sandbar, he remained out of sight of the birds until he was opposite where he had last seen them. However, wary and with good ears, they had moved away from that point so that when he arose to shoot, he flushed them at maximum range. They flew off, unscathed, to the relief of the more dedicated birders. As a sometime ducker, I was impressed with Tommy's stalk. The wild Muscovy is a goose-sized, deep-black duck with striking white wing coverts. As a domestic fowl it occurs in many plumage variations. It is a tropical American native whose name immortalizes a significant location error made by Linnaeus, who ascribed it, of course, to Moscow.

Butterflies in clouds fly along the river and alight on the emerging mud flats and sandy shores to feed on the salts of heron splats. Two similar types are usually present together; both have wing shapes like the common cabbage butterfly, but are nearly twice the size. The commoner one is bright yellow, the less common is lime-green. It is hard to ignore these colorful, numerous insects. Henry Walter Bates, probably one of the most skilled entomologists of his day to visit the Amazon, concluded that congregations of similarly colored "*Callidryas*" butterflies were composed exclusively of males. He also reports that at Ega he noticed eighty species of butterflies belonging to twenty-two different genera congregated at the water's edge and that "with very few exceptions, all the individuals of these various species...were of the male sex." Are the males seeking "salts" or other some component of bird scat of particular need for male butterflies? He comments that the females occur singly at the forest borders where they lay their eggs on low-growing mimosas. Another insect oddity seen at the water's edge was a brilliantly stenciled day-flying moth (*Urania fulgens*). This is a striking creature, the body and wings jet black and with four or five narrow phosphorescent light-green stripes across the wings and along the fat moth body. Its beauty alone makes this a standout among insects, but its behavior and distribution is equally interesting. Although we only saw single specimens, it is reported to undertake extensive daytime migrations during which thousands may be seen flying along watercourses. Its distribution is in the new world tropics and in Madagascar and reflects the distribution of lianas and trees of the family *Omphalea* on which the larvae of this moth feeds exclusively. Interestingly, *Urania's* migrations have been proposed to be due to the avoidance of plant toxins developed by *Omphalea* as a consequence of *Urania* larvae feeding on the plants. It would be interesting to learn if 1) this is true and 2) if a tree has to be actively fed on to make the decision to produce toxin, or 3) whether a pheromone signal from a caterpillar-infested tree is sufficient to elicit toxin, as has been suggested for oak infestation by gypsy moth larvae. On a steep river bank near a butterfly-bejewelled sandbar, we lunched briefly and trekked a few yards into the brush to find a pair of diminutive **Ruddy-tailed Flycatchers** victualling in the top of a modest-sized palm.

**CAMP #3** (N 3° 45.389' W. 58° 42.942') was among large buttressed trees on a shelf on the left bank of the river. Following a 7 hours run up the Rewa, a distance of perhaps twenty-five miles, we arrived at about 4:00 P.M. One of the boats skippered by Ashley and carrying fishermen had lagged considerably to fish and was nowhere in sight. After clearing the campsite we explored upriver for another mile. Beyond a rocky bar that spanned the river was a very attractive right-hand bend in the river with a quarter-mile long sandbar on the left. Clearly, this would be a most satisfactory fourth campsite. We drifted and paddled back counting bats and nightbirds and listening to night sounds. Eventually, the lagging boat showed up and the camp settled down. In the evening we heard a **Hardy's** aka **Amazonian Pygmy-Owl** across the river and managed to lure it into the woods near us. Although we did not see it, its call and response to the tape made a definite identification. Davis also identified a calling Tawny-bellied Screech Owl.

November 15 from 4:30 A.M. to 12:30 P.M. was spent working the woods behind camp three. This was an interesting walk among huge trees on the high bank and descending through varzea and lower trees to the edge of a swampy area. At dawn we heard a Variegated Tinamou, the only one recorded during this trip. We saw or heard eight different parrots, although only **Dusky Parrots** were new on this foray. A Fork-tailed Woodnymph was the only new hummer spotted. A Golden-collared Woodpecker and a pair of Red-necked Woodpeckers were seen as were our first Striped and Chestnut-rumped Woodcreepers. In a thicket one of the three species of large red-eyed antshrikes, a male Fasciated Antshrike was seen. Diving deep into a low gallery we followed a foraging party of antbirds, eventually intercepting it. This was a very productive and responsive group which contained Saturnine Antshrike, Cinereous Antshrike, Amazonian Antshrike, Mouse-colored Antshrike, in addition to White-flanked and Grey Antwrens and Black-chinned Antbirds. Among other birds seen were Wing-barred Piprites and **Double-banded Pygmy-Tyrant**. We first heard the Yellow-margined Flycatcher at this site and, although it was heard for the next four days, it was never spotted. The White-crowned Manakin was similarly heard in this area but eluded us through the trip. I was finally privileged to spot a cooperative **Pectoral Sparrow**, long overdue after my many attempts to view it at the Parabara Forest.

**CAMP # 4** (N 3° 44.021' W 58° 43.320) In the early afternoon, we relocated to the fourth campsite, lunched and swam. This is a lovely, open campsite. The river is cool and refreshing when the sun is at its zenith and the broad beach, although scorching hot, is an interesting place to walk. Facing the river from the campsite the main current of the river flows from left to right into a large pool. Along the edge of this pool a strong eddy countercurrent flows upstream past our kitchen/ sunning area. Fish are plentiful, as are caiman. It is a splendid spot from which to watch early morning parrot flights. The river is broader and slower upstream and at the top of the sandbar above the campsite many trees are lodged in midstream making it necessary for boaters to pick a careful course for a few hundred feet. This afternoon was the only time on this trip that rain threatened and a

very brief shower mostly by-passed us. Our hammocks were hung from trees on a shelf of high ground above the beach. In anticipation of rain, a tarpaulin had been arranged so the hammocks were rapidly put under cover when it did rain. We birded from 3:15 to 5:00 P.M.. In the late afternoon we observed a party of four or five **Blue-throated Piping-Guan** in the trees behind the beach. After the standard amenities and a supper of fresh fish, tasso (dried jerked beef) rehydrated, rice and hot sauce, birdlisting and bed beckoned. At night a Hardy's Pygmy-Owl and a Spectacled Owl called.

We bathed cautiously at the edge of the pool in front of the camp. I don't recall anyone striking off across the pool for a real swim, but a limited dip and just sitting in the current was very refreshing. Certainly there was the ever present possibility of an assault by caiman or piranha. Piranha have a mixed reputation when it comes to attacking large animals. They are to be feared under some situations: their dentition is the equal of the Atlantic Bluefish and they can mount a ferocious feeding frenzy. Hans-Ulrich Bernard suggests that during the low water of the dry season, piranha that are cramped in limited space with reduced food resources are more prone to attacking atypical prey than during high water conditions. Fragments of food from the kitchen attracted a surprising quantity of fish of several varieties, including piranha, in among our feet. During the first evening at this camp, a little (4 foot) caiman came close inshore to investigate us, but subsequently they kept to the other side of the river. Are other aquatic animals a threat? Teddy Roosevelt relates that the piraiba, a large catfish in the Amazon watershed is feared because of its attacks on humans. The piraiba is reported to grow up to nine feet long. This is the country of the anaconda which we did not see.

Sunday, November 16. This morning we birded from 4:00 A.M. until 10:00 A.M. Proceeding along a trail that Tommy had begun yesterday afternoon, we worked inland toward the higher forest. The riverbank, including that on which we are camped, would be low islands or even flooded during the wet season. Surrounding these islands are the streams, channels, ponds, and lagoons that comprise the varzea proper. For the first few days we birded in this now-dry varzea gradually extending the trail until it climbed a hill that was probably never flooded and which had a distinctly different botanical character. Our hammocks were in an open gallery forest with low underbrush. On the inland side, a fringe of jungle separated the camp from a woodland composed of much higher trees buttressed with immense flanges. These are uniformly called "mora" trees by the natives. One type is, according to Bates, called *Mora excelsa*. But in this environment many of the largest species representing a variety of genera share this buttressed trait. Even with strong binoculars it is difficult for me to examine the leaves of these 100-120 ft giants and probably futile since convergent evolution has tended in many species toward a "standard" water-shedding leaf shape; a smooth-surfaced, medium-sized, lance-shaped leaf with drip tips.

Dawn birds heard were a Tawny-bellied Screech Owl and an Undulated Tinamou. Two raptors were also heard respectively in and over the forest, Lined Forest Falcon and Ornate Hawk-Eagle. **Mealy Parrots** were seen. One of the first species Davis called in was a pair of beautiful Rose-breasted Chats in tall vine tangles close by our bivouac area. Also seen was a splendid male Blue Dacnis and three Blue-gray Tanagers. Yellow-rumped Caciques, eight in all, were also seen this day. A Long-billed Starthroat and Black-banded and **Barred Woodcreepers** were found. Another of the red-eyed antshrikes, the Great Antshrike (both sexes) were seen well. A Rufous-bellied Antwren and a pair of **Ferruginous-backed Antbirds** were listed. Four Purple-throated Fruitcrows, two Capuchinbirds and a **Cinereous Mourner** were added to the list. Here we had the second Guyanan record of the **Rusty-breasted Nunlet**, the first being on the last trip to the Kuyuwini River. Two Thrush-like Antpittas and a Bright-rumped Attila were heard, but no others were heard or seen on this trip. For birding in thick or high forest, Davis's educated and accurate ear is an essential tool that I clearly lack. His familiarity with, and continued alertness to, the sounds around us coupled with his virtuosity with his tapes often produced birds that none of us even guessed were around.

We worked our way under a low gallery toward a dense, vine-faced thicket as Davis searched for a bird he'd heard here the day before. Here he discovered a family group of three **Euler's Flycatchers**. This bird shares the trait that marks a typical Empidonax, "specific characters so subtle that there is often more variation within a species than there is between any two species in the genus" (Kaufman). It looks like a typical Empidonax and was placed in that genus for almost one hundred years although now shares its own genus, Lathrotriccus, with the Gray-breasted Flycatcher and possibly one other. It is of special interest because this is the first record for Guyana, none exists from French Guiana, and only two have been recorded from Suriname in the past 74 years (Haverschmidt and Mees). None has been known to breed east of Venezuela in the coastal countries. The likelihood that we saw a family group implies they must be breeding in the Rewa Valley.

Later in the day we birded in the woods from 11:15 A.M. to 3:30 P.M. and on the beach from 4:00 P.M. to 5:15 P.M. At the bivouac Duane had a crew, consisting of Crotchman, Alwin and Tommy, setting up the frame for a shelter. Tommy saw a Blue-throated Piping-Guan in a tree overhead. Out came the 12-gauge and down came the guan to fill the pot for a later meal. The fishing party had left on Sunday morning for Fish Pond fifteen miles up the river taking a significant portion of our rum supply and at this stage any portion was significant!. After our usual high tea celebrated with rum and followed by supper, we broke out Jennifer's treasure, a bottle of 12 year-old single malt scotch. Good whiskey a long way from home develops an incredibly high vapor pressure. It evaporated nearly instantly. Thanks, Jennifer. Next time bring two !!

Monday, November 17. This morning, while Steve, Jennifer and I breakfasted, a pair of Scarlet Macaws flew down the river. Brilliantly lit by the bright, rising sun, they were a simply stunning sight. Yesterday Duane and Dookie had explored an upriver streambed and were impressed with tracks and general terrain. We agreed birding there might be a good idea so they

ran the boat a mile more or less up the river to this narrow dry streambed which entered on the right-hand side. On the way a juvenile Rufescent Tiger-Heron was seen briefly and a Sunbittern was observed for many minutes in the open stalking insects on a sandbar. In a shoreside thicket along the sandbar a **Lemon-chested Greenlet** was heard and called in to be observed. In the wet season the stream flows out of a pond deep in the rain forest. In the dry season it gave us a highway into the midst of towering, massive trees on level, rather open ground. Almost at once we heard a new species of raptor, a **Lined Forest-Falcon**, which responded to tape by flying in and perching in view. A Barred Forest Falcon also called. Farther along the trail we heard another White-crowned Manakin which again was obdurately indifferent to tape. We found a White-tailed Trogon, several woodpeckers, two **Plain-brown Woodcreepers**, two Wedge-billed Woodcreepers and four species of woodcreeper that we had seen earlier: Chestnut-rumped, Striped, Straight-billed and Buff-throated. Climbing out of the streambed, which was about 12 feet lower than the forest floor, we oriented on a foraging brigade of antbirds and ovenbirds. The flock contained several species new to this trip among them: Olive-backed Foliage-gleaners, **Brown-bellied Antwrens** and **Long-winged Antwrens**. This was a productive area with more than 17 other species of antbirds! Davis identified the calls of a Short-tailed Pygmy-Tyrant and a Thrush-like Schiffornis and, as well, found a **Rufous-capped Antthrush**. Also new here was another vireo, the **Tawny-crowned Greenlet**.

The high point for me of this walk was certainly our stumbling on a family of **Yellow-billed Jacamars**. The birds responded to tape and gave close, clear views for several minutes. Judging from their behavior, they were a parent and probably two young since one bird carried food to one of the others and two seemed to take cues from, and follow, the other bird. The Yellow-billed Jacamar is an exceptionally colorful and handsome representative of a rather gaudy genus. The jacamar tendency to remain still for long periods at fairly low heights while scanning their surroundings for large flying insects allows their beauty to be fully appreciated. The illustrations in books of this jacamar do not begin to capture its color. After a guessing game about which direction to go to find the streambed - I was turned about! - Tommy unerringly led us to it. At 12:25 P.M. we rendezvoused with the boat and headed back for camp. In the afternoon, Jennifer, Steve and Davis walked the trail behind the camp from 2:15 P.M. to 5:15 P.M. among the birds they saw was a Royal Flycatcher. I had been somewhat "peelily-wally" since the third camp and in a short time decided to drop out and rest. A walk along the beach revealed a fifteen-inch diameter, circular water-filled excavation surrounded by a raised wall of sand just at the water's edge. Floating in this protective harbor was a large cluster of frog eggs. In this manner the Gladiator (or Bombardier) Frog (*Hyla boans*) assures its tadpoles will not be consumed by fish before they can swim. The temperature of the sand everywhere but near the water's edge is so incredibly hot during the day that predation from the land is unlikely. I'm told that after the eggs develop to the tadpole stage the frog returns at night to break down the wall, dig a canal to the river and, thus, release them. There are risks in this sort of parental care. A fast drop in water level may cook the eggs or leave them high and dry, or a sudden flood may wash them into the river. Nevertheless, these risks are offset by the added protection that development to the swimming stage offers to the frog embryo before its exposure to the world of predators.

Near dusk the fishing party returned loaded with lukunani and piranha, a few arawana, some tweezer-jawed swordfish, a few spectacular saber-toothed baiara, tigerfish (a black-striped type of catfish), and a very dark mottled-brown 15-inch catfish. Alwin quickly cleaned them, salted the split fish and hung them on the drying racks. The party had arrived at Fish Pond on Sunday afternoon to find it virtually dry. They slept on a sandbar in the open sharing it with large caimans to whom "Roger-Roger" talked in his sleep all night. Perhaps this is like the protection from nightly raccoon raids that playing a radio in the garden affords. In any case, they survived. In the morning they started back. Several miles above our camp at a pool by a rocky rapids the party began seriously fishing. The fishing was fast and furious and the rods were passed around among the five fishermen so that everyone caught fish. As delicious as the fish were, I found there is indeed a limit to how many successive meals of fish I can truly enjoy. Davis, on the other hand, never tired of the menu.

We often encountered reptiles along the river. In addition to black caiman these included quite large lizards, called "salipenta" (a term said to describe the larger *Tupinambis* sp. lizards, but which seemed to be generally applied to all but the smaller lizards) and iquanas (*Iguana iguana*) which, surprised sunning on the bank, scrambled up the banks or dropped into the water. On this trip no serpents were seen. Sunning turtles, while the most regularly encountered reptiles, were rarely seen well because they dove into the water in advance of our approach. However, during the fishing expedition Ashley surprised a turtle in shallow water, managed to race it down and brought it back to camp for us to see before releasing it. This turtle had a high-domed shell about 14 inches long, and weighed possibly 6+ lbs. When released it scurried quickly toward the river and plowed through the shallows creating a strong wake. Duane would have liked it for his zoo but turtles are under assault in the South Rupununi and any adult that can escape to breed again constitutes a treasure. One of the turtles we failed to see was the giant arran turtle (*Podocnemis expansa*). On the return trip we briefly came ashore and Duane spotted a matamata (*Chelys fimbriata*) swimming under the boat. With great alacrity he leaped in and caught it. The matamata is an extraordinary example of camouflage, not simply in its red-brown color, but in form as well. The head is flattened to an edge in front, the eyes are tiny and obscure just below the front outer edges of the head and various knobs, fringes and projections (the fimbriation of its Latin name) give it the character of a decaying tree branch or root. The nose is at the tip of a narrow tube so that no part of the head is exposed to breathe. Beneath the mouth are a row of four projections that presumably serve to lure small fish. The heavy central scutes on the carapace each rise to a peak and the scutes around the circumference of the shell each end in a point. The overall impression is that of a fragment of rock resting on a branch. This individual had a partially amputated hind foot having successfully escaped an encounter with some predator.

This evening we had a hearty supper of scads of fish and a delicious taste of piping hot Piping- Guan complementing our rice and farine. The last squirreled-away bottle of rum was produced and instantly consumed. Speculation and theory of just how to have a new supply air-lifted to us was rife. The situation even made it into our radio transmissions so that all Guyana, and most of northern South America, was alerted to our embarrassing situation. Amidst loud recriminations about how the hell did Duane expect a mere nine bottles of rum to last a party of fifteen for nine days (hey mon, it ain't loaves and fishes!), we retired to do the birdlist. In the evening, a Spectacled Owl and a Hardy's Pygmy-Owl were heard again.

Tuesday, November 18. This morning, Davis arose early to record bird sounds and we joined him on the forest trail that Tommy Kenyon had been extending almost daily. Three walks were made today from 5:30 A.M. to 9 A.M., from 10 A.M. to 2 P. M., and from 3:45 P.M. to 5:00 P.M. In the dawn chorus a Spectacled Owl was heard. Accompanied by Roger Stanley, we moved quickly to extend the head of the trail into new territory. Two Euler's Flycatchers were in the thicket where we'd first found them. Farther on we encountered a pair of **Musician Wrens** foraging around stumps in a thicket. Davis called them in and one circled us occasionally singing its symphonic and flute-like notes (enigmatically characterized by Haverschmidt and Mees as "a bad omen for hunters") while magically staying out of sight in open forest floor. Eventually, its movements became so predictable that we all saw it well. A short distance away we encountered a male and a probable female **Dot-winged Antwren** among a group of fast-moving foragers. This is one of only a few Guyanan records of this antwren. The only Ash-winged Antwren detected on this trip was heard here and our first Golden-spangled Piculets and a Long-tailed Hermit were spotted. A pair of Black-capped Becards were also recorded. Tommy pushed the trail up a hill that rose to *terre firma* considerably above the varzea. At one point, perhaps forty feet above the ground, we watched a pair of Golden-winged Parakeets excavating a hole in a large termitary attached to a large mora. On this relatively steep hillside the forest was denser and more lush than that of the earlier part of the trail and quite humid and hot. Here and there the occasional rubber tree had been chevroned to collect the latex, balata. Unique roles still persist for natural rubber; no substitute has ever been found for its use as the inner windings of golf balls, and for specialized tires such as aircraft tires. Now the working of the rubber into figurines is a folk art among many Guyanan artisans. **Flame-crested**, Guira and **White-shouldered Tanagers** were seen for the first time, and we saw and taped our first seen Grayish Mourner and a **Black-tailed Trogon**. A Gray-fronted Dove was heard cooing. While we had several audibles on the trip, we had no visibles. While we were concentrating on tanagers, Tommy had cleared a path toward the summit of the hill and was out of sight 200 feet ahead when he spotted a **Spix's Guan** in a tree. He proceeded to "collect" the guan, informing us of his action by the shot and the corpse which we duly photographed. More fowl for the pot. About lunch time we scraped together a meal through the foresight of Tommy who had brought a bag of a really delicious local trailmix containing cashew nuts, farine and raw sugar all finely ground together, and Roger who had thought to bring a bag of roasted, sugared cashews and some very tasty and refreshing candied ginger.

We turned around and retraced our steps toward camp. High among the buttressed trees near camp a foraging flock of birds were spotted among them we finally saw two species that we had heard for several of the last few days, **Spot-tailed** and **Todd's Antwrens**. Jennifer chanced on a "salipenter" off the trail in these open woods. This fifteen-inch lizard was evenly gray-brown almost exactly the color of a liana stem. It had frozen, limbs spread, in prone position, on the forest floor looking for all the world exactly like a piece of branch. Its commitment to this position was such that it could be tilted almost to the point it would tip over without altering its stance. Its survival was entrusted to one of the basic tactics of biology and administration; when threatened, do absolutely nothing.

Lunch, following the usual practice, was on the beach preceded by a swim. Insects are only a slight problem but at high noon a typical, black musca-like fly is plentiful enough to verge on being a pest. Tommy and Dookie swat and grab them with quick hand motions and drop them on the ground. A much larger insect, a solitary ground hornet, darts in among our feet to pick them up and carry them off one at a time and, shortly, all the corpses are gone. These ground hornets nest in tunnels on a knoll on the beach. Hundreds fly actively for a few hours when the sun is at its zenith. Bates describes a hornet-like wasp *Monedula signata* engaged in a similar activity in the upper Amazon. A softball-sized marabunta nest covered with the small black wasps was hung in a thin copse on the summit of this knoll. Neither the ground wasp nor the marabunta caused us any problems on this trip. At this season in this location there were no mosquitoes, simply none at all. I have yet to meet the kaboura, a Simuliidae cousin of the northern blackfly with which it shares an equally intimidating reputation. During one walk on Tommy's trail as we climbed out of the varzea I found that a medium-sized tick was attaching itself to the skin web between my right thumb and index finger. That none of us had been parasitized before was probably because ticks do not survive the flooding of the varzea where we had done most of our birding and because the use of Permanone on our socks, shirts and pants protected us from those that did find us. I had not used DEET at all on this trip. At 3:45 P.M., Davis led another trip down the trail. I reneged since it was too close to sundown and there are few things I like less than stumbling around in the dark. I stayed on the beach and saw the usual evening flight of six or eight **Giant Cowbirds** and a Red and green Macaw that had been calling in the high trees across the river pool. Steve also saw a **Lesser Swallow-tailed Swift** over the beach. In the evening Gray-winged Trumpeter called.

**RETURNING TO ANNAI.** Wednesday, November 19. Today we plan to depart. This was our last chance to bird in this marvelous woods and we could only bird from dawn until about 8:00 A.M. Our walk was quickly out to the end of the forest trail. Here we saw a Caica Parrot and, on the hillside above the varzea, we heard a male **Black-throated Trogon** which, in

responding to its own voice, overshot us on several passes, but finally alighted for a good mutual view. We had now certainly reached a state of diminished returns in respect to new species at this site. Thus, while we saw many other birds, none was new. Nevertheless, our first Cinnamon Attila and Tiny Tyrant-Manakin were each heard here.

We breakfasted (yes, the tasty Spix's Guan was on the menu) then we made a swift run down the Rewa River overtaking an amerindian family poling a dugout and scow. The amerindian method of poling a dugout down the river is curious: the pole is planted on the bottom, pushed off, pulled out and rotated 180°, so that on the next set the other end is planted on the bottom. Seems to work for them but I suspect the technique would be rather uncomfortable in the icy waters of New Hampshire. They were transporting two halves of an arapaima. Not the largest, for 1000 pound fish have been caught, but this fish is so large that the fileted, salted and partially dried meat occupied most of the room in both the dugout and the scow. Duane stopped to purchase half of the arapaima filets which even partially dried still weighed 55 lbs. Everyone seem pleased with the purchase which cost Duane about \$5000.00 GD (ca. \$36.00 US). The huge, and now rare, arapaima is a delicacy that is the prized item in the Guyanan specialty, dried fish and bakes. Transported back to Dadanawa this would be a welcome addition to the ranch larder. The amerindians use both fishing lines and bow and arrow to capture fish. A typical river scene is an indian standing on a rock or a dugout kanou with a half-drawn six-foot long bow fitted with a fifty-inch long arrow. The arrow is a work of art made from a long, light cane and is fletched with two 4 inch segments of Curassow primary feathers selected from opposing wings to insure proper rotation. The attachment of fletch and point is careful, beautiful symmetrical threadwork which is strengthened by a dark resin or glue. The fishing arrowheads are made of eighth-inch steel rod with two barbs at right angles: one an inch from the point, the other two inches from the point. It is an altogether lethal arrangement. Another type of arrow differs only in its point which is made of a light wood, lance-shaped, and six-inches in length. This is used for large terrestrial or arboreal game (tapir, sloth, monkey, agouti). The outfit is completed by a bow made of a single piece of dense bi-colored wood about 3/4 inch at its middle and tapered to about 3/8 inch at the tips. The concave (heart wood) side of the bow is dark, the convex (sap wood) side is light. The bow string is of symmetrically twisted plant fiber so perfectly even in form that one has to inspect it closely to believe the twine is not machine-made. There are other bows of shorter and lighter construction with correspondingly more delicate arrows which are used for hunting small birds, lizards and mammals. The thought, the artistry, the beauty, the technology inherent in the construction of these tools astounds me. As a sometime fly-tier, I can only admire the elegance of the feather and thread-work. The mastery of this living artist sings to me in much the same way as does that of the 12,000 year-old maker of the Clovis stone spear point I once found at Aziscoos.

Lunch was on a sandy bank next to a tributary in the vicinity of the large sandbars frequented by turtle egg collectors. Here, Steve joined the fishermen in hauling in lukunani and swordfish. In the shallows I found a fresh-water crab, in form like a typical grapsoid, brown and about three times the size of a fiddler crab. That this would be hundreds of miles from salt water surprises me. The only crab-like decapods I had encountered living their lives in fresh water were crayfish. The equatorial freshwater fauna is bewildering. Rays, crabs, flatfish, dolphins are all saltwater creatures that have adapted to it. Some of these are descendants of salt-water species that were trapped in a huge Amazonian Sea formed when the Andes rose and cut off all west-drainage of the continent during the mid-Cretaceous Period. Great time in a relatively unvarying climate and the filling of this sea with sediment and salt-diluting water favored selection for the critical water-salt balance adaptation. A colleague at the University of Sarajevo once pointed out to me an interesting parallel to this phenomenon among fish found in rivers of the Croatian coast. Some of these fresh-water fish are salt-water descendants of Mediterranean fish that took refuge in streams when the Mediterrean Sea was cut off from the ocean, dried and became too salty for even ocean fish to survive in.

Novel bird species first seen along the trip included **Blue Ground-Dove** and White-collared Swifts. High in a tree-top along the river a Black-tailed Tityra, which I didn't see well, was identified by several familiar with the bird. Considering the distance to go, we hurried down the river and by 3:00 p.m. made Rewa Village where we went ashore and met some of the villagers. This is a clean, small village with well-built permanent brick-walled, thatched houses bordered by a grove of large mango trees. The people were friendly, curious to know what we were doing, and informative about their village. Everywhere we go, Duane knows people, or knows people who know him, for instance, the amerindian family from whom he bought the fish had relatives that worked for Duane at one time or another. The Deputy Captain, Rudolf Edward, asked me to send a report of our trip. Since birding the area was our objective, I will send him our Rewa River bird list with a letter outlining our journey.

**CAMP #5** (N 3° 52.357', W 58° 49.963') We continued up the Rupununi to our fifth campsite on a very large sandbar a mile or so above the Rewa River. This site was memorable for the planetary display that evening. On the equator, Mercury rises to its greatest height, maybe 18° and there it shone brilliantly in the west, a treat to this northern city-dweller who had seen it only a few times before and always just dimly above the setting or rising sun. In a band across the sky followed red Mars, bright Venus, Jupiter whose four large moons were clear in Steve's Kowa telescope, ringed Saturn and, at our feet, the real glory of the heavens, Earth. The astronomical event of having all the major planets in sight at the same time is not common and even as astute an astronomer as Davis had not anticipated it. As it turns out, Uranus also was faintly visible had we but known where to look. One thing led to another and soon we were viewing galaxies, such as M31 the Great Andromeda Spiral Galaxy, with the telescope. Altogether it was an event enjoyed by all on a beautiful, warm, clear night as only the tropics can offer. In the dusk a dozen Band-tailed Nighthawks hawked above the river while bats swooped and dived from fifty feet to the water surface. Bats are ubiquitous in the forests and over the rivers. It is estimated that the order Chiroptera constitutes the greatest vertebrate mass in the Amazonas. Waking at dawn to see bats flitting over our hammocks was a frequent event. Our hammocks were set up on a

rise above the shore where a dry streambed entered the river. The streambed was pocked with tapir, peccary and jaguar tracks and twice during the night large animals moved along it since, because of the cliff-like riverbank on that side of the river, it furnished the only access to the water for several miles. The first was a lone animal, the second was a small group that seemed to be walking among our hammocks. They were, hopefully, tapirs, not pumas or jaguars.

Thursday, November 20. Early last evening a **Tawny-bellied Screech-Owl** had been heard and just before dawn Davis lured the bird to the trees above our hammocks so we could all see it well. A call, that of either a Mottled or Black-banded Owl, was heard. This morning we walked up the dry creekbed where we found Finsch's Euphonia. Inland above the bank a thin forest of trees with heights around 15-20 ft extended over a relatively flat once-drowned area. In this inauspicious place, Davis conjured up one of the biggest surprises of the entire trip, a **Saffron-crested Tyrant-Manakin**. While this was not a new Guyanan record, Davis explained that it represents a significant extension of the range in this country of this species which had previously been known from "white sand highbush savanna in central and northern Guyana". While we breakfasted on the sandbar we were treated to a fly-by of at least 160 Scaled Pigeons. A Black-throated Mango and a White-necked Jacobin worked the trees along the river. A Yellow-crowned Tyrannulet, heard often before, was seen at last. About 9:30 A.M. we started up the river again. The weather was much warmer and traveling against the current was slow, and slowed further by Dookie's cantankerous outboard. On the river all the usual birds were seen and counted. To relieve monotony, I kept a close bird log and launched forth several tunes rattling about my head, most notably "Won't you be my Melon, Charley Baby?" It was a hot day! We stopped after two hours and lunched from 11:30 A.M. until 1:00 P.M. Stephen and Ashley joined us for a brief foray into the woods behind the bank on which we lunched. At the base of a tree a ten-inch lizard worried a huge katydid for more than five minutes, alternatively bashing it against a trunk and chewing it until fleeing from us with the insect still unswallowed in its mouth. Only a few familiar birds including Roadside Hawk, Black-crested Antshrike, Black-chinned Antbird, Forest Elaenia, Striped Woodcreeper and a Helmeted Pygmy-Tyrant turned up. We continued up the river until about 3:30 P.M. and camped again on the left side of the river. It is a fact that without exception our camps were on the prevailing Guyanan "rules of the road" side of the river. The only stops we made in exception to this rule were two emergency stops when Dookie's motor failed. Most proper! This site was approximately a mile and a half shy of our first campsite on the river.

**CAMP #6.** (N 3° 51.643 W. 58° 56.169) The day had been hot and as I grabbed Steve Mirick's arm to help him ashore it was clear he was running a fever. When measured, it turned out to be close to 103° F. He was feeling unquestionably "peelly-wally". Opinion was mixed as to whether this was, as I thought, a result of a gastrointestinal infection complicated by incipient heatstroke or, as others cynically suggested, withdrawal symptoms. In any event the treatment was the same and rest, fluids, cool compresses, tylenol, a general antibiotic (floxin) and a night's sleep restored him to a similitude of normality. Jennifer had brought a number of enameled pins by Spear as gifts for the support staff. She proceeded to make her awards to the delight of the assembly. Soon all the worthies were appropriately pinned. Our indefatigables, Davis and Jennifer, walked in the woods, but I idled on the sandy bank smoking cigarettes under a large spreading tree, watched huge caiman in the pool, listened to the squirrel monkeys cracking nuts in trees on the far shore and speculated with Mike Lee on the barely imaginable world of today's biochemistry and biotechnology. As usual the fishing crew did their stuff. Both Mikes landed lukunani from the bank. After we had settled in, Duane took a boat-load on a fishing expedition into a small inlet just below the camp. He jumped and shot a Muscovy Duck. With Steve "hors de combat", Davis, Jennifer and I did the bird-list and turned in early disturbed hardly at all by the excitement of a chase by the staff and fishing crew after a boat which, poorly secured, had floated off down the river. As the my fishing buddy, Joe Uttaro, would have put it, "Poco chimo, poco marinari" (Little rope, little fisherman!).

Friday, November 21. The dawn chorus included Undulated Tinamou, Rufescent Tiger-Heron, Spectacled Owl and Tawny-bellied Screech-Owl. A tour of the open varzea behind the campsite and toward the small inlet produced good looks at three Cream-colored Woodpeckers, our second Saffron-crested Tyrant-Manakin, a Yellow-headed Caracara, and Brown-throated Parakeets. Southern Beardless Tyrannulet, Straight-billed Woodcreeper and Cinnamon Attila called, but were not seen. This was the last day on the river and we departed camp at 8:00 A.M. for Annai. We had a fair stretch to go against the current. We were now running through the formidable heat of the open savanna. I found myself wetting my hat every half-hour and singing monotonously. Davis asked me (and then answered) what had Melon Charley said to his daughter when she announced she was going to run off and get married? "You cantaloupe!" So our brains went. The heat was sufficient to diminish or call into question our birding judgement to the point that the ever-present Bat Falcon began to assume the form of the Orange-breasted Falcon. We had such a perfect view of the bird in question perched thirty feet above our heads and subsequently flying (a locomotion encouraged by the shot charge that Tommy put into the base of the branch on which it perched), that nothing short of collecting it (we declined Tommy's offer) could finalize a diagnosis. The result of this transmogrification is that I now despair of ever recognizing an Orange-breasted Falcon, even if one falls out of the sky into my lap. We stopped briefly at a landing across the river from an Indian farm to lunch on a splendid repast, curry of Muscovy Duck. The sand was blisteringly hot so even those who were nearly always barefoot raced to the cool woods. A swim in the water was a welcome relief. Dookie entertained the party by climbing trees to collect orchids in search of a suitable homecoming gift for his bride, Tammy.

**AT ROCKVIEW.** In short order we were off again and arrived at Kwatamang Landing at 3:15 p.m. to be met there by Sandy, Carl, even the long absent Pip, fresh back from the Queen's bar (who said he studied for the bar and how much does that take?) and assorted other children, friends and relatives. Instantly, the long drought was ended by Sandy who, responding to her

husband's lack of detail, had the foresight to bring with her a sufficiency of rum and a couple of coolers of Polar beer. The party went on for an hour and probably all night with much talk and hilarity. Happily, the threatened ox-cart ride was withdrawn and Carl chauffeured us by Land Rover to Rock View where a long-dreamed of shower, partial shave and brief collapse were enjoyed. Colin Edwards hosted his traditional relaxing pre-dinner social hour with many of the guests at the lodge. Among them were two attractive young women: Susan Alsop, the Assistant Manager at the Cara Lodge, and Vivian, a physician and jogger. Also present was Neil Pryor, an executive with the Guyanan Telephone Co., another jogger. After supper we had an early turn-in. I'd asked Sandy to bring me an amerindian bow and fishing arrows and Carl gave me this nearly six foot long package which ultimately was shepherded to Portsmouth.

Saturday, November 21. We walked around Rock View from 5:30 A.M. to 6:30 A.M.. The aforementioned joggers, the world's full of them, flashed by as we found our first Double-striped Thick-knees. Both Crested and Yellow-headed Caracara were seen. Columbidae were Common Ground-Doves, Eared Doves and Pale-vented Pigeons, the Psittacidae were Brown-throated Parakeets, Yellow-crowned Parrots and Red-shouldered Macaws. Since we had all but exhausted the possibilities of the savanna avifauna by this time, we saw nothing else that we had not seen before. Yesterday's birdlist was done this morning. Following a delicious breakfast which included, but was not limited to, porridge, eggs, fruit, rolls, toast with mango jam, tapioca pudding, and coffee (Good Show, Colin!) we retired to the courtyard to join Duane, Sandy, Dookie and Tammy, Carl, Ashley, Pip, the Mike's, the Steve's, Roger and Troi for photos and a farewell champagne toast, then on to the pub for the airline weigh-in. On schedule at 8:12 A.M., the GAC Twin Otter set down at the Annai Strip, heartfelt farewells were made, which included Dookie being capped with Steve's NH Audubon cap, and we were off at 8:23 A.M..

**GEORGETOWN.** Sixty-eight minutes later we landed at Cheddi Jagan Airport. We were required to pass customs. Because of their potential for drug traffic even domestic flights nearing the Brazilian border are treated as if from Brazil. The process was lubricated with Louis's efficient help and we were then driven to the Wilderness Explorers Office in Georgetown spotting on the way one new species, a **Zone-tailed Hawk**. In Georgetown we drove by Stabroek Market to the House Proud gift shop where I was able to buy a very enlightening book, "Amerindian Testimonies", a compilation by Amerindians of their life and experiences, and an attractive wooden bowl carved out of the beautifully colored native wood called purpleheart. In telescope view from the Pegasus Hotel rooftop were about thirty Scarlet Ibis on the far shore of the Demarara River. A hot afternoon was spent at the National Zoo where we met most of the fishing party. Our attempt to increase the size of our table at the very well-booked Cara Lodge to include the fishing party unfortunately came to nought so we dined without them. This zoo has a small but attractive collection. It was made even more so by the enthusiasm and friendliness of the zoo attendants. The larger birds were especially well represented. Among the raptors were all the commoner hawks including several specimens of the truly immense Harpy Eagle. Parrots seem to take captivity well. Almost all the species we worked so hard to see in the wild could be seen at close quarters. Hybrids of large macaws (Red and green x Blue and yellow) whose colors could not to be seen anywhere else were striking as were the handsome Red-Fan Parrots seen at arms length. In the lagoon are large, very tame manatees, expecting to be fed. They approach anyone who stands on the shore and wait patiently see what is thrown or handed to them. This part of the Botanical Garden is a site where **Gray Kingbirds** occur commonly and we saw three today.

The beach in front of the seawall is composed of eroded mounds of mud deposited by the river interspersed with sandy sections and tide pools. Herons worked these mud bars searching for small crabs and we observed the Tri-colored Herons stalking technique in detail. In a slow-motion process, not unlike the Sunbittern's tactic, the heron slowly and deliberately approaches the crab while steadily moving its head in a back and forth manner. By the time the heron is within range the crab has accommodated to its presence and movements and ignores it. The heron simply plucks it up on the next forward movement of its head. While on the seawall we witnessed an unusual inter-species event. A Ringed Kingfisher, not a common sight on the beachfront, flew out over the mudflats and was immediately harassed by a pair of Bat Falcons that had been perched on top of a large tree. The attack drove the kingfisher down onto the beach. The attack was continued when it tried to take-off. Eventually, the excited Bat Falcons broke off the attack and returned to the tree allowing the thoroughly harassed kingfisher to fly inland toward one of the nearby canals.

**RETURN TO NEW HAMPSHIRE.** Sunday, November 22. One bright spot in the evening was the news that our flight out of Georgetown would not be at the usual time, requiring as it does a 1:00 A.M. departure from the hotel. An 11:00 A.M. departure allowed us to bird for a few hours prior to riding out to Timehri. The dawn patrol along the seawall produced one new trip record, a **Yellow-crowned Night-Heron** and, of course, most of the typical shore-side birds. The remainder of the trip out to Cheddy Jagan Airport and back to JFK was a carbon copy of the last trip except for the more civilized departure time from the Pegasus, 7:15 A.M. for an 11:00 A.M. flight. Arrival in JFK and clearing customs was normal. Jennifer whose connections were destroyed by our delayed departure, did have to scramble to find a new way to the West Coast. Nevertheless, even she managed to get there by late evening and home by the next morning. The November weather was typical, i.e., marginal, but our delayed shuttle flight to Boston still met the penultimate C&J bus to Portsmouth. The shock of arriving in 20°F Portsmouth from 90°F Georgetown never fails to amaze.

### III THE MAPARRI WILDERNESS

Several miles north of Dadanawa the Kanuku Mountains rise spectacularly above the savanna to a height of about 4000 feet. The Rupununi River cuts a narrow gap through this range. On the eastern side of this gap the range is dominated by three significant mountains running from south to north: Makawatta, Barudin and, on the northern-most edge of the range, Maparri Mountain. The Maparri River is a small river (in our discussions it is as often referred to as "Maparri Creek") draining the notch between the Maparri and Barudin peaks. Its upper reaches are interrupted by rapids and falls. Duane has established a camp below the first unnavigable water. The entire area is recognized as a pristine amazonian wilderness by Conservation International. Ravines and steep walls offer the opportunity for birding in an environment distinct from the savanna and lowland forests through which we ranged in the first two trips. Wilderness Explorers has an established tour, "The Kanuku Explorer," through the area and it is this tour that our party initially considered. Dadanawa Ranch is usually the convenient starting place because it is immediately upstream of the Kanuku gap and, providing the water levels are sufficient, it is an easy run down the Rupununi River to the mouth of the Maparri River. The first overnight camp would be near Sand Creek (the Katiwau River) at an amerindian village where the Rupununi enters the gap. A second camp would be scheduled for an amerindian farm downstream. Our third camp would be at the Maparri site where we would spend four days. We would then boat down river to Karanambu to spend a day before flying to Georgetown. In Georgetown we will spend our last full day boating at the Lamaha Conservancy, a huge complex which is part of the Georgetown water supply, the term "conservancy" is equivalent to our term "reservoir". However, our actual travel differed significantly from these plans. Modest rainfall during the winter and spring of 1997-1998 combined with a water deficit due to one of the harshest droughts in recent memory reduced the water levels such that an easy down-river run from Dadanawa to Maparri Creek was unlikely. Under these conditions an up-river run from Karanambu seemed more feasible. Thus, we opted to fly to Karanambu from Georgetown and proceed from there to Maparri Creek. Although against the current, the approach to Maparri Creek from Karanambu is quicker and with fewer obstacles than that from Dadanawa.

Davis Finch, Ann Kimball and I went by hired limousine to Logan Airport on Saturday, April 25th, and flew to JFK where we were met by Polly Rothstein. Our plan was to stay at Polly's overnight and join the rest of the party, Jennifer Green and John Heizer, at the GAC gate at 6:00 A.M. on the 26th. We birded in Central Park with Claudia Loff where we found 31 species in a couple of hours. We lunched at the boathouse and then drove to the Marshlands Conservancy where the director, Allison Beale, gave us a tour of this important Westchester County refuge. Our trip to Georgetown was blighted by GAC (a curse seems to have settled permanently on our use of this "carrier") who called at 6:00 PM Saturday night to inform us that the flight had been cancelled due to lack of equipment "indefinitely". It looked like our trip would be spent at Polly's. We four, with Claudia and Allison, repaired to an excellent Indian Restaurant, "The Bengal Tiger" in White Plains to plan the next move. On Sunday morning we picked up Jennifer and John Heizer and spent a good deal of the day resting, walking in Polly's neighborhood, reading, looking at videos that Polly had made of a pair of Cooper's Hawks that nested (!) in her front yard. Making the best of it in the evening, our group and Allison proceeded to the Luke's Hong Kong Gardens in New Rochelle where Luke did his culinary best to improve our spirits. The dinner, initiated with oysters in 10 inch shells with ginger sauce, was simply elegant. Entirely chosen by Luke, it featured; eggplant, broccoli and beef, chicken, shrimp with minced pork, rice, peas and on, and on! The conversation veered to Ilza Belodis's question, "If you could push a button to eradicate the human species, would you?" Of course this question is simply whether the human species will ever get it right! I don't remember all the responses, but Allison and Davis clearly would, John and I wouldn't.

On Monday morning we were able to get through to Karen Weldren at Wilderness Explorers in Georgetown who informed us that a flight would leave JFK for Georgetown at 12:30 A.M. on Tuesday April 29. We did some shopping for things that Duane had ordered at the last minute, walked the lovely neighborhood and admired "Puffin's" genius at swiping food from zipped up duffelbags. Supper was a nice pasta dish and a couple of bottles of choice Merlot. At sundown we went to a nearby site to listen for woodcock without success. On return we found our limo waiting to take us to JFK. At 9:30 P.M. we were once again practicing the central rite of the Guyanan religion... standing in line. While we had much experience doing so in the Timehri Cathedral, this was our first indication that the rite was practiced wherever Guyanan's gathered. After joining five separate lines, the first outside in the bitter cold of a northeast April night, at 2 A.M., we boarded our substitute aircraft a very presentable Trade Winds Airline L1011. After fueling up, our crew took to the air at 3:10 A.M. There was plenty of room for the 118 passengers.

One incident marred this flight. During the loading two east indians had loaded their carry-ons in a bin and sat quietly nearby. A huge, corpulent, frog-like, nearly blind, physically intimidating, black man came along, found his seat, opened the bin above his seat and, while complaining that it was his bin because it was over his seat, proceeded to remove the contents and throw them on a nearby seat and place his bags in the bin. This was a very ugly, stupid revocation of the comity typical of air travel, re-confirming the racial tensions of coastal Guyana. While offended, the two east indians behaved with a dignity that few north americans could display. The matter was finally resolved by finding this brutish malevolence other seats with more space some distance away.

## **Kaieteur Falls**

Day 1, April 28. On landing at Timehri, we found that Wilderness Explorer's Karen Weldren had simply moved our plans forward and after arrival she joined us on our flight to Kaieteur Falls on the same day we had originally planned to fly there. Our pilot of the Air Services Ltd. Islander as before was Krishna Shankar. The falls were only glimpsed in fragments through scattered low clouds. At the airstrip we met Michael Phang. Michael is a knowledgeable naturalist who distinguished himself by his ability to name plants and animals with their scientific names - something that Davis had rarely encountered in tropical guides. Michael has a store of knowledge of the local history and the environment. Guyana is certainly fortunate to have Michael as the warden on duty here. The weather was very hot, windless and high humidity. Michael escorting us around the falls was especially knowledgeable about plants such as the sundews growing on the wet rock shelves, long narrow-stemmed pitcher plants, flame bromeliads, orchids and a thick-leaved herb with swollen red-stemmed petioles purportedly having skin-healing properties. We essentially repeated our last trip's circuit along the falls. Both male and female Guianan Cock of the Rock were seen at the usual lek site. Over and under the falls a thousand brownish White-chinned Swifts and five hundred very much larger White-collared Swifts swirled. Through this cloud of swifts a half dozen very dark, Chimney Swift-sized White-tipped Swifts weaved and plummeted. At the top of the falls a **Green-tailed Goldenthrout** worked the flowers in a shrub. Jennifer spotted a new bird, a **Black-bellied Cuckoo** in the high canopy above a well-used path. In the brush at the runway's edge Davis called in three Rufous-crowned Elaenias - an increase since last April when we'd found only one here. Dusky-capped Flycatcher and Tropical Kingbird were found. A pair of Blue Dacnis were seen. The Spot-winged Antbird seen here was the only one of the trip.

## **Karanambu**

We next headed for Karanambu where in addition to our host, Dianne McTurk, we were met by Ashley, Duane, Carl Frederick, Malachy Miller, now running Pirara Ranch north of Lethem, and other old acquaintances. What a pleasant reunion in that marvelous oasis. We made a quick boat trip to Simoney Lake spotting the usual waterbirds: Neotropical Cormorant, Anhinga, Cocoi and Striated Herons, Great Egret, Green Ibis, Wood Stork and Jabiru. **Black-bellied Whistling-Duck** and Muscovy were seen as were the ubiquitous Pied Lapwings and Spotted Sandpipers. On this trip the only Scaled Pigeon we found was at Karanambu. Other Columbidae seen were Pale-vented Pigeon, Common and Ruddy Ground-Dove and White-tipped Dove. Greater Ani were plentiful as were Short-tailed Swifts. As evening loomed Lesser Nighthawk, Band-tailed Nighthawk, and White-tailed Nightjar were seen insect-hawking over the river. Ringed, Amazon and Green Kingfishers and Swallow-wings were all present. The usual savanna big river suite of flycatchers were present: Tropical Kingbirds, Rusty-margined Flycatchers, Greater and Lesser Kiskadees. Here at Karanambu the typical martin is the Brown-chested Martin. White-winged and Southern Rough-winged Swallows predominate on the river. We staggered into the Karanambu compound in the pitch dark, cleaned up and joined our mates for a pleasant dinner with Dianne.

## **Day 2**

April 29th, in the morning, joined by Dianne and Kenneth, we followed the usual practice of a 5:00 A.M. walk on the runway. It was not an especially good nightjar display, only White-tailed Nightjar was seen although Least and Band-tailed Nighthawks and Paurque were all heard. Crested and Yellow-headed Caracaras, Vermilion Flycatchers and Smooth-billed Ani were noted. A chorus of about eight Little Chachalacas welcomed the sun. A new bird encountered this morning was a **Lesson's Seedeater**. Among other seed-eating birds found were Lesser Seed-finch, Grey and Plumbeous Seed-eaters, Ruddy-breasted Seed-eater, calling Grassland Sparrows and the Blue-black Grassquit. After breakfast we visited the Forest Patch. These woodlands produced Ferruginous Pygmy-Owl, White-tailed Trogon, Green-tailed Jacamars, Striped and Buff-throated Woodcreeper. Among antbirds seen were Black-crested and Slaty Antshrikes, White-fringed Antwren and White-bellied Antbird. Tyrannulets are frequently found in these woods and today we saw Slender-footed Tyrannulet, Southern Beardless-Tyrannulet, Mouse-colored Tyrannulet, and Pale-tipped Tyrannulet. Elaenia seen were: Yellow-bellied, Plain-crested and Lesser. Among other small flycatchers seen were Pale-eyed Pygmy-Tyrant, Common Tody-Flycatcher, Yellow-breasted Flycatcher and my first recorded **Yellow-margined Flycatcher**. Along the forest edges many of the commonly occurring tanagers were present including Blue-grey, Palm and Silver-beaked together with a pair of **Black-faced Tanagers**. This was a good day for hummingbirds. Seen today were Black-throated Mango, Blue-tailed and Glittering-throated Emeralds, White-tailed Goldenthrout, Long-billed Starthroat and a gorgeous new hummer, the **Ruby-Topaz Hummingbird**.

Following a pleasant lunch the party visited the "Neopalma" woods for a look at the Pale-bellied Tyrant-Manakin, an uncommon bird which is, however, a reliable resident near the compound. We next boated upstream to Mobai Pond. This is a seasonally stranded pond that is completely covered with the immense platters of Victoria regis water-lilies. Wattled Jacanas, both sexes, and Purple Gallinule fed and quarrelled on this third dimension of water. On the trip down and back were seen: Black-crowned Night Heron, Osprey, Kestrel, **Crane Hawk**, Roadside and Grey-line Hawks. Parrots seen today were Red-shouldered Macaw, the ubiquitous Brown-throated Parakeet, Scarlet-shouldered Parrotlet and Yellow-crowned Parrot. A pleasant visit preceded a delightful meal and it was off to bed in anticipation of a long run to Maparri Creek on the morrow.

## **To Maparri Creek**

Day 3 The next day we were up, even earlier at 4:15 A.M., for a run-way session which produced few newly seen birds. We left for Maparri Creek in two boats. In one boat was Duane, Justin, Polly, Ann and me. In the other was Ashley, Leroy, Jennifer, John and Davis. Marjory Antone, Sammy Melville, Duane Jr., and Nikki Persaud had gone to camp the day before to prepare for our arrival. The river water was running well presumably from showers up-river although we have not had significant rain locally. Initially we motored through open savanna with deeply cut banks bordered by thin brush, grassy

swards and occasional large isolated trees. Early in our travel we overtook and cut off two large black caiman **in shallows which forced them to swim alongside the boat. Their speed was just about equal to our top speed of 5- 6 miles per hour although when they tired of being herded they shot away at twice that speed.** The bird-life typical for these large rivers includes: **Swallow-wings (50), White-banded(55), White-winged(40), and Rough-winged (6) Swallows, Cocoi Heron(40), Great Egrets(7), Snowy Egrets (7), Green Ibis (8), Jabiru (4), Neotropical Cormorant (12) Black-bellied Whistling Duck (4), Anhinga (4), Spotted Sandpipers (20) and Pied Lapwings (12). Greater Ani (10), Ringed (6), Amazon (10), and Green (4), Kingfishers. The Drab Water-Tyrant (12) was present all day. As we entered the water gap, Brown Jacamars (9) were encountered in river-bank Cecropias.** This is our first sighting of this bird which is extremely common in the smaller rivers of heavily forested areas. At a large bend in the river a **Laughing Falcon** was at last seen well sitting motionless in a large tree overlooking the river. Swallow-tailed Kites soared over the boat and a pair of Plumbeous Kites flushed from a streamside tree. An agonizingly brief view of a Sungrebe on a shoreside bank didn't rate my list as a countable lifelist bird. Between Karanabu and the mouth of the Maparri there is only one significant rapid which at this water level was flooded and simply fast water. The day was bright with high clouds. Justin sat in the bow conning the river for logs and shallows and occasionally reaching back to restore a wandering chicken to its place under the bow deck. The chickens were, of course, destined for Marjory's culinary attentions.

About noon we paused at an amerindian farm near a stream entering on our left. This was a pleasant site on a high bank, but pretty much in the open and quite hot. Here we lunched on sandwiches, hard-boiled eggs, nuts, juice, water and sweets. We motored steadily and in late afternoon arrived at Maparri Creek. The entrance to the creek is obscure, not unlike any of the dozens of ox-bows along the river. The creek is narrow, fast-moving and winding with occasional fallen and waterlogged trees, but no rocks. We have about a five mile run to make to the campsite. Soon after entering the stream Duane wasted a shearpin on a submerged obstruction causing a short consultation and a quick repair. Somewhat further along our progress was halted by a huge mora that had fallen across the stream. We unloaded the boats, carried our gear around the roots of this tree and the crew lifted and pulled the boats over the tree. The tree was a most adequate bridge with a diameter of 7 feet or more. Near this portage we encountered a Giant Otter which loudly scolded us for our intrusion. Both Spot-breasted, Crimson-crested and Cream-colored Woodpeckers were seen in the area. On the straighter runs of the stream we could see Maparri Mountain up ahead. It is a "sugar-loaf" completely clothed with vegetation. On either side of us the beginnings of a gorge appeared. Just before sundown we encountered another tree blocking the stream that required lining the boats through its branches and, for us, a portage over a sandbar overgrown with an obnoxious thorny vine. Later in near total darkness by the light of flashlights we hacked and chopped our way through another tree which blocked our passage and pulled our boats through it. Shortly thereafter guided by flashlights we arrived at the lit and comfortable campsite.

**Maparri Camp** sits on the top of a high midstream sandy island. Just upstream of the camp is a four hundred foot long rock-filled gorge topped by a waterfall. At the campsite island the river splits into two streams and flows over sandy/clay bottom with only occasional streamside ledge thereafter. Although shallow, the pools among the rocks in front of the camp are excellent for swimming and bathing. A standard tarpaulin-covered shelter has been prepared for the hammocks close by the kitchen and dining area. In many respects this campsite echoes the Kuyuwini Camp. In the early evening we relaxed, talked and drank, some more than others, none more than I. In the evening we had significant rain.

**The Gorge Slope** Day 4 May 1 is our first full day at Maparri. My first view of the rapids is shrouded in mist. Duane had reported that there was a different type of heron, similar but darker than the Rufescent Tiger heron, resident at the waterfall. In the morning I went down to wash up and I spotted a distant heron at the falls but the visibility was so poor I couldn't really tell what it was. It was wary and quickly flew upstream. The identity of this bird became a central objective of this trip and it was not seen again for several days. After breakfast we elected to bird on the right (North) bank of the creek. This entailed ferrying us across the stream in a boat. This was a simple task because a large tree had fallen across the stream and our guides walked the tree while lining our boat across. The river forms a narrow gorge here with extremely steep banks. We climbed for the first several hundred feet at about a steep 30° angle. Our guides offered to cut us walking rods and the offer was uniformly accepted. Eventually, the trail began to follow the contour of the bank with occasional detours around small, sharp ravines. Davis first identified the call and then lured in a **Wing-banded Wren** from the depths of a ravine. This is a petite-sized bird instantly recognizable as a wren since in outline and tail it is very like a Winter Wren. However, it sports a bright white band on the wing - a characteristic unique in wren-dom. The bird is a quick-moving, wired individual which hangs around and hunts for the intruder with enough determination for us all to see it. The slope of this gorge was dotted with huge house-sized rocks to which clung liverworts, ferns and occasionally lizards. One with an eight-inch long body and a even longer tail sat for several photographs. As expected in a completely new environment our bird-list is almost completely made up of birds we have not seen previously on this trip. Among these are: Reddish Hermit, Fork-tailed Wood-nymph, Chestnut Woodpecker, Chestnut-rumped Woodcreeper, White-necked Thrush, Violacious Euphonia and Purple-throated Fruitcrow. Among the antbirds seen today were Fasciated and Mouse-colored Antshrikes and Wing-banded and Grey Antbirds. We walked this contour for several hours stopping by a spring to lunch. As we threaded our way through huge boulders returning, the unmistakable cat-like growl of a Guianian Cock of the Rock was heard. It responded to tape briefly and was seen by most of the party. The huge boulders give this site the character of the location near Kaieteur Falls where Cock of the Rock is common and it seems likely that a lek site could be found nearby. The best bird of the day is spotted by Jennifer in the sub-canopy of the forest on the steep slope sitting

quietly on a limb. It is a **Collared Puffbird** our first on these trips. We tramped down the hillside to the ferry. I elected to walk the log to the consternation of our guides who, I'm sure, expected a disaster and were surprised when I managed it easily. The water level had been steadily rising since our arrival and during the evening it rained. In the afternoon I bathed and loafed. Jennifer had brought several hummingbird feeders and had hung one on the bank near the boat landing. On a branch near this feeder a Reddish Hermit was perched and gave a close view to all. However, I don't recall any hummer actually feeding at the feeder. Perhaps these tropical birds are too specialized for particular flowers, while our northern hummers are generalists that adapt quickly to new sugar machines.

Day 5 The next morning it was raining and we made a late start to explore a trail that Nikki has cut on the left (South) bank of the river. We ferried across to the left shore. Near the river this bank has a broad shelf at the base of the gorge wall. Our guides are camped on the left bank and Nikki's trail runs from their camp downriver for a half mile. This is an interesting environment consisting of large, high trees. Where the river channel permits light to penetrate are thicker "jungle" edges and palm thickets. Almost at once we spot a flock of white and black tanagers with bright red bills feeding on fruits directly overhead in a very high tree crown- a truly neck damaging position. These are my first **Red-billed Pied Tanagers**. As we move along the trail we divide a flock of foraging **Grey-winged Trumpeters** which, in reforming, pass close by calling to one another with a low "howt". These birds didn't fly but walked rapidly around us offering many quick glimpses but not one lingering look. We spotted a Blue-crowned Motmot whose racket tail failed to impress me. Illustrations all seem to promise something more elaborate. Later in Trinidad at Asa Wright I saw this bird in all its beauty. Davis, hearing a Cinereous Mourner, taped its voice and played it back to him. This energized the bird which then proceeded to launch into a non-stop monotonous repetition -sufficiently annoying that we readily fled the area. In these woods we encountered Golden-collared and Lined Woodpeckers and the ubiquitous Wedge-billed Woodcreeper. A number of yellow, soft plum-like fruits are found under a tree. They are tasty and sweet, easily identified with "plums" which they are called although they are unrelated. We crossed several trails of leaf-cutter ants and I followed one to a hive entrance which was about an inch high and 5 inches wide. In another location we found a mound of about thirty feet long and ten feet wide and raised to possibly five feet above the ground level which was composed of the waste from successive generations of leaf cutter ants. The litter was soft and it was easy to sink to knee depth in the mound. This mound appeared to be extending uphill away from the river. Although the song of the **Cocoa Thrush** was by now familiar to me, I had not yet managed to see one well. While near this mound, Davis lured one in and I finally had a decent sighting. We return to camp and while bathing discover that a pair of White-tailed Trogons have built a nest in a tertiary in a tree a dozen yards out in the river. They are seen regularly thereafter.

After lunch, from 3:00 P.M. to 7:00 P. M., we drifted down river to the brook near the abandoned farm on the river's right bank. The waning day was windless and, except for birdcalls, quiet. The "belling" of the White Bellbird was a regular sound through the day but, while several quicker eyes spotted one, I've yet to see this tree-top herald. In contrast, Scarlet Macaws are constant unwary, "squawkers" and Channel-billed Toucans are frequently heard "yelping." Here Red-billed Toucans are heard as frequently as the Channel-billed Toucan. During the drift Polly spotted a Green Aracari. Her feat was emphasized by the length of time it took the rest of us to spot this leaf-green bird sitting still in a green-leafed tree. In a large tree overhanging the water a pair of Red-fan Parrots displayed and somersaulted about a limb while in the distant skyline treetops a troop of Red Howler Monkeys scrambled around the branches feeding. At the mouth of the Farm Brook we saw a pair of Squirrel Cuckoos building a nest in an almost impenetrable vine column. Among birds seen on this drift are: Olive-backed Foliage Gleaner, Warbling Antbirds, Amazonian Anshrike, **Neotropical River Warbler** and **Black-tailed Tityra**. In the grove of Cecropia trees at the Farm Brook are about ten cacique nests. These are all **Red-rumped Caciques**. They seem to all appear at once and disappear together as a flock. When they are near the nests there is a great deal of displaying, bickering and entering and exiting of the nests. In much higher trees along the bank hang the nests of Crested Oropendula looking for all the world like bull scrota on a hot day. Two birds I had not previously seen, **Cinnamon-throated** and **Strong-billed Woodcreepers** were found. In twilight a Short-tailed Nighthawk made several close passes overhead. We returned in the dark for a nice social hour and repast.

Day 6 On May 3 we get up early and gather around the table downing coffee, juice and fresh baked bread for a post-dawn snack. Small, uniformly black, stingless bees have discovered the camp and crawl in unbelievable numbers around the sweets and jellies, but what they are really after is flour. Marjory can barely knead the bread without including a bee from the numbers that swarm on the flour of her kneading board. They confuse it with pollen, as do honeybees, when pollen is scarce. To distract them Marjory places a few tablespoons of flour in a foam plastic cup and sets it down away from her kneading board. In just minutes the cup is filled to the brim and overflowing with bees. It is an amazing demonstration of the ability of these colonial insects to overwhelmingly and rapidly exploit a food source.

**The Farm Brook** was our birding objective today. The off and on rain during the past two nights has raised the water level enough so it is possible to easily motor and pole the boats well into the brook which meanders around an old farm site. We landed on the bank and began to explore this area which is flooded occasionally but unlike varzea is probably never inundated for long periods. Very quickly we spotted a Black-tailed Trogon in the rather low understory. Dusky, Red-fan and Blue-headed Parrots were seen, as well as several Scarlet Macaws. Painted Parakeets were heard. A **Straight-billed Hermit** is a life bird sighting and we found our first Black-eared Fairy of the trip. In a vine-curtained glade, Davis called in a Coraya Wren, a bird that had called for the past two days but we had not seen. This bird was seen well.

As we moved past this glade, our guides Justin and Sammy, proclaimed that we should move quickly and quietly past a fallen hollow log as they suspected that it harbored a snake, possibly a fer de lance or a bushmaster, both deadly poisonous. Their diagnosis was based on an odor said to be characteristic of the snake. I clearly could detect a distinctly different odor in the area. It is my experience that snakes do smell, copperheads often smell like cucumbers, so I'm not surprised by the warning. The bushmaster which grows to an prodigious size is alleged to be one of the most aggressive of poisonous snakes. It is viviparous and is said to defend its young by rushing at the intruder. Of course, everyone wanted to see this snake and out came the binoculars and cameras to peer into and photograph every aspect of the log while our guardians stood nearby with their shotgun at the ready. In a very short order two schools were firmly founded: those who claimed there was a snake in the log and they saw it, and those who saw no snake. Most interesting was the fact that those asserting they saw the snake were Polly, Ann and Jennifer, whereas none of the males in the group claimed to see it. But the matter did not end there! Photos were taken, ultimately developed, and have been interpreted and re-interpreted as to what they show. Whether the inability to see snakes is genetic, a sex-linked trait, or the ability to perceive objects as snakes is a psychological manifestation, a Freudian matter, remains unclear but nevertheless the controversy is ongoing. There is little question that this region has its share of snakes as shown by my find several hours later. While closely examining the buttresses of a large tree I noticed a football-shaped, 6 inch x 9 inch, mass of hair lying on the ground. On close examination it was evidently composed exclusively of keratin, hair and seven claws. This bolus represented what remained of a sloth which had passed through a large snake. No sign of flesh, bone, tooth or cartilage was present, only the keratin components. I assume the snake was a boa constrictor although in some situations an anaconda or even a large bushmaster might have an opportunity to capture a sloth. In any event I came away from this find with a new respect for the durability of hair and wool, and the inability of snakes to digest it, and the remarkable capacity of wool moths to dine on them.

We continued along the brook toward a small waterfall and called in a Neotropical River Warbler for a very good close look. During this day we saw Great Antshrike, Pygmy Antwren, a pair each of Dot-winged Antwren and Black-chinned Antbird. Also newly recorded were Lemon-chested Greenlet, Slate-colored Grosbeak and Yellow-throated Flycatcher. We returned to camp for lunch at 12:40 P. M. and at 3:00 P. M. we set off again on a downstream drift. While we had seen most of the birds associated with this stretch of river, we did have a good find in high trees lining the left bank of the river, a male Pompadour Cotinga with three females. Along the shore leguminous trees sport long brown pods like locust fruits. These pods contain about ten beans each surrounded by a sweet, glutinous pulp. The pod is tough and getting at the pulp is difficult, but worth the effort.

Day 7 Today at 7:30 A.M. our objective was once again the north mountain slope trail. We found a Greyish Mourner and a Screaming Piha, a bird that has been a audible constant throughout the trip. We continued along the path on the crest of the gorge through large trees several of which had littered the ground under them with hefty, dense softball-sized fruits. Not infrequently we heard the sound of fruit crashing to the ground often dropped by monkeys. Loitering under these trees seemed unwise. Eventually, we encountered a massive foraging party of antbirds, greenlets and flycatchers. There may have been hundreds of birds in this group and, in response to a feeding tape, they were in our area for perhaps a half hour. Among the antbirds were: Saturnine and Cinereous Antshrikes, White-browed Antbird, Grey, Brown-bellied and Long-winged Antwrens. Plain-brown and **Barred Woodcreepers**, Plain Xenops, Wing-barred Piprites and Tawny-crowned Greenlet were among the foragers. Breaking away from this horde, we heard a new call. The located bird turned out to be a **Fulvous Shrike-Tanager**, a new bird with a color pattern reminiscent of an orchard oriole. Pairs both of White-breasted Wood Wrens and of Long-billed Gnatwrens were seen on this walk as was a Double-banded Pygmy-Tyrant. A Ringed Woodpecker was identified. One of the best birds of the day a **White-necked Puffbird** was spotted by Ann. I had failed to see the **Royal Flycatcher** during the November '97 Rewa trip, but today had a very good look at one. Another life bird was the **McConnell's Flycatcher** a good indicator of this forest type, undisturbed, primary growth *terra firme*.

We returned to camp at about 1:45 P. M., lunched and at 3:00 P.M. went again for our evening boat drift. Near the camp we saw a smaller caiman which Duane feels may be a small species which is unique to this area. In addition to the usual drift birds, this evening's birds included a Black-necked Aracari, Black-headed Parrots and Grey-fronted Doves. Toward sundown we observed about ten Guianan Saki, a like number of Brown-backed Saki and three Red Howler Monkeys in the skyline trees. Here and there the shore-line brush is interrupted by large rocks on the vertical surfaces of which Long-nosed and Sac-winged Bats often plaster themselves, taking flight as we approach. A curious aspect of some of the rocks is a series of long vertical grooves giving the surface the aspect of a folded curtain or a cluster of organpipes. Surely these are the result of weathering, but why in this fashion? My guess is that the grooves indicate the paths of roots that have channeled acidic water along the rock surface. We see many examples of trees on rocks from which the soil has eroded leaving the tree with roots clasping the rock and growing vertically into the eroding soil. We return to the camp in dusk, and gather about the table to exchange privy tales and consume candied ginger and other treats. I am my naughtiest by giving our guides and hosts small dutch cigars.

Day 8 It has not rained for the past two days and the water has gone down markedly. Duane had seen the mystery heron again yesterday and since our time at this camp is short we decide to explore upstream in hopes of spotting the bird. At 6:30 A. M. we ferried across the stream to the left bank and walked upstream above the waterfall, but saw no trace of the mystery bird. The walk today is again along Nikki's trail. Shortly after entering the woods we spotted a band of Black Spider

Monkeys in trees off to our left. At my urging, I'm afraid, Davis played a monkey tape. All hell broke loose! These large, black, red-faced monkeys proceeded to shout at us and to throw limbs, some very large, and other things down on us with great accuracy. They shadowed us for the next few hundred yards before deciding we had been satisfactorily intimidated and losing interest. We continued along the path for the most part seeing birds we had previously located although we had a good look at a Spix's Guan, the first I've seen alive. A Red-necked Woodpecker was newly discovered together with two Chestnut Woodpeckers and our second Collared Puffbird. On the trail of a Ferruginous-backed Antbird that Davis heard, we found instead my first **Golden-headed Manakin** high on the side of the gorge in rather open gallery woods. Davis called in this beautiful well-named bird which zipped from perch to perch with a constant sputtering "pip"-ing. This was a steep climb which Ann wisely elected to forgo and when we rejoined her we found both Silvered Antbird and Streaked Antwren in lower shoreside tangles

On return to camp we learned that the mystery heron was in place at the falls at the top of the rapids. A good look at it proved it was a **Fasciated Tiger-Heron**. This is the first recorded occurrence of the bird in Guyana. These tiger-herons "usually perch on boulders in turbulent streams" (Hilty and Brown, 1986). Their absence from prior Guyanan birdlists reflects the novelty of bird surveying in mountainous environments such as Maparri Creek. There were two birds present, an adult and an immature. At camp I photographed the leg and arm lesions representing Leishmaniasis infections which both Justin and Nikki had. They'd contracted the disease on a trip last November, been diagnosed recently and were on a series of daily antimony injections. Duane skinned out and cleaned a labba that he had shot and which was to be carried shortly. Once again we drifted down river from 3:00 to 7:00 P. M. This ground was pretty well worked over during our river trips on nearly every evening. Our expectations were modest. But, in a distant tree a brilliant blue bird caught my attention. I lost it but others quickly identified it as an adult male Spangled Cotinga. We had a first view of a Pauraque near the Farm Brook pool although we had heard them numerous times on this trip. We spent the greater part of the evening studying pairs of Scarlet Macaws and Red-fan Parrots as they settled down for the night.

**Return to Karanambu** Day 9 Today we go back to Karanambu. We started at 7:50 A.M. drifted and motored down Maparri Creek until reaching the Rupununi at 2:45 P. M. and arriving finally at Karanambu at 6: 25 P. M. The day is gorgeous, bright and, initially, not hot. As we drifted down from the camp a rail was spotted. We stopped and are rewarded with good views of a **Grey-necked Wood-Rail** sneaking along under the canopy of the bushes overhanging the shore. The down-creek trip was much like the upstream run. We dodged all the same trees and obstacles, but now the water was significantly higher and the running was easier. At one stop we spotted a number of tanagers and other species feeding in Cecropias on the edge of the stream. The variety was impressive: Turquoise, Guira and Silver-beaked Tanagers, **Black-faced Dacnis**, Red-billed Pied Tanagers and Pink-throated Becard. Among these was a miniature parrot, the Dusky-billed Parrotlet. These tiniest of parrots enthrall me for reasons that I don't fathom. In a distant tree, I identified a **Bare-necked Fruitcrow**. This bird was one that I had missed the year before at Karanambu Landing. Two new raptors were seen: White hawk and **Black Hawk-Eagle**. Also seen on the Maparri this morning were Yellow-green Tyrannulet, Forest Elaenia, and Cinereous Becard. In spite of these finds, the bird of the day was a tiny heron. As we passed a very dense large clump of bushes growing over the river, Davis heard the voice of a Zig-Zag Heron. We stopped and he played a tape. Parking our boats at the edge of the bushes, we peered, and peered, etc. until finally Jennifer led the way to spotting the bird. This is a tiny dark heron, sharing its characteristic fine barring with the tiger herons. It is small, decidedly larger than a Least Bittern and smaller than a Striated Heron, and gives a "chunky" impression. Its camouflage is superb and the bird sits quietly or walks slowly along the branches making full use of this protection. After seeing the bird we drifted to the lower edge of the bushes to let the other boat get a good look. As we did so, a second Zig-Zag Heron flew into the bush from downstream. So we got a second look of this rare bird.

The Rupununi was running much higher on our arrival and there was indication that it had been higher still while we had been up the Maparri. Since we still had a four hour trip, we got underway quickly. Several birds we had missed on the trip to Maparri were seen as we went downriver. Among these were Rufescent Tiger Heron, Bat Falcons, Limpkin, Red and Green Macaws and Caica Parrots. Among the hummers seen were White-necked Jacobin and a male and three female **Racquet-tailed Coquettes**. Many Black-bellied Whistling Ducks were flushed along the river. In a nest tree two Jabiru stood and surveyed our passage. For the first time we gained the attention of kabaura flies. These miniscule relatives of our blackflies (Simuliidae) were invisible, but the fifty or so tiny, non-itching bites dotting our wrists and arms were clear evidence of their presence. As the sun was setting, we noticed that the higher branches of the Cecropia trees lining the river bank were draped with large iguanas. They lay casually parallel on the branches some with their tails hanging negligently down. Our passage caused them no detectable alarm. The evening spectacle of nightjars on a broad river is always a treat and tonight Band-tailed, Short-tailed and Lesser Nighthawks swooped and side-slipped through a brilliant cerise sunset outlining purple thunderheads on the horizon. We were met at Karanambu Landing by Peter, the Otter, who was begging for attention and I suspect fish, but ignored because in the failing light none of us could distinguish him from his malevolent alter ego, Alex.

Day 10 Today was spent around Karanambu, first the dawn patrol on the airstrip, later the others went to Mobai a pond area, not feeling in peak condition I pooped out. In the late afternoon we drove to the marsh area (Maiacapa) near the GAC airstrip. In the early morning at least two Double-striped Thick-knees lurked about the compound and the airstrip. A pair of Crested Bobwhites were seen, one almost continuously calling from the top of a low bush. New today on the morning walk were Wedge-tailed Grass-Finch, Grassland Yellow-Finch and a Shiny Cowbird. A pair of Dusky Antbirds, a Barred Antshrike, a

White-flanked Antwren and a Striped Cuckoo were seen. Both Black Collared and **White-tailed Hawks** were seen today as well as Snail Kites. For those who went the trip to Mobai was rewarding. Among the birds seen which had not previously been recorded on this trip were Black-banded Woodcreeper, Yellow-chinned Spinetail, Greenish Elaenia, Pale-tipped Tyrannulet, Helmeted Pygmy-Tyrant, Hooded Tanager, Capuchin Bird and a Yellow-billed Cuckoo. All in all, a productive outing.

At the GAC airstrip were many of the expected marshbirds. Among those seen for the first time on this trip were Red-breasted Blackbird, Eastern Meadowlark, Eared Doves, Pied Water-Tyrant, and White-headed Marsh Tyrant. As we have seen before at the GAC airstrip we saw Aplomodo Falcon, Cattle Egrets, Bi-colored Wren and in a distant tree a mystery bird which turned out to be nothing more than a Tropical Mockingbird, but our first for the trip. It was a splendid evening with a soft breeze blowing and mild temperature. As is so often the case in the late afternoons here, the mountains above the marshlands to the northwest were the spawning area of great towers of cumulus clouds framed by the shafts of light from the setting sun. I am beset by an almost overwhelming sense of beauty. As we stood birding an amerindian family with a primitive wooden-wheeled oxcart came along the path. They were women and children all dressed up heading for a party at a house near the west end of the runway. At sunset the sky silently filled with Least Nighthawks. As we returned to Karanambu we found an amerindian lying on his back by the side of the runway all tangled up in his bicycle. In all likelihood he was an alcoholic casualty of the big party down the runway. We left him breathing normally, but inert, oblivious to pain. The next morning, when we ventured this way again for our flight into Georgetown, he was gone.

**Georgetown** Day 11 I woke up Jennifer at 5:07 A. M. and trotted out to the airstrip to appreciate the dawn chachalaca chorus. The dawn is as lovely as the sunset was. The Crested Bobwhite song, now a familiar cheery, "Bob -/ white'...sqeek," comes from several different directions as they proclaim their territories. At 7:30 A. M. we head for the GAC airstrip to catch our flight to Georgetown. At the GAC strip we find a Yellowish Pipit among the usual birds. At 8:10 A. M. our plane an "Irish Mail" named Robert Roberts arrives, this is a box-car, rear-loading, twin-engine workhorse which has seen a few years. I saw the first of this type of plane in the fifties. It showed its years as we climbed away from Karanambu through low rain clouds and we were showered with water from the leaky roof. Almost the entire group dozed off immediately while I photographed the sleeping beauties. I struck up a brief, almost drowned out, conversation with a medical worker in an adjacent seat, Roy Thomas. Mr Thomas is the Regional Supervisor for the Malarial Control Programme, Lethem. I promised to write him on my return and will do so when I finish this travelogue.

Our flight was uneventful. We were met by Louis Singh and shepherded to House Proud, the Pegasus and ultimately spent the afternoon at the Botanical Garden. The Botanical Garden is a marvelous island of bird-life in the city. In the margins of its pools we found "peeps" such as, **Semipalmated** and **Western Sandpipers** and **Semipalmated Plovers**. A Plain-bellied Emerald darted and hovered about a flowering tree. Along the back path we flushed a pair of Great Horned Owls. In higher trees were Orange-winged Parrots. Two of the more distinguished residents of the Botanical garden are Blood-colored Woodpeckers and White-bellied Piculets which we easily found as we did Yellow-chinned Spinetails, Spotted Tody-flycatcher and Variable Seedeater.

**The Lamaha Conservancy** Day 12 Early (4:30) the next morning we set out for the Lamaha Conservancy. This water conservation project is essentially a huge swamp that is threaded with channels and open water pools. While there are palms and other trees on the higher ground its essential character is that of a marsh with varied shrubs, reeds and grasses. Our transportation was a broad outboard with several spacious bench seats that easily accommodated the party. We motored slowly along a wide canal bordered by high trees with much bird-life. Parrots and both Red-bellied and Red-shouldered Macaws were in constant attendance as large groups flew from roosts to feeding areas. The dawn had that magical muted character of transmitted, in contrast to reflected, light which enhances color contrast. In shoreside shrubs we found a Little Cuckoo, White-lined Tanager, Grey Kingbird, **Piratic** and **Sulphury Flycatchers** and a **Buff-throated Saltator**. Also seen were a wren, the Black-capped Donacobius, **Moriche Oriole**, and a new spinetail, the Pale-breasted Spinetail. As we drifted by a densely overgrown bank we first saw one, and finally up to six, **Least Bitterns** very close to us. We also flushed a number of **Azure Gallinules**, all seemed washed out, none seemed as pretty as the illustrations in De Schauensee and Phelps, but they are so obviously rails in form and so distinctive in color that they can be nothing else. The canal winds along a forest edged with palms inhabited by groups of Fork-tailed Palm Swifts which speed by us always in a hurry to be elsewhere. A **Masked Yellowthroat** and a Cinnamon Attala are spotted. Along the bank I get my first really good look at an **American Pygmy Kingfisher**- by days' end we'd seen five. As we passed heavy reed stands, we flushed a large brown heron, the Pinnated Bittern. Like our own American Bittern, the Pinnated Bittern is a master of deception and is rarely seen until it moves. We motored slowly by a group of workers in life jackets fully immersed in the water hogging out weeds to keep the channel open. We had passed a barge with an attached cutter and scoop arrangement to mechanize this operation but it was not working on this channel. After a few more meanders we flushed a very large stork which flapped briefly then soared away giving us all good views. The white head ruled out a Wood Stork or Jabiru, it could only be a **Maguari Stork**. The expected Yellow-headed Vulture vulture in this area is the Lesser and we saw only one.

As we entered an area in which small shoreside trees tended to form a canopy over the boat, the engine quit. It took quite a while to simply remove the engine cover since the boat had but one tool, a rusty pair of pliers. But eventually the cover

was removed the choke/ throttle /whatever was corrected. While the crew was distracted, we heard two of the resident rails nearby: the Rufous-sided and the Ash-throated Crake. Davis managed to call the Rufous-sided Crake up onto a bank and within a few yards of the boat where some of us, but not all, saw it. We found Green-tailed Goldthroats along the canal. Our goal was the Lamaha Guest House a spacious structure with a large open veranda, guest rooms and several outbuildings. We rested to recover from the strain of bright sun and hot wind and lunched on sandwiches and drinks that Louis had brought. We then set out to search for a Lamaha Guest House specialty, the Point-tailed Palmcreeper. In very short order Davis called it into a grove of palms less than one hundred feet from the compound. My expectations for birding in this unique new environment were greatly exceeded.

**Asa Wright, Trinidad** Day 13 Our GAC flight was scheduled to depart at 6:00 A.M. We had planned a 2:00 A. M. departure from the hotel. We returned to the Pegasus and sat down for an early supper which was interrupted by a message from GAC that once again our flight had been cancelled for lack of equipment. There was an alternative, a 6:00 A. M. BWIA flight to Trinidad, if we could make the connection. In hopes of getting on the BWIA flight we went out to Timehri as planned at 2 A.M.. Good news, there would be space on the BWIA flight: bad news, there was no one from GAC to authorize a ticket transfer from GAC to BWIA. What an amazing fact that at the home base of GAC there were absolutely no GAC personnel to be found! But Louis persisted and a truly competent BWIA agent made an executive decision to authorize the tickets herself. Then and there we all decided to never ever use GAC again and on a subsequent flight we used BWIA.

We had a uneventful flight to Piarco, Trinidad, disembarked and found that we had seven hours before our continuing flight left. This, Davis pointed out, was plenty of time to visit the famous Asa Wright Nature Center in the Cerro del Aripo mountains above Piarco. In a hired van we drove up there and spent a pleasant morning, luncheon and early afternoon before taking our van back to the airport. Great side-trip, Davis! With the assistance of Sheldon Driggs, a gifted Asa Wright naturalist, we had a short but most effective walk near the compound. The similarity of the birds at Asa Wright to those in Guyana is at once evident. Forty-eight of the fifty-five birds we identified were also common in Guyana. Not unexpectedly Great and Cattle Egrets, Black and Turkey Vultures were present. We saw two other accomplished fliers, White Hawk and, on a nest with young, my first Ornate Hawk-Eagle. Ruddy Ground Dove, Greater and Smooth-billed Ani were seen. New birds seen were a Lilac-tailed Parrotlet, a Copper-rumped Hummingbird, a Cocoa Woodcreeper and eight White-bearded Manakins displaying at a lek site within two feet of the ground. The best bird, certainly the bird that we saw and heard best, was a Bearded Bellbird. Only 30-50 feet away we had excellent views of this bird perched and regularly calling its loud note which has been likened to striking an anvil with a hammer. Other new birds for me were a Tropical Pewee, a Tropical Parula, a Golden-crowned Warbler and a Rufous-breasted Wren was heard.

On schedule our van showed up and we left Asa Wright. At 4:00 P. M. we left on BWIA for Miami where John and Jennifer left us for flights to the West. After passing customs, we flew on to JFK, bade farewell to Polly and caught a flight to Boston. There, after playing telephone tag, we managed to make the connection to Bob Patterson, our limousine driver, who delivered us to our individual homes in chilly New Hampshire.

## IV THE KWITARO RIVER

The Kwitaro River, which drains the area between the Rupununi River and the Rewa River, is one of the major watercourses of the Southern Rupununi District. Its source lies far to the south between the Parabara Savanna and Marudi Mountain within a few miles of the Kuyuwini River. In contrast to the clear dark waters of the Rewa River and those of Maparri Creek, Kwitaro shares with the Rupununi River the distinction of being a "white" river. The Kwitaro is remote from civilization. In its 120 mile course it has but a single family living on it and is unmarked by road. Access to the Kwitaro basin is overland by Land Rover to Shea Village and by jungle footpath to the east for 30 miles to Brian's Landing. The trail provides access to an occasional slash and burn farm site and is used by the farmers, hunters and fishermen of the Wapashani. The chevron marks on every mature balata tree testify to the fact that the area has not always been devoid of settlement. Before cultured Malaysian rubber made its economic debut in 1910, this had been a thriving area in which every year thousands of pounds of balata were harvested and sent down river. Now a few dozen visitors, naturalists and fishermen bring income to the Wapashani amerindians for whom these are their tribal lands. The Kwitaro-Rewa basin may be the most extensive unexploited riparian corridor remaining in eastern South America. It is exceptionally rich in natural wonders.

Day 1-2 On Nov. 1, 1998, Davis Finch, Polly Rothstein, Jennifer Green, John Heizer, Larry Master, a zoologist of the Nature Conservancy, and I arrived in Georgetown on a BWIA flight after an American Airline flight to Barbados. This new connection was a direct response to the simply awful run-around GAC had given us on our last trip to Guyana both coming and going! In Barbados we had several hours for our connection and so bused to the nearest wild-life refuge, the Graeham Hill Swamp. Near the airport we found Cattle Egret, Carib Grackle, and Green-throated Carib, a hummingbird. At Graham Hill we found Grey Kingbird, White-crowned Pigeon, Zenaida Dove, Common Ground Dove, Antillian Grackle, Yellow Warbler, Black-faced Grassquit, Common Moorhens, Little Blue Heron, Green Heron, Little Egret, Snowy Egret, Great Blue Heron, Spotted and

White-rumped Sandpipers. As well, mammals included a pair of mongoose (sp.) and several porpoises in the shallow swamp estuary. After a few hours we continued on and arrived at the Pegasus in Georgetown as planned about midnight.

The next day we birded early around the Le Meridian Pegasus and then flew to Dadanawa Ranch in a two-engine Britten Norman BN2. Chatting with the pilots I learned the sad news that Krishna Shankar, the pilot who had flown us to Karanambu in '97 and earlier this year, had died while swimming in the Ireng River. He'd flown a party to Orinduik Falls and gone swimming below the falls where he was caught in the rapids and drowned. On the turn-around flight our chartered plane was modified by putting the seats in the rear, plastic sheet laid down on the deck and half dozen sides of beef loaded. It lifted off to Georgetown within the half hour.

**AT DADANAWA** With the exception of Larry, all of us were familiar with the hinterlands of Guyana and had enjoyed the DeFreitas hospitality. Sandy DeFreitas met us and we repaired to the veranda of the main house for a welcoming drink. Marjory and the ranch staff offered us a pleasant lunch. A brief walk along the river trail and later a trip to Towa Towan turned up a Ferruginous-backed Antbird but no other birds new to me (this being my second visit to the ranch in this season). The Towa Towan twilight was simply spectacular as over the hill and adjacent marsh many Lesser Nighthawks, fewer Least Nighthawks and several Nacunda swooped and pirouetted. On the road back to the ranch, Pauraque, White-tailed Nightjars and Burrowing Owls were flushed in the headlights of the Land Rover.

Day 2 On Nov. 3rd, after dawn birding around the ranch, we breakfasted, mounted two Land Rovers and set off for Shea (shee-a) Village. The 40 mile trip through the dry savanna was scorching but made just a bit more bearable by contrast to the "Red Hots" Jennifer had thoughtfully included in her kit. The ford at Sand Creek was made easily and eventually Shea Rock was in sight. Shea Rock is a large, rounded, bald rock outcropping standing possibly 500 feet above the rolling savanna of Shea Village. It is a feature much like Australia's Ayer's Rock. We paused here while Sandy made arrangements to insure that we'd have sufficient bullocks available to haul our gear to the boat landing. Further along the road we passed a dozen bullocks heading for Bernard Ritchie's house (N 2° 49.465', W 59° 29.295') which was the staging area for our walk to the first camp. Far off to the east a huge stone obelisk shot skyward above low hills. This was referred to as "Bottleneck (or once as "Bottle") Mountain" and so it appeared. Our trail passed south and east of it. At Bernard's we re-hydrated, lunched briefly and watched our gear being loaded into palm-frond woven panniers balanced on the backs of some of the eighteen bullocks that made up our train. A brief run by Land-Rover to the scrub forest at the edge of the savanna and we were off.

**WALKING TO THE KWITARO** our party consisted of Sandy, Carl, Marjory, her assistants, Paula, Cheryl and Fay, Duane Jr., Nikki (Sparrow) Persaud, Bernard Ritchie and more than a dozen drovers including their families. One of the drovers, an amerindian named Sobers, is according to Duane and Pip one of the most talented woodsmen and fisherman in this country. He led one bullock, while his wife their two-year son and two-month old baby carried at the breast, rode another. The crew for our river trip, Duane, Justin, Pip (Philip Hiscock), Ashley Holland, "Andy" (Gajandran Nauth Narine) and Leroy Ignacio were waiting at Brian's Landing for our arrival together with part of last November's fishing contingent: Mike Lee, Roger Stanley and Mike Wilson, as well as Mike Wilson's daughter, Danielle. They had brought four boats up the Rewa River from Kwatamang Landing in the past three weeks. For most of the support party it will be a six week nearly four hundred mile round-trip.

Our original plan called for three overnight camps on the thirty mile stretch to Brian' Landing, but even with our frequent birding stops that seemed excessive. We elected to try it with only two camps. Our walk the first day to Kumquat Camp was about 8 miles. The walk was quite easy first through scrub forest and then into taller forest where many birds were heard and a few seen. Our birding stops soon put us in the rear as drover after drover passed us. Chiggers were plentiful on this first trail day. I initially ignored them, an act I came to regret. The trail passed through a slash and burn jungle garden planted with cassava, bananas, plantains and other food and herb plants. This farm was still being expanded and logs and stumps smoldered on the fine sand soil. Around the clearing were a flock of a hundred Shiny Cowbirds and twenty Giant Cowbirds. Marjorie's father had farmed this and other nearby areas and farther along the trail we would pass through the place where she had grown up. Brief afternoon showers and clouds diminished the savanna heat making the walk through the forest pleasant. Our destination was a camp that had been set up next to a small brook, Kumakowri River on the maps, but called Kumquat Creek by Marjorie from the occurrence of kumquat trees there.

**KUMQUAT CAMP** On arrival at the Kumquat Camp (N 2° 55.677', W 59° 5.365') we found our vanguard had got things well underway, a covered shelter, a spot of something and a great meal of pot roast, pepperpot, rice, potatoes, the works, awaited us. Supper was followed by a thunderous cloudburst too loud even to permit the daily bird-listing ritual...a rare omission. I report it here simply as an unavoidable sacrilege. My hammock was exposed to stormward at the end of the row in the tarpaulin-covered "benab" shelter but I never noticed the weather and slept a fetal doze in slightly damp suspension while a Mottled Owl "whoou"-ed.

Day-3 At breakfast on Wednesday morning we heard news about the outcome of the US elections following an interrupted shortwave program which alluded to yesterday's "miraculous" US election but gave only a hint to the outcome. I finally managed to work the new shortwave radio and to get the whole scoop from VOA. We were ecstatic. To describe Polly as

ecstatic when she heard of Charles Schumer's defeat of Al D'Amato would be extreme understatement. We all shared in a truly happy moment.

While the crew was breaking camp, we birded nearby along the trail getting prime looks at a Spotted Puffbird, Spix's Guan, Red-throated Caracara and an elegant study of a Slate-colored Grosbeak. Chestnut Woodpeckers were found and Amazonian and Saturnine Antshrikes were seen. Other Antbirds seen were: Long-winged and Spot-tailed Antwrens, and Dusky, Grey, White-browed and Warbling Antbirds. This was a good manakin day with looks at Blue-backed and Golden-headed Manakins. For the bird-watcher, manakins have much to recommend themselves: they are small, the males are colorful or strikingly black and white and, in contrast to most other little birds, they tend to sit quietly. Their size and habit of stillness makes them hard to find but, once seen, you do get a good look. The insect-like sibilance of the White-crowned Manakin was with us on the trail this and the next day. In fact, finding this bird became a goal, even an obsession, but during our walk this bird remained unseen as it had on each of my other trips.

The trail led gently down through occasional brooks and up modest rises but generally trending downward toward the Kwitaro River bed. The trail had been newly opened, widened, detoured along gentler slopes and around recently fallen trees. By mid-day we walked through the Mica Creek site (N 2° 57.55', W. 59° 2.035 ') at which Bernard had lived and where Marjory had grown up. It is now used as a hunting camp. Here and there were the carapaces of a half dozen "gopher" tortoises. Near a crude shelter the gap between adjacent buttresses of a mora tree had been closed off with a fence of sticks to form a tortoise-holding pen. Land tortoises are prime forage as they can be collected without weapons, stored alive for long periods with little care and prepared without special utensils. They have been used as food by humans for probably 100,000 years. The usual method of preparation is simply to crack off the plastron, invert the carapace over a fire and cook the animal in its own juices. It is said to be excellent fare. Reptiles are under threat of extirpation throughout the tropics, but tortoises, turtles, and crocodylians are particularly susceptible to population loss. Archaeologists have studied the presence of tortoise shells in human-occupied sites dating back 50,000 years and their work suggests that as little as a 7% population reduction in tortoises can cause their extirpation. They have a lot of factors going against them including: slow growth, lateness in achieving sexual maturity, the relatively small number of eggs laid, and the fact that the eggs receive no parental care after their initial burying. Failure to know whether or not a clutch of eggs actually hatches denies such egg-layers an important response to egg predation, i.e., the ability to start a second brood. In contrast, the brooding instinct of birds is a major survival asset.

At the Mica Creek clearing Bernard pointed out a compact planting of one of several varieties of shrubs used in the smaller streams to poison fish. This plant has long smooth stems banded with light gray bark and poplar-like leaves. The general term for these plants is "conami" or "haiari" (Arawak) for vines and lianas such as: *Clibadium sp.*, *Lonchocarpus sericeus* and *Picadia guaricensis*. The practice of poisoning fish in this way is probably on the wane since under some circumstances it may be destructive to stream ecology. Further along the trail Larry asked Bernard to identify the "water" vine. Almost at once, Bernard cut a large liana the bark of which had a color and texture like that of a grapevine and then cut it again about two feet higher up. The second cut, by interrupting the pressure of fluid drawn to replace transpired water, immediately allowed a steady flow of palatable, virtually tasteless, water from the first cut. Among other aspects of woodcraft was Bernard's demonstration of using "mukru" to weave baskets. Mukru is a small palm (*Ischnosiphon sp.*) growing in jungle glades. The six-foot long stems are about 1/2 inch in diameter and without nodes or branches. Long strips of the outer sheath are collected by peeling 1/8" wide sections from base to top. When washed, cleaned and dried these strips are used to weave baskets and other items. It was this plant that Placid was preparing while we were at the Kuyuwini River. Sandy acquired for me a beautiful and serviceable example of mukru weaving; a "warishi", the traditional amerindian back-pack.

**COKERITE CAMP** The trail passed along the shoulder of a large rocky mountain and several hours before sundown we came to the second campsite at Cokerite Creek (N 2° 57.604', W 59° 1.913'). Cokerite Creek in this season is about 10-20 feet wide and deep enough to completely immerse in. It was cool and refreshing after our long hike. While we bathed, Polly was assaulted by one of the large black aggressive horseflies which bit her on the calf. As on our prior trips, insect assaults such as this were rare or, as in the case of chiggers, preventable at this season. Here the creek flowed in from our right and continued south. It gets its name from the cokerite palm which, together with the ite' palm, plays a central economic role in the life of the amerindian. Both of these trees provide good thatch, fruits for food and drink, oil for cooking and medicine. The Cokerite palm is celebrated in the parishara dance ceremony in which these palm leaves comprise the essential costume. Sitting on a level shelf fifty feet from the creek Cokerite Camp could not have been situated more attractively. At these campsites, we "sports" slept under cover, the drovers tied up their cattle and dispersed into the woods where hammocks were hung, and our guides nested nearby. Marjory and her assistants rarely showed any evidence of sleeping!

Day 4- In the morning we birded a short distance along the trail where three Black-bellied Cuckoos foraged close overhead in a low understory. Heard at both camps were Great and Variegated Tinamou (will I ever see a tinamou?). Our travel was often through high groves of mature trees. Bulletwood trees (*Mimusops globosa*) which had been tapped for their latex (balata) were dispersed in the forest. These trees are huge since during the rubber boom it was illegal to cut them down (harvesting rubber from widely scattered trees often meant cutting the tree down and collecting the latex exuding from the roots, trunk, and branches) or to tap a tree with a girth less than 36 inches at chest height. They bear fish-bone tapping scars upwards for sixty feet. The trees bled lavishly a thin white latex almost instantly when slashed with a cutlass. Many different trees use latex to

prevent insect attacks and heal damages. Latex colors vary. I've seen white, oxygenated blood red, pale yellow and transparent latex. I spied a small crimson spot climbing up one trunk; a jet-black pseudoscorpion with a bright red abdomen with a captured fly held securely in its chelae. The repeated, high pitched "wheoo, wheoo..." of an unseen passing Ornate Hawk-eagle was heard just over the high canopy. These woods were rich in parrots, Scarlet Macaws were frequently heard and seen, as were Painted Parakeets, Caica, Blue-headed and Dusky Parrots. Among psittacids which were heard but not seen were Golden-winged Parakeets, Black-headed and Red-fan Parrots. A Green and Rufous Kingfisher was seen briefly near a small brook. Both Golden-collared and Yellow-throated Woodpeckers were observed.

We stopped to lunch at the crest of a small rise on the trail. Shortly thereafter, a hunting dog walked up followed by Mike and Danielle Wilson and their guide. Danielle was simply exhausted, Mike his usual active self: eating one of Marjory's cheese sandwiches, drinking a tot of rum, dragging on one of Sandy's cigarettes, and talking a blue streak. Good to see that old campaigner, our companion on the Rewa trip a year ago. He was on a swift run to reach Lethem by dawn tomorrow. Later we learned that in less than 24 hours he somehow managed the feat of a thirty mile walk and a long Land Rover haul to reach his flight. This was a quick stop and soon we parted company and headed for our third camp at Brian's Landing. The terrain now began to show more variety. Clearly, we were approaching a high ridge somewhat to the south of Bottle Mountain. We forded a much larger Cokerite Creek which now trended to the east and began to climb a gentle slope. Three Yellow-billed Jacamars were observed along the trail. Around 2:30 in the afternoon we heard several White-crowned Manakins off to the right and returned to our obsession of finding them. After quite a few minutes of calling and taping responses, Davis's usual way of bringing a bird into sight, Marjory and Bernard began to show some signs of anxiety. Both were concerned about the difficulties of walking over the next mountain, "Smell Mountain", especially in the dark. While Bernard had a very clear idea of how long it took a normally walking party to traverse distances on the trail, dealing with event-focussed groups such as ours was a great puzzle. I discussed the matter with them and suggested to Davis that he break off our quest for the elusive manakin. Reluctantly, even though we were on the verge of success, he did. In retrospect, we found that Brian's Landing was only a short 90 minutes away and the trail over the mountain was only a modest climb at best. Surely, we might have found the White-crowned Manakin had we but terried a while longer.

In a few hundred yards, the trail rose steeply (15<sup>o</sup>) for a few hundred feet or less. A break in the side-hill foliage near the summit revealed a great view of Bottle Mountain possibly three miles away. Bottle Mountain is a bare rock spire, like a cathedral tower. It is certainly a rock climber's tantalizing challenge and a rare, totally vegetation-free, exposed rock spire environment in this heavily forested country. Whether it is extensive enough to support a genetically unique assemblage of organisms remains to be discovered. A short gentle incline led up to and over "Smell Mountain" and then on a steady down-hill walk we were met by Leroy and shortly thereafter emerged at Brian's Landing to be greeted by Duane's party.

**BRIAN'S LANDING** (N 2° 56.696', W 58° 58.230') is an ample rock shelf on the west side of the Kwitaro River at the foot of Smell Mountain, one of several places where the feet of the mountains rest in the river. To the northwest, Kalishadaker Mountain, occupies the most south-east corner of the Kanuku Range. North of us (downstream) are mild rapids (Aruararua and Karabiru Falls) where either ledge or rock piles intersect the river. The location of these falls relative to this mountain is the legendary basis for the name of this mountain. On learning that Marjorie knew of a legend explaining how Smell Mountain got its name, I urged her to overcome her modesty and relate the legend. Once the area was inhabited by the primogenitor amerindian people who lived in peace and harmony. The men of this tribe were exceptionally well-endowed sexually. However, as time passed a curious propensity of the men emerged. They developed the habit of preferring to sniff their mates rather than to service them. All the women, unsatisfied, took umbrage to their behavior and fled downstream. In the process they raised a series of waterfalls as barriers to isolate themselves from their erring males. The fact that a mere waterfall or rapid or two was sufficient to deter their pursuit re-emphasized the fact that their mates were lazy in the extreme. This may also explain the fact that the area is largely unpopulated.

The river here is 40-60 feet wide with a good flow and is navigable from here to the Rupununi. Our camp sprawling along the west bank included a tarpaulin-covered "benab" for the "sports" and hammocks hung here and there in the shrubbery for the support party. In addition, small campsites had sprung up on the east side of river into one of which Sandy and Duane disappeared. Actual count of one of the group photos taken revealed thirty-five people in the whole party. Possibly ten more were absent. Here and there in the riverine jungle, grazing cattle were staked. We relaxed until supper time on the smoothed, much inscribed ledges that form the "wharf" at Brian's Landing visiting with our old fishing pals, Mike Lee, Roger Stanley, Ashley Holland, Duane, Sr., Justin and with the crew who were to ride down river with us: Nikki Persaud (Carl's nephew), Leroy Ignacio, Duane DeFreitas (the younger) and Andy Narine. Nikki, Leroy and Duane's sons had been valued guides on our Mapari trip. Young Duane replaced Justin, who had come up the river with the fishing party but was now ailing. Andy, showing the agility of the first rank soccer player he is, was a good woodsman and boatsman.

Day 5 We stayed one day at Brian's Landing camp (Nov 6) birding on a trail on the west (left) shore in the morning and on the east (right) shore in the afternoon. In river-edge brush, Streaked Antwren and Dot-winged Antwren (N 2° 49.570', W 59° 12.987') were seen. This shore brush habitat is the domain of the Streaked Antwren and it was recorded on almost every day on both the Kwitaro and Rewa Rivers. The trail, a hundred yards downstream on the west side of the Kwitaro, led up a short steep bank into a low gallery under heavy thicket. Close by the start of the path we threaded carefully around a tree which bore a large,

chest-high "armadillo" wasp nest which was well covered with many large black "marabunta". This is a different species of wasp about twice the size of that we'd encountered at the Parabara forest trail. The nest is tan in color and banded with completed horizontal ridges, not unlike the bands of an armadillo. A Great Antshrike was heard and both sexes were called into view. A pair of Black-chinned Antbirds were found, as were Forest Elaenia, Double-banded Pygmy-Tyrant and a Wedge-billed Woodcreeper. Deeper in the woods, a Fork-tailed Woodnymph buzzed us and a Ruddy-tailed Flycatcher played hide and seek in the substory. Young Duane spotted a bird spider curled in a leaf on the forest floor. The feet (last segment of each leg) of this large, black hairy spider are remarkable in being pink-- shades of the late forties when black and pink was the "in" color combination. Guira Tanager and Green Oropendola were also among those birds newly seen on the trip. In the afternoon, the group, from which I excused myself, walked along a trail on the east side of the river. Among the new species they recorded were Spix's Guan, Great Jacamar, Black-necked Aracari, Spotted Antpitta, Yellow-crowned Elaenia, Short-crested Flycatcher, Lemon-chested Greenlet, Rufous-browed Peppershrike, Black-eared Fairy, and Black-headed Antbird.

Day 6 The next morning from 7:20 to 9:15 we drifted down river several hundred yards until Davis heard a new call, seemingly that of a **Yellow Tyrannulet**. In response to a tape a single bird flew in, looked us over from the top of a streamside bamboo canebrake, and flew away, giving us the first brief Guyanan record for this bird. Later in the trip three more were seen well and as many others heard. If not common, it is a regular component of the shoreline bamboo and brush environment. Davis pointed out that by distribution maps the bird was not unexpected here. The lack of prior record of this bird in Guyana reflects not so much its rarity but more the infancy of detailed bird study in the region. During this float Blue and Yellow Macaws and Grey-breasted Sabrewings were seen.

We returned to camp, gathered for a group photo, bid farewell to Mike Lee, Roger Stanley, Carl and Sandy who were walking out and by 10:15 A.M. we headed down river. At the first bend in the river, Marjory spotted a Black-eared Fairy sitting on a nest in the shoreside brush. How it is possible to see something so well camouflaged and so tiny from a moving boat is a mystery. But now we all know that Marjory's eyes are sharper than ours. During this quite long day, John and I shared the smallest boat with Andy and young Duane. John and I have had many hundreds of miles of white-water canoeing under our belts. Thus we felt obliged to educate our boatmen and guide them through the very few mild rapids and narrow channels that the Kwitaro has to offer. In short, we made ourselves unforgettable pests. When they came to any piece of water that looked challenging, they lined the empty boat down it. It probably made good sense not to risk getting the "sports" wet. In this faster moving section the Kwitaro is small, barely twenty-five feet wide. The hot sun in the mid-morning clear sky was formidable on the river and covering up, or sunscreen, was the order of the day. Duane, Sr was perfectly topped off for the weather with a solar-powered, air-cooled pith helmet I'd given him. We stopped to lunch, rest and bathe on a small mid-stream island in the second of the two rapids. Rocks, jet black and polished by stream action, line these swift but uncomplicated rapids. These are the roots of the Guianan Shield, or intrusions into it, and may be among the oldest rocks in the world.

During our river trip we saw Pied Puffbirds, Green-tailed Jacamars, Golden-spangled Piculet, Ringed Woodpecker and Olive-backed Foliage Gleaner. A Blue-crowned Motmot was heard and seen. The Cecropia trees on the river bank were regularly occupied by pairs and families of Brown Jacamars on this section of the river. Brown Jacamars favor the upper reaches of rivers surrounded by deep forest and as we traveled north they became progressively less frequent. A high point of the day was in late afternoon when on the west side of the river I spotted a large (probably Three-toed) Sloth moving through the top of a nearly denuded forest emergent. We watched the animal move quickly, almost gracefully, from the end of a branch inward and finally paused with its upper limbs outstretched as if praying to the setting sun. Among the technological advances we had at our disposal was Larry's pair of Canon 12x Image Stabilizing binoculars. The ability to stabilize an image vastly improved our ability to make an identification particularly in conditions where there is difficulty holding a binocular steady such as, from a boat, overhead, or at the usual cramped angle.

**COMODI CAMP** About 5:45 PM we arrived at Camp #4 (N 2° 59.627', W 58° 54.597') which came to be known as "Comodi Camp." The camp is 8.1 miles from Brian's Landing. It is situated where the river, passing by a large rocky outcropping, has formed a steep sandy shelf. Opposite the camp a few large rocks sit athwart the main flow. Our guides soon had the Lion of Judah flag of Ethiopia flying in mid-stream. This flag is an icon of the Rastafarian religion which is popular throughout the Caribbean. Our guides, young Duane and Andy seem to be followers of Rasta in dress and hair style. Our shelter is on the summit of a rock ledge practically overhanging the right side of the river. Since we arrived close to dark there was no further birding, other than listening for owls and nightjars. Duane has invested in new hammocks for us all. The hammocks are each enclosed in a mosquito netting, capped with a relatively water-resistant fly and have a full height Velcro enclosed entrance rather than a zippered port. These are extremely effective shelters whose only drawback is the horrendous ripping noise one makes on opening and closing the port. Our movements are no secret! At each campsite a frame for a table and seats had been constructed. Considerable thought had gone into the planning and each table frame had been constructed to fit exactly plastic panels which we carried and used as a table surface. Meals throughout the trip had great variety; fish, tasso, eggs, cheese, fowl (when available), labba, murudi and at least one caiman were protein sources; farine, sweet and irish potatoes, bakes, rice, and nuts, such as cashews, peanuts and brazil nuts were plentiful and excellent starch sources, fresh and dried fruits and fruit juices were constantly available. Even though we are on a river with virtually no human settlement, precautions to assure the quality of the drinking water supply were continuous. These were either to boil the water which tended to give it the odor of creosote, or to pump the water from the river through bacterial/protozoan filtering cartridges. The pumping process was tedious requiring about

fifty strokes per cup but each day a minimum of two gallons of water was prepared for canteens. At this camp my carelessness with chigger protection was apparent as more than a hundred bites on each ankle induced me to itch at every opportunity. An antibiotic salve helped somewhat, but the major effect of this mite-y assault was elsewhere. I have suffered from a psoriasis on my hands and prior to this trip it was remitting. However, for the next two weeks this auto-immune condition flared up.

Day 7. We arose at 5:00 A.M., snacked briefly and about 6:30 A.M. launched a boat on a down-river drift. Among the birds seen were Black Caracara, the ever-present Black Vulture, Red-fan Parrots, Squirrel Cuckoos, Channel-billed Toucans, Lineated and Crimson-crested Woodpeckers. At 8:00 AM, we returned to camp, breakfasted sincerely, and at 9:00 A.M. explored a new trail being cut by Duane Jr and Leroy which led inland on the right side of the river. The trail initially led through fairly large trees that were evidently regularly flooded and eventually began to climb a small rise. At this rise, a sharp, brief call was heard. Davis identified it as the call note of a **White-crested Spadebill** and we moved forward to eventually intercept a total of three birds, parents and a young, presumably. As we are all instructed, the key to identifying flycatchers is almost always the bill. This small flycatcher has the broadest bill of any spadebill. The birds were actively feeding and constantly moving. Just by luck I managed to have a bird in good view for many seconds. This was a new bird for me. We turned back to the path which led back down to the varzea. Today we saw all the psittacids we had previously, seen with the exception of Black-headed Parrots. We also saw three Black-tailed Tityra and a Musician Wren. Most notable for me was my first really good looks at **Great Jacamars**. I had missed the Great Jacamar when I decided to skip the late afternoon exploration of Day 5. We returned at 2:00 P.M. lunched until 3:00 P.M. and then spent an hour and a half exploring a new trail on the left bank of the river. This trail led through nice shoreside brush and tangles on through higher ground forest and trees with the smooth, multicolored bark of sycamores. On the way Black Nunbirds, a squirrel (*S. grandensis?*), and several barely discernible monkeys were seen. Previously recorded antbirds such as Grey, Dusky, Warbling, White-browed, Black-chinned and Black-headed were present at this camp. A new bird call was heard here that was the cause of some question in Davis' mind. On recollection, Davis decided the call was that of an antbird he'd recorded in Brazil. The tape proved that we had found the first Guyanan record for **Blackish Antbird** (N 2° 59.848', W 58° 54.492'), a bird we saw the next day. Our day was completed by a down-river float from 4:30 to 6:00 P.M. In the evening and the next morning the Cinereous Tinamou was heard as was the Variegated Tinamou, but the sound of the Great Tinamou heard on the walk to Brian's Landing was now absent.

During the day Paula had clambered around the rocks looking for a site from which to fish and discovered a very large anaconda, called locally a "comodi", coiled at the base of a rock cleft in very shallow water. This snake was shedding its skin. At dusk we examined this reptile, took pictures and discovered that there were in fact a total of three comodi, the very large individual possibly close to eighteen feet with a head the size of a large shoebox, a twelve footer and an almost tiny eight footer. Later in the evening Duane and Ashley, who had gone hunting, returned with a four and a half foot caiman that appeared to me to be different from either the black or spectacled caiman. This was prepared for the next day's luncheon. The general impression from the crew was that it was "emergency" food, but I found it palatable, if dry and bland. During supper we celebrated the birthday of Polly's son (Chester) by attempting to play tunes on a toucan-shaped toy plastic trombone, a gift from Chester. The music did not lack an appropriate primitive quality.

Day 8 In the morning we drifted downstream again and discovered that the Red-Fan Parrots had a nest hole in the trunk of a dead streamside tree. A pair of **Dusky Purple-tufts**, were spotted in riverside trees and flying to nearby trees (for fruit?). This a bird that Davis had not previously seen in Guyana and one which Ridgely and Tudor state is not well known. The morning walk today was on the left side of the river on the trail that Ashley, Nikki and Andy had extended up a hill to its crest. In the beginning of the walk in streamside brush galleries we had good views of antshrikes, antbirds, and antwrens among those newly recorded were White-flanked and Grey Antwrens. Along the path a Coraya Wren was seen well. In higher forest near the summit we encountered Straight-billed, Chestnut-rumped, and Buff-throated Woodcreepers. Jennifer got a good quick look at a rare bird but one which is unmistakable, a Curve-billed Scythebill. I saw this bird but couldn't focus on the bill, but that bill is so unusual, long and strongly decurved that no other candidate exists. John, Davis and I walked down the side of the hill in search of an elusive antthrush. This was a bird which responded faithfully to tape by calling, but which stayed resolutely out of sight for at least three separate approaches. Finally, we each got a decent view of this **Black-faced Antthrush**. A ground-walking bird, it is water ouzel-shaped, with a delicate blue eye-ring, a white spot between the eye and the bill, a black chin and bib, and a bright rufous rump under a short upturned tail. A very pretty little tyke. While we were thus engaged Larry Master had arrived at the summit and had spotted a Blackish Nightjar. He managed to get very decent video shots of the bird. The next day we all had very good views. The rocky open summit of this hill is arid with yucca, leafless thorn vine and cactus growing amidst large slabs of rock. It was in this area the nightjar was roosting.

In the afternoon we walked the trail on the right bank and once again encountered a Musician Wren singing a simple variation of its lovely melodious concert. Among the other birds newly seen were: Grey-fronted Dove, a Sulphur-rumped Flycatcher and Yellow-crowned Elaenia. A drift on the river was planned from which I, being several days shy on my note-taking, demurred in favor of writing. Paula called my attention to the largest, newly shed comodi which she discovered had taken up residence coiled in a rock cleft at the water's edge just twenty feet below my hammock. It is stunningly huge, colorful and beautiful creature. While writing I heard a shot and another about fifteen minutes later. Duane and Ashley appeared with a **Black Currasow** (Powis) which Duane had discovered while hunting on the hill trail, shot at, missed, and later, while walking out, came upon it again. This, too, became a welcome dietary diversion.

Day 9. We birded about camp from 5:00 A.M. until 7:00 A.M. and then headed for our next camp with Duane and Pip as crew. This time we traveled together comfortably in the largest river skiff. We left the remainder of the staff to break camp and overtake us. For most of the morning (7:00 A.M.-11:15 A.M.) we drifted, stopping for lunch and a swim at noon shortly after the gear-carrying boats overtook us. Eventually, we took Justin and Andy's boat in tow and seriously motored down river. This was an especially long trip but one which was simply full of birds and other wild-life. Among mammals we saw a group of six Coatimundi, Squirrel Monkeys (saki-winki), five Spider Monkeys, Capuchin Monkeys and three Tapir, a cow with her spot-streaked calf and another adult. Along the river bank the corpse of a jaguar-wounded tapir had attracted all three common vultures: Black, Greater Yellow-headed, and King Vultures overhead in the classic column of soaring vultures. I followed my practice of keeping the running total of birds called out during this ten hour trip. Among those birds scored for the first time on this trip were: Pied Lapwing, Rufescent Tiger-Heron, White Hawk, Red and Green Macaw, Dusky-billed Parrotlet, Little Cuckoo (N 3° 0.736', W.58° 53.935'), **Blackish Nightjar**, Common Tody-Flycatchers, Plain-crowned Spinetail (N 3° 1.759' W 58° 53.797'), Cocoa Thrush and two **Long-tailed Tyrants**. Two more Yellow Tyrannulets were found and day-high counts of Swallow-wings (162), Drab Water-Tyrants (56) and Brown Jacamars (46) were recorded. In the afternoon we stopped at the only farm on the Kwitaro (Harold's Farm, N 3° 4.329', W 58° 52.926') and traded flour, rice etc. for items such as, sugar cane, papayas, bananas, plantains and limes. Young Duane and Andy climbed trees in a farm orchard and threw ten mammoth, very green papayas into the river and retrieved them. Euler's fly-catcher was heard at N 3° 8.606', W 58° 50.035', comprising a second Guyanan site for this bird.

**KASEM CAMP**, our fifth campsite, is located at N 3° 11.584', W 58° 48.660'. We arrived at dusk (5:30 PM) having traveled 27.8 miles. The presence in the river of electric eels, called "kasem" by Marjorie, gave this campsite its name. Only the very large, soft-ball sized heads of these eels were regularly seen rising for air in mid-stream although a good view of the whole electric eel was yet to come. We are now quite deep in the Kwitaro basin, perhaps fifty miles from the Rupununi River to the west and sixty miles from the Essequibo basin to the east. This is a completely untracked region. Our view of the wild-life is warped by the fact that we travel only by river. What life is characteristic of the distant uplands is only hinted at by our occasional foray a half-mile or less from the river edge. The camp was almost completely set up. We were camped on the right side of the river on a steep bank of good quartz sand. The kitchen was set up on a level shelf and our benab close above on a clear level area. A rock shelf on the opposite side of the river defines and deepens the river here. Technically, the camp is on an island bounded by the river on one side and a smallish brook on the other. On the opposite shore Ashley had a crew cutting a trail through the woods and up a very steep hillside. The fishing on the Kwitaro is reported to be generally poor. Ashley, Pip (who lives to fish) and Duane come up with a catfish and a lukanani, but mostly its perai (piranha) which are caught and these do not seem to be very big.

Day 10 We drifted downstream from 6:30 A.M. to 8:00 A.M. A Black and White Hawk Eagle was seen from the beach. At 8:45 A.M. we started to explore Ashley's trail on the left side of the river. Along the trail we heard and called in a Golden-headed Manakin and a pair of **Rufous-tailed Flatbills**. A large group of monkeys including at least three different species (Capuchin, Black Spider and Brown-bearded Saki) made themselves evident by the sound of dropping fruits as they fed in a high forest tree. A single fruiting tree can attract a range of monkey species which seem to go about their business with a minimum of conflict. The path was a steep one to the top of a hill much higher (possibly more than 250 ft above the river) than that we had climbed at the Comodi Camp. At the crest we found a fully wooded forest with 100 foot trees and a new mystery bird. A "see u wheat" call was heard repeatedly in high vine tangles. The call was easily imitated by young Duane with Jennifer's Audubon Bird Call. After some cogitation Davis decided a White-throated Manakin was a good possibility and, after nearly a half hour, we began to understand the movement pattern of this little bird as it responded to tape. The hero of this find was Leroy who was finally able to locate it and put most of us on it (I didn't consider my own glimpse as a *bona fide* sighting). The bird was not an adult male, but from the fact that it called, was probably an immature male. Female manakins are notoriously nondescript and the White-throated Manakin female is among the most bland of the group. The immature male is similar to the female. This wired male raced back and forth among the vine tangles quite unlike the manakins I had seen previously. This was Davis's first Guyanan sighting of the bird. Aside from this new bird the hill-top was remarkably devoid of detectable birds, but this may also have reflected the noon hour activity lull.

On our return to the base of the hill we found Black-spotted Barbet, Cinerous Mourner and a Striped Woodcreeper as well as several previously seen woodcreepers and woodpeckers. Tanagers were observed flying to and from a bole in a tree elbow. We watched for fifteen minutes as a succession of tanagers included Spotted, Turquoise, **Bay-headed**, Flame-crested and a female Purple Honey-creeper repeatedly bathed in a natural bird-bath sixty feet up in a tree. That this would be good placement of birdbaths in any area seems evident. We returned to camp at 2:00 P.M., lunched, and at 2:45 walked along the right bank trail for an hour. Just behind camp we were mobbed by Red-throated Caracaras. Davis thrives on their response to tape or voice, but this time it was just too close to camp. Along the trail we heard the usual assortment of antbirds, flycatchers and greenlets. We returned for a late afternoon boat ride which once again I declined in favor of writing.

Day 11 At 6:45 A.M. we made our usual two-hour drift down the river. At a site where the night before a tapir had appeared along the shore within five feet of the boat, we surprised a labba (*Agouti paca*) at the base of a steep bank. It fled to some nearby logs and submerged. Presumably it entered a hollow log and escaped to a burrow. The usual cast of swallows,

swifts, parrots, macaws, kingfishers associated with the river were present but a new finding was pair of **McConnell's Spinetails** (N 3° 11.976', W 58° 48.166') and our first Osprey. With the long days we have already spent on the river, most of the riverine avifauna have been encountered, but hope springs eternal. To me, morning floats are preferable to the evening ones since the light steadily increases rather than decreases and therefore my eyesight improves. However, the chance of seeing nightjars and nighthawks is virtually nil on the morning drifts.

Today we made two walks on the right side of the river. In the morning we found a **Spotted Antpitta**, Rufous-bellied Antwren, Warbling Antbird and a much more cooperative Black-faced Anthrush. After lunch Larry, who had started ahead of the main party, encountered a bird whose description could only be a Ringed Antpiper. None of us saw it but a video confirmed it as the most likely species. A Cinnamon Attila and a Black-tailed Trogon were seen. In the higher elevations various greenlets and flycatchers were heard and a Thrush-like Shiffornis was seen. Our trail meandered toward higher ground along a marshy area where we could hear a large group of White-lipped Peccaries mucking. At this camp our guides found another of the Pink-shipped Bird Spiders (my designation). This one was larger than the one we'd seen earlier and much more active. Placed on a limb it explored with a sedate, measured step and on the hat Ashley was wearing was a distinctive, if worrisome, ornament.

Day 12, Friday, November 13 After a short walk in the woods around the camp we embarked for yet another long day of river travel. We were under way at 7:15 AM. Our goal today was Corona Camp below Corona Falls on the Rewa River. Two Capped Heron were seen in breeding plumage and three Sunbitterns were seen well. Among the raptors seen this day were two **Grey-headed Kites**, an adult and an immature, and my first well seen, unmistakable, **Orange-breasted Falcon**. Along the two rivers we saw our highest number of White-banded Swallows (315) and Band-rumped Swifts (350). Among other birds seen today were Rufous-browed Peppershrike, Sirystes, Cream-colored Woodpecker and **Swallow Tanager**. An hour or so after leaving we stopped to check on the progress of our human-powered and lagging companion boat which was crewed by young Duane and Andy. Duane and Pip motored upstream while we explored the wooded edge of a nearby pond. The shore mud had many tracks including deer and tapir and in the trees a Wedge-billed Woodcreeper. Our boat returned quickly and we resumed travel towing the laggards in convoy. Blackish Nightjar habitually roost in the open along the banks of the river and several were seen in exposed sites on the next few days.

**The Confluence** We passed Pobawau Creek (N 3° 15.927', W 58° 45.087') a western tributary of the Kwitaro which flows out of the Kanuku Mountains at 11:15 AM and arrived at the confluence of the Rewa and Kwitaro Rivers (N 3° 17.371', W 58° 45.087') at 1:15 P.M. The confluence is about 15 miles from Kesam Camp. The heat was incredible and several members of the group swam among them, Jennifer and Duane. Larry, surrounded by butterflies, walked on the beach looking for animal tracks. Hornets dominated the scorching sandbar where Duane had set up the shortwave antenna and received messages from Sandy. Chief among these messages was one for Polly which detailed the resignation of House Speaker Newt Gingrich. It is startling and unforgettable news. Following an initial "double-take" (Can you repeat that message?) we rejoice and John and Polly embraced in victorious joy! In retrospect this was the first, clear news that the most conservative elements of the House of Representatives had finally taken charge of that body.

Here too, wildlife abounded: a Giant River Otter swam across the river toward us while a pair of adult capybara swam across the Rewa below the confluence. After refueling from a cache of gasoline we headed up the much clearer Rewa River. The appearance of the Rewa is different from the Kwitaro here. In addition to the clearer black water, the trees on the banks seem more majestic, and the river here and there has sandy riffles and bars that the Kwitaro lacked. After a few meanders it runs nearly a straight course. The birds are not as abundant at this hour, but monkeys are and include, Saki winki, Black Spider and Bearded Saki. Along a bank we encountered the Southern River Otter. This is a smaller, darker otter than the Giant River Otter. After three hours we approached a rapids near a river S-curve, dis-embarked and walked over a shelf on the left bank where we are met by the boats that have been lined through the rapids. We ferried to the right bank, walked over some rocky ledges around more shallow rapids and re-embark. Ashley and Leroy, already at the campsite, came down to help us negotiate the rapids. Our camp is about a third of a mile above this point on the right bank along a wide pool almost in sight of Corona Falls. The distance from Kesam Camp is 25.2 miles. It is a lovely campsite. Our benab is close by the river up a steep bank in a clearing surrounded by modest sized (30-50 ft) trees. This is the camp at which the fishing party stayed for several days. In contrast to the Kwitaro, the fishing here is good, although possibly better at other seasons. Certainly this is a place where there are very large fish, pacu running to seven pounds, and very large perai, possibly baiara and aruwana. The best fishing is closest to the falls. We had a quiet night following a good meal.

**CORONA CAMP** (N 3° 10.842', W 58° 40.535') Day 13. I arise about 5:00 A.M. and proceed to rummage in my gear. When traveling I find that nothing beats a good rummage! It is an opportunity to find that which has been lost, discover what you forgot you had, stow away the un-necessary, give away the unwanted, collect the laundry, and generally resist the ravages of entropy. On this trip I was not alone as we had more than our share of convictable rummagers. Carried to the extreme, rummaging becomes pathological and even opens up the (remote) possibility of impeding the progress of the entire trip (it is conceivable that some have wanted to bird whilst I rummaged in my bag for an item). But how could this crew complain? Unquestionably, the antidote to pathological rummaging is to reduce the load to the absolute bare minimum that is, so few items that there is nothing left but order. Of course the mammalian memory thrives on extracting order from the disorder in which we

live and only in a very few minimalistic dwellings (see House Beautiful, they show one such every year) is such order displayed. This is simply because achieving and maintaining this degree of order is so much more effort than rummaging, anathema to a serious rummager and not nearly as much fun as a good rummage.

At first light Larry amused us by decoding bat ultrasonics with a signal transducer (I don't intend to give the impression that Larry is a walking electronics shop, but he gives a great imitation of one). One small bat flew a rigid flight pattern in a circular course under the lower trees so that the bat was seen and its sound heard together. Bats constitute the largest mass of vertebrate life forms in these forests. Several different frequencies and periodicities suggested that different bat species were also heard. The possibility of entering new worlds of sound and sight are exciting. I know virtually nothing about bats. Considering their evolution to fruit and pollen eaters it seems there should be types specialized for searching for nocturnal insects by leaf gleaning or branch creeping. Perhaps these questions can be answered by bringing night-vision equipment along on these trips to look for bats, insects and other nocturnal creatures. The concept of extending the range of human senses to wavelengths (infrared and ultraviolet light, ultra-sound, and infra?-sound) beyond our capacity for un-aided perception seems a door to a world we've barely explored.

The first walk of the day is along the right bank to Corona Falls. The path itself is interesting passing through smaller trees perched on rocky ledge on to an open area with pineapple-like plants and shrubbery bearing bromeliads and aerophytes. Corona falls is spectacular and well-named. The falls is a series of ledges; the topmost, crown-shaped, is a gently curved hundred feet wide and thirty feet high, water falling over this corona collects in a large pool which runs down a steep flume to plunge into a larger pool below from which it exits in a right-angle turn. A Fasciated Tiger Heron is seen fishing along the steep flume as we get close to the falls. This is a rare bird and only the second site for which it is recorded in Guyana. The first being discovered by Duane DeFreitas in April, 1998 at Maparri Creek. It is a bird associated with tropical rapids and falls and its feeding probably takes advantage of the distraction that rapidly moving water is to migrating fish. Two adults and an immature were seen here. I took several photographs of our party with the falls in the background. A close look at the rocks in the falls showed that they had a extensive beard of hanging submerged plants (*Lacis fluviatilis*). The plants had long quarter inch diameter stems with linear leaves attached along the stem. Interestingly, on the surface of drying rocks the plants had sent up thin one sixteenth inch diameter fruiting stalks, completely different from the underwater stems, each bearing a single white flower. These were attractive to both honeybees and stingless bees many of which were actively visiting these flowers. When mature, each stalk contained a single ball-shaped seed-pod with several seeds. The vegetative stems and leaves of this plant are a favored food of pacu. Later we met Duane, Ashley and Pip who had walked up to the falls along the shore and caught a number of pacu. This is one of the most delicious fish I ever have eaten.

We walked next to the small brook behind the camp. The brook is shallow but running with a good current and, unlike the Kwitaro, it is diamond clear. In the brook were three electric eels. The scene was so fascinating that it consumed almost all of the remaining morning activity. The eels were similar in size, each about 18-24" long. The brook water was so clear that we could watch every detail of the movement of the large electric eels as they investigated the minnows drawn to the pieces of "bakes" we threw into the water. The propulsion of the eels is completely by control of the undulating waves traveling forward or backward along the ventral fin while the body is kept relatively straight. Direction and elevation is essentially by the small pectoral fins, and modest bending of the body. Occasionally, minnows approaching an eel would panic, assumedly from a detected electric field, but we saw no eels feeding following these "panics". Associated with these eels was an occasional popping sound, whether from an electrical discharge or an explosive exhalation was not clear to me. Apparently electric eels continuously shine an electric field on their surroundings which they monitor and can detect perturbations in the field. Being able to "feel" distant objects without physically contacting them is certainly a useful ability in the turbid waters of the Kwitaro or at night. Among the many small minnows in the pool were a dozen hatchetfish each an inch and a half long. They had highly expanded and elongated pectoral fins and brown stripes running along their flanks and rested passively just below the surface film where they could easily be examined with binoculars. Larry captured absolutely fantastic videos of this idyll.

In the afternoon we walked into the woods behind the camp where Jennifer and I had a fleeting glance at a rapidly foraging group of antbirds among which was, what we later recognized to be, a **White-plumed Antbird**. One very good sighting today was our first Lineated Woodcreeper. However, the biggest bird of the day was found when we heard the "sizzle" of the bird that was the object of our obsession, the White-crowned Manakin. Davis began playing the tape and the bird responded. It was obviously close by but invisible to all of us. All of us, that is, except young Duane who had collapsed about twenty feet ahead of us to rest from his trail-chopping exertions. He raised his head and there was a male **White-crowned Manakin** displaying and singing just in front of him. Like any good manakin he sat rock still on a low branch, as if sitting for his portrait. The jet-black male with its bright white forehead, cap and nape is unmistakable. Our search for this bird had started almost a year earlier on the Rewa and this was a most satisfactory conclusion. We returned to camp for a swim in the cool Rewa and a lunch of beautifully prepared pacu. We then walked up the trail to discover a pair of Spot-backed Antbirds, our first and only of the trip. We also recorded our first Wing-banded Antbirds this day, my first **Pink-throated Becard** and two Flavescent Warblers. Altogether a most productive day in gorgeous surroundings concluded by an evening drift toward the portage area. This evening Marjory announced there would be no more rum. Sadly, I broke out my donation, a liter of decent scotch whisky, and we toasted lovely Corona Falls on the Rewa.

Day 14. At the camp table several varieties of stingless bees greeted us at breakfast and lunch as they investigated jam-smearing knives and spoons. These were quite different from the jet-black bees so common at our Maparri Creek camp. One type had a golden thorax and another was distinctly brown. Larry was quite interested in them and their nests. There are many species of stingless bees each with its own distinctive nest entrance: some with a simple cone-shaped tube, others with a tube surrounded by characteristic wax/propolis/latex protrusions like great flowers, others with a large horizontal mouth-like landing platform. During the course of our trip Larry managed to video the hives of at least five different species. We boated down the river this morning from 6:20-7:45. Three sunbitterns calling and repeatedly displaying on the river edge close to the boat were a splendid sight. The birding group walked a new trail on the left side of the river from 8:15 to 1:15 P.M. where they saw an Ornate Hawk-Eagle, Bat Falcon, Marbled Wood-Quail, Straight-billed Hermit, Spot-winged Antbird and Scale-backed Antbird.

Rather than bird, I went fishing at the falls with Duane and Pip. Opposite the camp there is a well-defined trail along the left bank. It is about six to eight feet wide, often paved with log rollers that amerindians use to haul their dugouts ("kanous") above Corona Falls. According to our map there is approximately 50 miles of navigable water above the falls. Here and there the path was overgrown with vines and bamboo but for most of the course it was a well marked and cleared avenue. We arrived at the top of the falls and fished in the pools below the corona's cascade. I had a very close look at two more Fasciated Tiger-Herons on this side of the river. Using lead-head jigs, spinners etc. and baiting the hooks with the waterfall plant I hooked and lost a large pacu, then landed a beauty of about 7 pounds. Pip and Duane each caught several and in no time we had six good pacu. The pacu is plate-shaped, quite thick in cross-section and a very strong swimmer. It is an extreme challenge to land one caught in swift water. The ledge at the falls is covered with boulders. These have been inscribed with petroglyphs figures of individuals and the typical three parallel feather or fish incisions so common at other river sites. Rock incising seems to have been a common activity in these parts of Guyana. It is hard not to conclude that they constitute property markers although such a conclusion is clearly a product of my own culture. Below the falls outlet, I caught a very large and dangerous looking perai - at least a five pound fish. Pip was sufficiently impressed to warn me away from its mouth while he disengaged the hook. Throughout the trip our guides were solicitous and kept us under their care when there was the slightest chance of our injury. Before I left I had a bath and shower under the waterfall. We returned to camp by wading along the shore, an occasional (disasterous for my camera) dip in the river, and balancing on the left bank ledges. It was a damp return.

In the afternoon we walked on the right bank trail from 2:50 P.M. to 4:50 P.M. One of the better birds seen was a **Bright-rumped Attila**. At one point a Plain Xenops responded to a taped call by flying in, looking at the tape recorder and flying off never to return. Polly's observation about the recorder fit the bill, "It talks the talk, but it doesn't walk the walk!" This day we saw our first White-lored Tyrannulet, a bird we had heard repeatedly at every campsite. At 4:50 PM the main party decided to walk up to Corona Falls on the left bank trail. I declined in favor of my well established aversion to stumbling around the woods in the dark and the fact that I'd already been there. The party returned in the dark at 6:15 PM but not without difficulty since John tripped going over a log and lost his glasses, which were recovered the next day.

Day 15 Today, at 7:00 AM we set out for our seventh campsite. This is our longest day on the river so far and is the start of our return to Annai. Our next camp is 35 miles away. Approaching the portage below Corona Camp, I spotted a bright crimson and gold bird perched in a leafless gray bush at the water's edge. This was a male **Crimson Topaz**, a large, very showy hummingbird with two long central tail plumes, crimson all over except for its greenish-gold gorget. Rarely have I seen a bird shine as did this jewel. Shortly thereafter an apple-green female made herself visible, the male flew at her, re-settled to show himself off even better and eventually they flew together up river. As we disembarked, we flushed a Blackish Nightjar, then another from the rocky shoreline. A **Rufous-throated Sapphire** was observed carrying nesting material and working it into a nest in a small bush that grew out of the shoreline ledge, a precarious location that would certainly be submerged in high water. Soon after this we encountered three more Rufous-throated Sapphires in the portage area. During this passage we also saw a White-chinned Sapphire. A quick fly-by over the river of a Guianian Red Cotinga was recorded but not by me. At the waters edge on the banks of the portage trail were craters of the "bombardier" frogs each filled with eggs or tadpoles in various development stages.

Motoring down a quite straight swift run, several of us spotted a small bird leave a nest in a branch overhanging the water perhaps ten feet out and about six feet high (N 3° 13.075', W 58° 43.190'). We sneaked back, grabbed some brush and awaited its return. Soon a male Streaked Antwren worked his way out the branch and darted into the nest. He was incubating two eggs. The nest was about two and one half inches in diameter, tightly constructed of rootlets and fibers but of thin enough construction that the eggs were clearly visible through the bottom of the nest. Somewhat farther along the river we spotted a new flycatcher in the second rank of trees beyond the shore. Davis thought it was a **Dusky-chested Flycatcher** and it responded to the tape flying closer and then returning to a tree-top perch on the skyline. This, only the second Guyanan record, was found at N 3° 13.542', W 58° 43.557'. Another very good bird, a Dot-winged Antbird, was seen along the river at N 3° 16.987', W 58° 45.051', just shy of the Rewa/Kwitaro meeting. We arrived at the Kwitaro River junction at 10:45 A.M., spent a half hour, cleaned out the fuel cache and picked up a spare engine stowed for emergency use and continued our journey.

This was a long, hot day. In its upper reaches the Rewa is a fast millrace virtually running in a straight line to the northwest. On meeting with the Kwitaro, the Rewa meanders, often many miles from a true course toward the northeast. At one point a large 4-5 mile loop curves back to within a few hundred yards of itself. The river has occasionally broken through at this

point, but is not yet committed to the new course. We lunched on a steep sandy shelf just after the big loop. While lunching we picked up and carried off plastic wrappers and batteries left by an earlier negligent fishing party. Further along the river, Pip went ashore and recovered a pretty decent casting rod that had been absent-mindedly abandoned by Roger Stanley on the trip up-river. Bat Falcon and Plumbeous Kite were raptors newly seen (by me) today. Among other new birds were Black-tailed Trogon, a White-collared Swift and a Green Aracari. This was a long trip generally made under power. At 4:30 PM we made camp at a large sandbar on the left side of the river. Resident on this large, high sandbar were our first pairs of Large-billed Terns and Black Skimmers.

In the evening and for the next few days we heard both the Variegated Tinamou and the Undulated Tinamou. The Undulated Tinamou replaced the Cinereous Tinamou in this region. The Cinereous Tinamou is associated with the forests typical of the smaller watercourses like the Kuyuwini, Maparri Creek and the upper Kwitaro/Rewa basins, while the Undulated Tinamou seems more characteristic of the broader river valleys such as the lower Rewa and the Rupununi River near Karanambu. The Variegated Tinamou was recorded in every forested habitat on this trip.

**LEONID CAMP** (N 3° 26. 802', W 58° 35.102') was the first site which did not have a previously built structure for our hammocks. Ashley led most of the staff into the woods at the north end of the bar where they quickly chopped the parts for a "benab." The structure is a simple one depending on gravity, the tension of the hammocks, and the compression of lateral supports to make a strong support to keep the hammocks off the ground and firm. The benab is a rectangle about fifteen feet wide and about 25 feet long. It is made of two sets of three posts (each ten feet long and six inches in diameter) opposite one another and each sunk two feet into the ground. The post at each corner of the structure is anchored by a tree with its fork braced against the post and its butt in the sand toward the opposite post. A 25 foot tree trunk is wedged between the fork and its post and runs the length of the set of posts tying the side together and providing a beam on which to tie the hammocks. The forked tree defeats compressive forces preventing inward collapse and the hammocks supply tension preventing outward collapse. The structure can be further modified with end gables and beams to support a roof of palm fronds or a tarpaulin. The entire process from tree chopping to completion was done in about ninety minutes. The only tools required are the cutlass, a shovel and a plentiful supply of softwood trees with long unbranched trunks.

At night there was a spectacular meteorological event, the Leonid Meteor Showers from which I named this camp although others, more impressed by the bird-life, called this Black Skimmer Camp in allusion to the noisy pair with which we shared the sand dunes. From all the subsequent reports this may have been the very best place in the world from which to view the Leonid Meteor Shower. Davis's description of ionization trails that hung in the sky for minutes, exploding meteors and nearly constant bombardment were exciting. Strangely, Davis felt no obligation to wake others and only he and Larry enjoyed this most rare event. Next time, wake me up!

The dunes and high river bars are nest sites for river turtles and turtle tracks are obvious at this time of the year because nesting coincides with falling water levels. Such tracks lead turtle egg collectors to the nest. As with tortoises, river turtles are especially susceptible to nest predation which has resulted in a general reduction of turtles of all types and the extirpation of the giant arran turtle from much of its range. We are pleased to learn that Duane has begun to practice obliterating turtle tracks by sweeping the beaches to conserve these animals. This beach had been swept. Leaving Leonid Camp was a simple matter of packing hammocks and cooking gear and stowing it on the boats. Our party has consistently encouraged leaving a camp without trash. One of the absolute pleasures of these campsites is their cleanliness especially the absence of plastic, metal and paper trash. So we burn anything flammable, bury unburnable material in a waste pit, and give all our used up batteries to John who plans to dispose of them in Montana (I think I'd like to visit Montana simply because it must have so little trash it has to import its from Guyana!). The benab remains for future travelers until the floods carry it away.

Day 16 Today's trip of 35 miles will be as long as yesterday's. We are up, breakfasted and leave by 6:06 A.M. We are barely out of sight of the camp when Davis hears the call of an Olive-backed Foliage Gleaner. Immediately Duane motors to shore and Pip holds the boat in place by grasping the shoreside brush. The tape brings a bird in, but it is one of those shy critters that refuses to perch in the open or even allow itself to be well framed in an opening. One by one, with Pip's boat maneuvering, we all get a glimpse of it. Jennifer, who consistently has the best eyes and is always the first to see a bird, begins to call out field marks at Davis' prompting: "rufous head, back's not olive, buffy breast, no, the throat isn't white". Davis confirms that this description doesn't sound at all like an Olive-backed Foliage Gleaner, but it is answering the tape in a regular and predictable manner. Could it be a **Chestnut-crowned Foliage Gleaner**? Davis plays that bird's tape and elicits a very unusual response, the bird calls back but now its call has a different, strangled quality quite different from the original call. We conclude after a few more sightings that it is a Chestnut-crowned Foliage Gleaner and a new bird for Guyana. The sighting was at N 3° 27.362', W 58° 35.298'.

As we arrived at our solution to the "Foliage Gleaner Problem", Duane noticed that our companion boat a few hundred feet upstream was signaling quietly by hand waving, no shouting. We motored up and found an adult puma (*Felis concolor*) sitting on the lip of a steep bank. It regarded us passively sitting upright on its haunches unafraid and unconcerned for a few more minutes then got up and padded off into the forest. I have lived near bobcats, tracked them, and never seen them. Cats as a group are exceptionally secretive. Sighting a puma is an extremely rare event, one which was new to Duane, and certainly the

high point of our mammal viewing on the trip. We did see Capybara and Giant Otter on this river stretch. As we proceeded down the river we encountered our first Yellow-billed Terns, Wood Storks and a Jabiru. We had day high counts of the trip for White-winged Swallows of one hundred and Sunbitterns of five. Capped Heron in gorgeous breeding plumage consisting of blue face skin, soft yellow wash to the neck and cape, startling white plumage all topped off by the black cap reached their highest day count of ten and Green Ibis of sixteen in this section of the Rewa.

At noon we stopped at Fish Pond a large shallow inlet of the river which was pretty nearly dried up. The fishermen fished with modest success while we lunched on a hot muddy bank and watched a half dozen very hefty black caiman cruise the pond. This pond had been the objective of the fishing party last November who found it completely dry then. Nevertheless, it has an excellent reputation as the place to fish when the water level is high. Early in the day, Nikki had set off alone down the river, paddling his skiff. Although we motored, he managed by steady paddling to keep ahead of us most of the day. We finally passed him in mid afternoon. Nikki is a real phenomenon; expert woods-man, good trail breaker, indefatigable boatsman and a guide whose exceptional leadership qualities were frequently called upon. As we approached the place where we had camped on the Rewa last November we explored a riverside ox-bow pond as a potential fishing site, but it, too, was drying out.

Either from the bright light or from looking through binoculars all day, my eyes bothered me. While normally my visual correction is such that I view binoculars through glasses with the neutral diopeter setting, I noticed that now I had to correct the right eye by more than three marks on the diopter setting to achieve good focus and that without my glasses a neutral setting gave me a sharp image. In short, I suddenly did not require glasses. It seems likely that the shape of my eyeball or cornea changed for whatever reason. This condition lasted only for the next two days.

Following my usual practice I kept a count of species and numbers of birds on these day-long trips. In this journey from south to north on rivers of increasing size interesting trends can be seen in the distribution of the more frequently encountered species. Brown Jacamar are strongly associated with the upper reaches of the Kwitaro/Rewa Rivers and fall off rapidly as we go downstream. To a lesser degree the Swallow-wing is associated with the upper regions of these watersheds as are the White-banded Swallow and the Band-rumped Swift. The passerines that are tightly tied to the river almost regardless of the environment through which it flows are the Drab Water-Tyrant and the White-winged Swallow. A table showing the occurrence of the most numerous species as we progressed northward follows, but note that miles 36-96, and 95-130 share the 20 mile trip to and from Corona falls.

Miles	0-8	8-36	36-61	61-96	96-130	130-165
	<b>Birds per mile</b>					
Brown Jacamar	4.9	1.7	1.4	0.9	0.5	0.2
Swallow-wing	12.3	5.0	4.0	1.6	1.8	2.1
White-banded Swallow	25.0	8.8	12.6	3.7	4.7	1.4
Band-rumped Swift	12.3	2.2	3.0	13.0	7.2	2.2
Drab Water Tyrant	1.9	2.0	1.8	0.7	1.0	0.7
White-winged Swallow	2.5	1.9	2.1	2.7	2.9	1.0

**Caiman Camp** In the late afternoon we arrived at our eighth camp, Caiman Camp (N. 3° 42.917', West, 58° 44.548'). This camp was on the right side of the river at a point where it took a ninety degree turn to the right. Facing us across a deep pool was a fifty-foot high perpendicular wall where the river had gouged the left bank. Kitchen and staff accommodations were set up on the sandy bank while our benab resided forty feet up a series of sandy steps and about one hundred and fifty feet along a trail in the midst of a spectacular grove of trees many of whose branches did not start until 80-90 feet up their trunks. The large pool in front of the camp was the home of many large caiman. We watched as a really large caiman entering the pool from downstream. The smaller caiman fled, rigorously maintaining their distance, although it did not appear that the larger caiman was actively attacking them. The number of Black Caiman and the second morning's capture of one led to naming this Caiman Camp. This camp is also known to the fishing party as "Pirowrin" Camp for it was here that Justin landed an unforgettable 58 lb "Banana Fish", a catfish like that we'd seen last year at Karanambu. It is a matter of fact that where there is a congregation of caiman, that's where the fish are. Pip managed to catch medium sized baiara here. I'd indicated that I wanted the skull of one as a gift to my piscatorially oriented colleague, Dr. Stacia Sower. The baiara is a fish which has two amazingly elongated fangs in its lower jaw which fit into scabbards in the roof of their mouths. Nikki carefully debrided the skull of all accessible flesh, and I dried the skull for the next three days., finally sprayed it with krylon plastic and presented it to Stacia. Above the campsite before the bend on the opposite side of the river a jungle was emerging on low deposited sand and in the bare branches of the higher trees we saw Blue-throated Piping Guan. Interestingly, their position in relation to the orientation of the river's bend and the character of the streamside forest was nearly identical to that where we first saw them last year at the Rewa campsite.

As we settled in, Marjory (accidently?) stumbled on, not one, but two, bottles of rum in spite of her previous claim that we were out. Now that we were well on the home stretch conservation of rum was no longer critical. But, of course, these were

absolutely the last bottles. I fixed a libation for John who's toast was "Happy Birthday!", I responded "and many more." Two days later I learned that today (November 18) was actually John's birthday. We enjoyed the evening while waiting for the last possible display of the Leonid Meteor Shower which did not materialize.

Day 17 In the morning while on a downstream birding drift we were puzzled by a jet black, short-tailed bird that was flushed in shoreline brush but which kept out of sight. Eventually it was seen again, flushed across the river, and slowly we reached the conclusion that it was a Greater Ani which had lost its tail. On the river we had a good overhead view of a **Hook-billed Kite** and later both mature and immature kites together. This morning we birded across the pool on a forest trail that led through fairly high and thick edge cover and into a very high mature forest of strongly buttressed trees and finally to varzea on the shore of a narrow river inlet. As we proceeded along the trail, Larry began to take a considerable interest in the unique ecology of hollows in standing trees. Nearly every tree had some sort of cavity at its base and some were so large that it was possible to stand in them. In this domain were spiders, oversized leaf-hoppers that had bubbled large "spittle" cocoons around themselves, bats, and later that day, a very large, buff-colored tailless whip scorpion (*Amblypygi* sp.). Larry has a very decent Sony Camcorder replete with low light, high magnification, image stabilization, close-up and, you name the "bells and whistles" with which he's documented much of what we've seen. Happily we did not encounter snakes in these hollows although this environment seemed made for them.

One of the birds seen on this walk was real puzzler. Nor have we completely solved the puzzle although Davis is focussed on a particular suspect. It is rare to hear a birdsong that Davis cannot identify, but during our return a strange bird call was heard in the lower branches of a canopy of modest height. The sharper eyes of Larry and Jennifer found the bird which they described as small and greenish. Davis got "on it", too late, just as it left its perch. This was a difficult bird to find and eventually it ceased responding altogether. Davis had heard the same call last year at the nearby Rewa camp. His suspicion is that it was an Olive-green Tyrannulet, a bird of which Ridgely and Tudor write, "Rare (perhaps in reality more difficult to see or collect) in canopy and borders of humid forest. Not well known". We decide to try for it again tomorrow at the old Rewa camp.

In the afternoon we walked along a level trail on the right side of the river finding several new birds. The Cayenne Jay, as always, played hide and seek in the largest limbs of the highest trees. We called in a pair of Rufous-throated Antbirds for a great look. Attempts to call in the White-plumed Antbird, which is often associated with Rufous-throated Antbirds, failed not because none was near, but rather because the over-excited bird kept overflying us and finally flew into the next "county". A Rufous-capped Antthrush was called in and observed as it walked on the forest floor about twenty-five feet away. This bird has the rail-like shape of the Black-faced Antthrush, but differs in having a distinctive bright rufous pate and blackish throat, a very handsome bird. Also found today were Crimson-crested and Golden-collared Woodpecker and a Plain-brown Woodcreeper. Back at camp Jennifer lifted her hammock bag and discovered a medium sized black scorpion had taken up residence under it. I was obliged to tend to this, the first scorpion I have seen on our trips.

Day 18 Morning found a four foot long Black Caiman tethered to a stick in the beach sand. During the evening Marjory and Paula had been visited by two caiman. Paula had lassoed both of them. The largest had simply been too much to hold. The smallest gave us all a good close-up view and photos of Polly and of Leroy holding it. We released it and it streaked for the pool. Davis lurked about the nearby woods and shore recording birdsong once, at least, haranguing the camp's miscreants for making too much background noise. At about 7:00 A.M. we continued our trip down the Rewa with the plan to camp on the Rupununi River after another 35 miles. The old Rewa Camp was an hour away and we stopped there to walk Tommy's trail from 8:00 to 9:20 hoping to find the mystery tyrannulet. No luck. The higher water this year had quite changed the shoreline. The sandbar, mostly submerged, was the stalking ground of Wood Storks and a Jabiru. The fishing was not as good as it had been in last year's lower water. We continued our boating over familiar territory passing Sobers's fishing camp, one of Pip's future goals, and stopping for a ninety minute lunch break at the site that we'd used on the previous trip. After a quick dip and a good lunch, we continued on arriving at Rewa Village on the Rupununi a half hour later at 1:20 P.M. The usual cast of river denizens were present, in addition, we saw our first **Short-tailed Hawk**, a light phase bird. As expected along savanna rivers, both Southern Lapwings and Brown-throated Parakeets were found as was a Black-throated Mango.

**Centipede Camp.** (N 3° 52.176', W 58° 53.587') We motored up the Rupununi in the hot afternoon sun searching for a suitable site on which to build a camp. At 5:10 P.M. we found a decent site on a high, lightly wooded, bank opposite a small inlet. In their usual efficient manner the staff cleared the underbrush in a grove of trees, hung hammocks, put up a table and benches while Marjory and Paula stoked a fire and prepared dinner. While walking along the shore collecting firewood, Jennifer discovered a site where fisherman had scaled an arapiama. I think Duane suspected that Marjory might still have a bottle of rum set aside for medicinal purposes. At his suggestion, I queried Marjory and, *voila!*, this magician produced the very last bottle for our evening cocktail. In the evening, as well as the next morning, we enjoyed very good views of a half dozen Band-tailed Nighthawks which made passes over the river close by the camp. At supper a small (quarter-inch long), light-colored winged insect (ant/termite/mayfly?) appeared in great abundance. They seemed to be involved in a group activity gathering in rapidly swarming clusters focussed on small depressions including the dimples in our table surface and apparently trying to dig into the surface. Clearly, they were engaged in some sort of mating/feeding/swarming behavior. The following morning the table still had small groups of these insects trying to burrow into its dimpled plastic surface. In the evening we heard Tropical Screech and

Spectacled Owl. In the early morning hours we heard a Tawny-bellied Screech Owl and Davis called in the Tropical Screech Owl.

Day 19 Spines of various palms (such as the genus *Acrocomia*) are a constant serious hazard in the jungle. In some places every palm seems covered with them. Many plants have spines only when they are small and prone to grazing, others have them as well when they are fully mature. These are often long, thin and hard and can be most painful when stepped on. Just such an accident happened to Andy when a spine pierced his right little toe just beneath the toenail. This morning John operated on Andy. Happily, John travels with a formidable medical kit so that Andy received the full emergency treatment including a local anesthetic, sterile instruments and forty-plus years of experience. The next day he showed every evidence of regaining his full prowess as a soccer star. The morning walk was in the woods immediately behind the campsite. Initially, this area was varzea devoid of ground cover and washed clean of the normal litter of the past seasons. As we went forward to slightly higher ground the underfoot bark, leaves and brush increased. This appeared to be the classic environment of the Saffron-crested Tyrant Manakin which Davis quickly found. We also found Pale-tipped Tyrannulet, and both Lineated and Striped Woodcreeper.

We heard an odd bleat, puzzling even to Davis. We searched for its source near the leaf-strewn forest floor. While the rest of us searched small twigs and branches for a bird, Jennifer, always with the best eyes, from twenty feet away spotted the source of the noise. On the forest floor was a tree frog held in deadly embrace by an immense centipede (*Scolopendra gigantea*) that was eight inches long. We watched spellbound for at least an hour as the centipede worked its way around the frog eventually passing entirely from one side to another gnawing and injecting its venom as it proceeded. The frog was clearly weakened as the assault went on and eventually, its bleating ceased and its eyes began to close. The ability of one of the earliest (Ordovician) land organisms, a simple-plan arachnid, to catch and physically overwhelm such a clearly modern (Triassic) vertebrate as the tree-frog simply terrifies. The tree-frog probably had taken refuge in a folded leaf in the treetops, one occupied by the centipede. Once the centipede had attached itself to the frog, both fell to the ground and the frog was locked in a death grip of an adversary that evolved perhaps 300 million years before its species had evolved. The photographs and especially the video of the event are simply chilling.

Our scouts have possibly discovered a new bird. Pip and Duane on a fishing expedition have spotted a bird which was one of my trip objectives, a Boat-billed Heron, in the inlet across the river. We broke camp about 10:30 A.M. and made a run into the entrance of the inlet. Poling our way into the shallow inlet we had great looks at Yellow-billed Terns perched on flooded tree trunks as we approached the area where the "Boat-billed Heron" had been seen. Nothing! In disgust we turned around and headed back. As we did the **Boat-billed Heron** left cover and flew into the water's edge at the end of the bay. It was an immature bird, well concealed by its camouflaged plumage, but enough in the open that we each could each "get on it".

Now we had a long (35 mile) run up the Rupununi to Annai. Always hot, almost bored, we spent a long day on the breast of the Rupununi. Where last year we had seen pairs of Southern Lapwings on nearly every sand beach and bar along the river, on this trip we saw few pairs. We did encounter two separate large flocks of Southern Lapwings; one with 19 birds and the other with 23 birds. I surmise that these are "staging" flocks waiting for the river to fall sufficiently to allow the establishment of breeding territories. In contrast, most of the Pied Lapwings we saw were pairs. Memorable birds include a Pectoral Sandpiper, a **Blackburnian Warbler** and a good look at a Plain-breasted Dove as we entered an awkward passage through a shallow sandbar area in the home stretch.

**ANNAI** As we motored along, Davis, a barely recidivistic non-smoker, offered to roll a cigarette for Pip in the bow. Davis proceeded to roll one of the most full, luxurious tubes of Brazilian tobacco yet seen on the trip. Clearly, this non-smoker had some expertise and practice. He passed it to me lit, I puffed a drag or two and passed it to Pip in the bow. Two, no more than three, minutes after Pip dragged on this toke we hit a rock. The cigarette, lost overboard in the crash, was forgotten and soon we were in sight of the Kwatamang Landing where Sandy (with ready-rolled cigarettes) awaited us. As always, Sandy, the soul of hospitality, was joined with many of our old friends, Among them Dianne, Carl, Justin and Danielle. Our deep thirst was assuaged with a plentiful supply of rum, and ice cold Banks and Polar beers and our hunger met by meat patty and cheese sandwiches. After a mild bout of carousing we fled to Colin Edward's Rock View Lodge for clean-up, a pleasant hour of visiting and the usual bountiful supper that Rock View tables.

Day 20 Our flight from Annai was at 8:00 A.M. the next morning and on time. While awaiting the flight, we did the usual things: a great Rock View breakfast such as I've celebrated elsewhere, the group photo (evidence we'd all survived and surely all been improved by our journey), popped a Banks or two and proceeded to examine Colin's livestock. Pip discovered that a pet labba had a craving for Banks beer poured down his throat while a Giant Anteater slurped beer from a cup with its long serpent-like tongue. Tapir and deer were kept in nearby compounds and macaws, parrots and monkeys in the aviary. Amidst a blizzard of fond farewells and grateful thanks for an absolutely terrific wilderness experience we boarded and within the hour landed at Timehri. Here another new experience awaited us, a nurse stood ready to take blood samples from each of us as part of an initiative to evaluate our malarial infection status. All passengers coming from this flight were required to have blood smears taken. Neither Sandy nor Duane who were flying to Georgetown with us had been put through this routine before. Was this the doing of Roy Thomas's (the Regional Supervisor for Malarial Control in Lethem) whom I'd met last April on the flight out of Karanambu? I did learn in this episode that the Lariam pills taken, before, during and after the trip are about 70% effective

against malaria. Because of the almost complete absence of mosquitoes at this season, and our use of mosquito netting and bug repellent our threat of malarial infection was minimal. For those who live year-around in the outback malaria is of constant occurrence and virtually none of our guides and traveling companions have escaped it.

In short order, Louis picked us up, delivered us to the House Proud gift shop, the Pegasus, to the river wharf district to look for a Crab Hawk, and to the Botanical Garden. The Botanical Garden as always is a very productive area now very much recovered from the "restoration" attempt of last year. Among the birds seen here were two types of spinetails, Plained-crowned and Yellow-chinned Spinetails also Spotted Tody-Flycatcher, Yellow Warblers and Variable Seedeaters. This is a site where we can expect Blood-colored Woodpecker and fairly late in our walk we found a pair. Grey Kingbird is also expected here and was easily found. While walking along the woodland trail Jennifer took an extra hard look at a termitarium and turned it into a Two-toed Sloth. Probably the closest sloth sighting I've ever had and one that would certainly have been missed by us all since it so clearly appeared to be a termite nest. Another surprise find was a very good view of a Little Cuckoo. Pied Water-Tyrant, White-headed Marsh Tyrants and an American Pygmy Kingfisher were also found. Parrots seen here were Yellow-crowned, Orange-crowned and Blue-headed. In a large tree overhanging a pool we found the expected waders: Snowy and Cattle Egrets, Black-crowned and Yellow-crowned Night Herons and my first adult Boat-billed Heron. In another pool the tame manatees always on the look out for food offerings, begged and assumed their most charming attitudes. It is hard to imagine the deprivations that drove early mariners to think of these gargantuan beasts as mermaids.

Whenever I have been in the Guyanan outback, relations with everybody, guides, indians, drovers, kitchen staff and strangers met on the rivers could not have been more harmonious and friendly. In Georgetown our interactions have been with Wilderness Explorers agents, Le Meridian employees and taxi drivers who have always been most helpful and cordial. However, Georgetown is a world away from the Rupununi Districts and two events showed just how different they are. At the Botanical Garden we were accosted by an individual seeking a handout. When denied, he proceeded to verbally assault us in the most disgusting terms. The man was clearly mentally deranged and a public threat for which there was apparently no public remedy. We stopped to search for a Rufous Crab Hawk and, while we were parked scanning the river shoreline, a thief rode by on a bicycle, reached in, swiped John's knapsack and was gone before anyone noticed. The loss included medicines, eyeglasses and his plastic-imbedded bird copy of the illustrations of "Birds of Venezuela", costly, but luckily did not include passports or tickets. This brazen theft is probably not unexpected in a country as impoverished as Guyana, but in the Guyanan hinterlands I have not seen anything even slightly like either of these events.

In the evening the DeFreitases, Dianne McTurk, Karen Weldren, her husband Neil, Trudy Thorne and our party gathered together for a marvelous dinner at the Cara Lodge. Unfortunately, Tony was in England at a meeting and missed this first-rate affair. Then it was back to Le Meridian for a short nap and out to the airport at 3:00 A.M. to catch a BWIA flight to Miami via Trinidad and on to New York. As we boarded the plane at Timehri the reason we had elected to fly BWIA was clear; on the airstrip sat GAC's 757, jacked up with no tires on it! In Miami, Larry, John and Jennifer left us for connecting flights to Boston, Montana and California, respectively. Polly, Davis and I made a quick connection to New York and by limousine to Polly's house. By 7:00 P.M., Davis and I were driving to New Hampshire where we arrived about 11:00 P.M.

**BIRDING HABITATS** The areas in which we birded have some of the least perturbed environments in the neotropics. It is an area which is postulated to have played a major role as a plant and animal refugia in Amazonian history and in the face of impending environmental threats may once again serve that important role. Many of the species we've seen have been cited in *Neotropical Birds, Ecology and Conservation* (Stotz, Fitzpatrick, Parker and Moskovits, U. Chicago Press) as representative of the undisturbed ecology of the habitats we visited. Examples of species which are characteristic of undisturbed Tropical Lowland Evergreen Forest which we saw were: Lined Forest Falcon, Gray-winged Trumpeter, Long-tailed Hermit, Plain-brown and Chestnut-rumped Woodcreepers, Olive-backed Foliage Gleaner, Dusky-throated and Cinereous Antshrike, and Rufous-bellied, Brown-bellied and Long-winged Antwrens in addition to Ferruginous-backed Antbird, Rufous-capped Anthrush, Sulphur-rumped Flycatcher and Blue-backed Manakin. Examples cited of species of undisturbed Flooded Evergreen Forest birds that we saw were: Green Ibis, Sun Bittern, Striped Woodcreeper, Black-chinned Antbird, Pale-vented Thrush and Tawny-crowned Greenlet. It is clear both from the numbers of species we encountered and the numbers of sightings of individuals of these species that the Rupununi, Rewa, Kuyuwini and Mabarri Rivers offer a unique window onto the undisturbed ecology of the neotropics and in their present undeveloped form are a most important resource to Guyana and its people.

Does the area offer still more in the way of ornithological surprises? Undoubtedly. The area has not been surveyed intensively. Our trips were river-bound, and while this is certainly the most well studied environment, of the species of birds we saw, 1.25% of those were new to Guyana. The prospects of finding new birds in areas like the Kanuku Mountains and the isolated mountainous areas such as Kusad are alluring. On these four trips in Guyana I had a grand total of 489 species, 477 seen and 13 heard. Of these, 62 were species I had previously seen in the ABA area. Thus, 88% of the species were new to me. Of special note were the first and second recorded occurrences of Euler's Flycatcher in Guyana, and reasonable assurance of its breeding in the Rewa River Basin; the first and second Guyana records of Rusty-breasted Nunlet and Fasciated Tiger-heron; the first three occurrences of Spot-winged Antshrike; two of only a few sightings of Dot-winged Antwren for Guyana; new Guyanan records for Yellow Tyrannulet, Dusky-chested Flycatcher and Chestnut-crowned Foliage-gleaner. The finding of the Saffron-

crested Tyrant-Manakin in three sites along the Rupununi River represents a major range extension for this species. Seeing the infrequently encountered Crimson Fruitcrow was still another high point, as was finding the Capuchinbird in three localities.

**Literature of Tropical Interest** One element of great importance was a reading list for Guyana which Davis gave me prior to the first trip. It is absolutely critical to arm oneself by reading a comprehensive book describing the ecological and natural history of the tropics. For this, John Kricher's "Neotropical Companion" (Princeton Press, 1997) is without peer. In my loitering in bookstores I have encountered new books of interest among them: Stanley Brock's, "Jungle Cowboy" written by a former manager of Dadanawa offers great insight into the region, people and animals; Henry Walter Bates's (1863) "The Naturalist on the River Amazons" (a Penquin Nature Library Selection, reprinted in 1989), is a simply marvelous, thoroughly readable semi-scientific account of the insects, plants, and other fauna seen during Bates' eleven years in Brazil. Bates, an associate of Alfred Russel Wallace, was one of the original thinkers in the development of the theory of natural selection and the discoverer of what is known as "Batesian mimicry." "Mad White Giant" by Benedict Allen (Macmillan, 1985), is an account of his extraordinary 1500 mile journey much of it by foot from the mouth of the Orinoco River to the mouth of the Amazon River in 1983 during which he spent time with Wai-Wai amerindians on the Guyana-Brazil border. In a similar vein, R. O'Hanlon's "In Trouble Again" (Vintage Books, 1990) is a formidable synthesis of good science writing, historical perspective, quirky humor, terror and cannily perceptive reporting of a journey in the other direction - from the Rio Negro to the Orinoco. A truly great adventure read! Another adventure book exploring the French Guyana is Francis Maziere's "Expedition Tumuc-Humac" (Doubleday, 1955). Describing two ethnographic/photographic/recording trips to the southernmost borders, it is an alert and perceptive view of amerindians who have had until then little contact with non-amerindians. Victor G. C. Norwood's "Jungle Life in Guiana" (Robt. Hale Ltd, London, 1964) is a well-researched book that touches on both historical and contemporary aspects of the region. "Amerindian Testimonies" edited by J. Forte and I. Melville (pub. Janette Forte, Georgetown, Guyana, 1997; an earlier printing in 1987 was made by Boise State University, Boise, ID) presents the results of twenty-two interviews with amerindians of the major Guyanan tribes concerning their customs and life. An "Insight Guide" produced by Hans-Ulrich Bernard is a photographic gem that touches on many aspects of the neotropics. "One River" (Touchstone, 1997) by Wade Davis describes hundreds of years of the history of ethnobotanical exploration in the Amazon in writing that is entertaining, engrossing, and which begins to approach the richness of an Amazonian forest. One cannot begin to appreciate the forests of Amazonia without some knowledge of the trees. Palms are a good place to start learning since most are small enough to be seen and sufficiently distinctive to identify. "Field Guide to the Palms of the Americas" by Henderson, Galeano and Bernal (Princeton University Press, 1995) which I borrowed from Maggie Wittner, my favorite book-hawk, was for me a crucial beginning in appreciating the mysteries of palms.