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JOURNAL AND LETTERS VOL. I

of

William F. Coultas

Whitney South Sea Expedition

May 1929--November 1930

Period dealing with the

Solomon Islands

(H) 28 p2

JOURNAL AND LETTERS VOL. I

of

William F. Gifford

Whitney South Sea Expedition

May 1939--November 1940

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Period dealing with the

Solomon Islands

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1929

- May 31. Received appointment New York City, departed for Seattle, Washington.
- June 14-25. Seattle, Washington.
- June 26-July 20. Enroute Sydney, Australia.
- July 20-27. Sydney, Australia.
- July 28-August 17. Enroute. Kieta, Bougainville Island. Territory New Guinea.
- August 17. Disembarked Kieta.
- August 29. Schooner 'France' arrived Kieta.
- September 2. Moved aboard schooner 'France.'
- September 3. Sailed for Faisi, Shortland Group, Solomon Islands.
- September 6. Anchored Faisi. Some collecting done.
- September 14. Sailed for Choiseul Bay.
- September 15. Anchored Choiseul Bay, Choiseul Island, Began collecting.
- September 17. Hamlin departs for Senga.
- October 2-4. To Faisi and return for ship's supplies.
- October 6. 'France' sails for Tulagi.
- October 9. 'France' at sea; overhauled by Hamlin.
- October 10. 'France' anchored Luti plantation.
- October 11. 'France' shifted a few miles to Sumbi anchorage. Hamlin and Eyerdam depart for Bambatani.
- October 13. Mayr and I leave 'France' for interior of island (Mount Gourdin).
- October 18-26. Collecting in interior with some success.

- October 26. Returned to 'France.' Hamlin and Eyerdam have returned to the vessel and gone on to Tauro, leaving instructions for us to join them.
- October 29-30. Mayr and I broke camp and returned to ship.
- October 31. 'France' sails for Tauro-Choiseul Island.
- November 2. 'France' anchors Tauro. Hamlin and Eyerdam aboard with duffle.
- November 5. 'France' sails for Tulagi.
- November 16. 'France' anchors Tulagi harbor for slipping and repairs.
- November 25. Mayr, Eyerdam and self take passage on Government steamer 'Ranadi' for Kira Kira, San Cristoval Island.
- November 27-28. At Kira Kira.
- November 29-30. Enroute interior island. Established camp at village Huno-Galdaha approximately 1900 feet elevation.
- November 30-December 21. Collecting interior.
- December 22-23. Enroute Kira Kira.
- December 24-28. At Kira Kira. Some collecting.
- December 28. Mayr, Eyerdam and self to Santa Anna Island.
- December 29-31. Santa Anna Island. Some collecting.

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- January 1-8. At Santa Anna. Some collecting.
- January 9-11. Party aboard M/V Hygeia enroute Tulagi.
- January 11-23. At Tulagi aboard 'France' dispatching specimens making preparations for Malaita campaign.
- January 24. 'France' enroute Auki, Malaita.
- January 25-28. Anchored Auki. A little collecting.
- January 29. 'France' enroute Auki to Su'u, Malaita.
- January 30-February 16. Collecting Su'u and environs.

- February 17. 'France' Tulagi after overnight run from Su'u.
- February 17-24. Tulagi.
- February 24. Dr. Mayr leaves expedition to return to Germany.
- February 25. Anchored Su'u, Malaita after a night's run from Tulagi.
- February 25-March 1. Collecting at Su'u.
- March 2-13. Enroute Mount Torambusu interior of island.
Party comprising Hamlin, Eyerdam and self.
- March 13-20. Camped and collected top of Mount Torambusu, elevation 4000 feet.
- March 16. Hamlin leaves party to take vessel to Ulava and Gower Islands.
- March 20-30. Camped at Wanga fu fu short distance down the mountainside.
- March 30. Camp shifted to Aurola.
- April 1-16. Collecting at Aurola.
- April 11. Hamlin reaches camp.
- April 16-17. Enroute to 'France', anchored at Ulimburi.
- April 18-19. Aboard 'France' enroute to Tulagi.
- April 20-May 12. At Tulagi.
- May 13-16. 'France' enroute Rennell Island.
- May 16-June 2. Collecting Rennell Island.
- May 29. A trip was made to Bellona Island.
- June 2-5. 'France' enroute Tulagi.
- June 5-16. At Tulagi.
- June 16-23. 'France' enroute Samarai-Papua.
- June 23-August 14. At Samarai, Papua. 'France' undergoing repairs, etc.
- July 7. Capt. Burrell leaves vessel.
- July 16-August 2. Hamlin and Riddall collecting Missima Island.
- July 26. Capt. Lang joins ship.

August 5. Eyerdam leaves expedition.

August 8. Hamlin " " .

August 14-September 1. 'France' enroute Tulagi.

September 1-17. 'France' anchored Tulagi.

September 18. 'France' enroute Gower Island.

September 19-23. Collecting Gower Island.

September 24-25. 'France' at Roncador Reef.

September 26. 'France' enroute Ongtong Java.

September 27-October 10. Collecting Ongtong Java.

October 11-26. Enroute Ponape, Caroline Islands.

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1929

JOURNAL AND LETTERS

During the course of a visit to the American Museum of Natural History on April 23, 1929, at which time Mr. Walter J. Eyerdam and I were seeking assistance for a proposed collecting venture in East Siberia, Dr. Robert Cushman Murphy suggested to me that there were positions, as collectors, available with the Whitney South Sea Expedition then operating in Australian Papua and the British Solomon Islands Protectorate. If we were interested in this undertaking in lieu of East Siberia, he would place our names before the Whitney Committee and recommend us to those posts. Mr. Eyerdam and I readily consented to this change in our plans and were indeed pleased and surprised to learn later in Chicago by letter, that, at a meeting of the Committee on May 6, we had been accepted as members of the Expedition.

I was instructed, by letter, to let Mr. Eyerdam continue on to Seattle while I should return to New York to receive "one week of intensive training" before departing for the expedition. This I did.

May 21-31. In New York City, Dr. Murphy explained to me the object of the expedition, some of its history and relatively what would be required from the field in the future, vis. a thorough and conscientious

survey of all of the areas in which we were to work. Dr. Chapman and Dr. Sanford gave me such advice and suggestions as they deemed practicable, while Dr. Chapin schooled me in the preparation of specimens.

One week was hardly sufficient to assimilate all of the instructions and suggestions given me. Barely had I left the city before I began to think of scores of little problems I should have discussed with experienced men. There were petty irritations and worries which cropped up later, in the field, dealing with collecting and the preparation of specimens which had to be worked out by patient experimentation.

As time went on, in the field, I recalled these New York conversations and profited by them. A single remark of Dr. Sanford, "Coultas, learn to work the natives," became an obsession with me and proved to be one of the most helpful suggestions I received.

On May 31, I obtained the following contract and instructions from Dr. Murphy and departed for Seattle, Washington, to take passage to Sydney, Australia, and later the schooner 'France' of the Whitney Expedition.

May 31, 1929.

Dear Mr. Coultas:

In accordance with preliminary arrangements made between you and the Whitney South Sea Expedition Committee of the American Museum of Natural History, we pro-

pose to employ you and Mr. Walter Eyerdam for two years' field work in the South Pacific Ocean, commencing with the beginning of our fiscal period on August 1, 1929. You and Mr. Eyerdam are to be employed on equal terms, but the responsibility of leadership, which involves management of the Museum Schooner 'France' and direction of all undertakings in the field, is to be centered in you. You will doubtless find it advisable to delegate various duties in accordance with the tradition of the Expedition, which has been in the field for ten years. Thus the management of the vessel and crew will be under the immediate charge of the vessel's captain, who is in turn responsible to you.

The terms of employment involve the usual conditions of all permanent American Museum employees as regards pension, insurance, and employers' liability. If you should become incapacitated through ill health, accident, or otherwise, from carrying on the work for which this appointment has been made, the Committee agrees to pay you two months' salary from the date on which you are incapacitated and the equivalent of your personal traveling and living expenses from the field to the United States. In the event of accident, you will receive, furthermore, the full protection of the New York State Compensation Act. In view of these provisions, it is agreed that you will release the Museum and the Expedition from any further liability due to accident or ill health, which might necessitate the termination of your services.

We shall defray all necessary living and travelling expenses of you and Mr. Eyerdam from the date of sailing until your return at minimum first-class rates to the United States. We shall also supply all essential equipment for your field work and defray the costs added to your living expenses between the date of your return from Chicago and the date of sailing, which we understand will be by the Canadian Pacific Steamship NIAGARA, leaving Vancouver on June 26, 1929. The salary of yourself and Mr. Eyerdam will be at the rate of \$50 per month each from August 1 to December 31, 1929, and \$100 per month each thereafter.

Mr. Hannibal Hamlin, the present field leader of the Whitney Expedition, will be notified by cable of your arrival at Sydney on July 22, and will be asked to communicate with you by cable or wireless, so that you may carry out any business he wishes done at Sydney and join him with the least possible delay. Steamship transportation is available at short intervals between Sydney and Noumea, Samarai, Rabaul, and other ports of call of the Schooner 'France.' You are to report to Mr. Hamlin in accordance with his instructions, and put yourself under his leadership until such time as he relinquishes the command to you and leaves for the United States which, we anticipate, will be on or before September 1, 1929. Before his departure Mr. Hamlin will arrange to transfer

the entire responsibility to you, including the Museum's financial credit with the Bank of New South Wales, the agencies of Burns Philp & Co., and other local organizations.

From Mr. Hamlin you can learn more fully than has been possible here of the recent field work of the 'France,' the feasibility of beginning operations in especially desirable fields, and the necessary steps required by the various governmental, mandate, or local authorities. I may say that our first wishes are to complete work among the Solomon Islands, of which the most important remaining locality is the large island of Malaita, which has never been visited by naturalists. We wish to have Malaita worked as thoroughly as possible, including particularly the highlands. The island has, however, been previously avoided because of hostile natives, and you are to undertake no operations there without the full authority and protection of the government representatives. The same applies, naturally, to any other field.

After completion of work in the Solomons, we think that New Caledonia, which is also a very large and important island, should be an early objective, particularly since deforestation is now reported to be proceeding there at a rapid rate. New Caledonia is under French control, but we think that an approach through the local authorities, including the managers of the mineral and

agricultural undertakings, is more feasible than one through ordinary diplomatic channels. Mr. Hamlin will have visited Noumea, the principal port of New Caledonia, before your arrival, and he can doubtless advise you. There remain in the New Guinea region the islands of New Britain, New Ireland, and the Admiralties, but the question of working these and of proceeding northward into the Japanese Mandate islands may be left for future consideration.

You already know that the primary object of the Expedition is the collection of bird life and that we wish to have every locality worked as thoroughly as possible, so as to obtain examples of the entire avifauna in full series. We wish to acquire specimens sufficient not only for the study collection of the American Museum and the exhibits in our new building, which is to be devoted mainly to island and oceanic bird life, but also duplicate material suitable for exchange with other institutions throughout the world. At the same time, we wish you to make your investigations as broad as is consistent with conscientious ornithological work, and all other zoological specimens will be welcome. In particular we are agreeable to Mr. Eyerdam's plan that he collect mollusks as opportunity offers, and if he finds it possible to make subsequent studies in this field which will supplement the systematic and distributional work in ornithology, he may be assured of our enthusiastic encouragement and cooperation. We understand that Mr.

Eyderdam possesses an extensive personal collection of shells of the world, and the Committee will gladly accede to his request to obtain subsequently a duplicate series of Whitney Expedition mollusks in exchange for his material from other regions. This may be left to future arrangement, with the assurance that the Committee will take a generous and cooperative attitude. It is understood, however, that all collections of whatever nature, as well as photographs, notes, and all other records are to come to the American Museum and to be the property of this institution. As regards the personal use of such records and photographs, you may be assured that the usual privileges extended by the Museum will hold. It has always been our wish to have naturalists connected with the institution make use of their experiences in ways that are beneficial to themselves, provided only they are likewise creditable to science and education. Nothing is to be published without the express approval of the Whitney Expedition Committee.

I must call your attention particularly to the need of economy and efficiency in carrying out your work. Our appropriation is barely sufficient for conducting such extensive operations, and at the present time we have fallen seriously behind, owing to the heavy expense of rehabilitating our vessel. The Schooner is now in first class condition, with a new Diesel engine

and many improvements which have made life on board more comfortable. Mr. Hamlin reports that the engineer and the two best trained Polyhesian collectors have agreed to remain for another year. The same is probably true of the captain, who is a gentleman and a good companion, as well as a man of long experience in the Melanesian region. Everything points, therefore, toward an auspicious beginning for your enterprise. We know of no finer opportunity for two well prepared young men of your apparent spirit and determination, and we fully believe that you can make it the beginning of a career to your liking. As regards your own ornithological work, it is our hope that you will continue after the conclusion of the field experience, and you may count upon all facilities, including such direction as I can give, in reporting upon special problems, perhaps in connection with future university work.

Since it is to our mutual advantage for you to keep as closely as possible in touch with the Museum, I request that you report by letter regularly every two weeks, as nearly as possible, even if your communications are very brief. The field notes made by you and Mr. Eyerdam should likewise be sent in frequently by registered mail, so that they may be copied promptly. These will further serve to keep us in close touch with the progress of the work. The original manuscripts will be preserved and returned subsequently to the writers. It

is especially important that you notify us frequently of the movements of the vessel and of all periods in port, because in this way we are sometimes enabled to obtain rebates on our insurance premiums. The policies are held at the Museum and any matter calling for adjustment, repairs to the vessel, etc., should be reported by cable, addressed merely to "Museology," New York.

You will, I am sure, remember your heavy responsibility to the Museum, and to the American flag, under which the Schooner 'France' is registered. Your tact and courtesy in dealing with government authorities and private individuals will not only determine in large measure the immediate success of your field work, but also have a far-reaching effect upon the attitude taken toward scientific investigators from the United States. You will be working as a guest in foreign territories, a relationship which must never be forgotten by any member of your force.

With our best wishes for a campaign which may equal or excel the high standard of the past, I am

Sincerely yours,

(Signed) Robert Cushman Murphy

I hereby accept the terms of the foregoing letter.

(Signed) William F. Coultas

June 14-26. Two weeks in Seattle gave Mr. Eyerdam and me sufficient time to assemble all of our gear and effects. Our instructions were to take only the bare necessities as everything required in our work would be found on the Schooner 'France' when we arrived. Like most other people, though, we accumulated far more of odds and ends than we had need for later on.

Eyerdam had made, for his conchological work, a long heavy cone-shaped dredge and two small flat-topped dredges which he hoped to use in dragging the bottoms of harbors. His idea being to fasten a long line to each of these, carry them in an open boat to the center of a harbor, where the 'France' was anchored, drop them overboard and later, with the use of the windlass aboard the vessel pull the dredges to the ship and thereby obtain examples of the marine life from the bottoms of harbors.

We had made, also, a number of wooden boxes in dimensions of 4' x 2' x 2' which were cut to uniform size, knocked down and crated into small compact bundles. These were to be assembled later as cases and used in the field for shipping specimens to the Museum. The general idea was a good one. We found many uses for these cases aboard the ship. In the future, though, I should prefer to wait until I reached some port or settlement near the field of operations and there have a reliable carpenter make up a number of uniform cases all tin-lined,--ready to be soldered after the specimens are in the case.

Ornithological specimens which are to be shipped from South Sea Islands should all be placed in water-tight, unlined cases.

Several communications reached me in Seattle, from Dr. Murphy in New York. I was pleased to learn that Dr. Ernst Mayr, then working in New Guinea, would join us aboard the Schooner 'France.' Likewise a copy of the minutes of the meeting of the Whitney Committee of June 6 was forwarded, which urged the completion of the Solomon Islands and, particularly, the relatively unknown island of Malaita as the first and most important objective of the expedition.

On June 26, after cabling Dr. Murphy of our departure, Mr. Eyerdam and I sailed from Vancouver, B. C., aboard the Canadian-Australian Steamship NIAGARA, for Sydney, Australia, via Honolulu, Suva, Fiji, and Auckland, N. Z. In Sydney, we were to get in touch with Mr. Hannibal Hamlin, the leader of the Expedition, and ascertain where we might join him.

June 26-July 20. Aboard the S. S. NIAGARA. On July 9, I received a radio from Hamlin, advising me to "report to Jack Sharp of Burns Philp & Co. for instructions."

July 20-27. Sydney, Australia. A radio and letter from Hamlin were received upon our arrival in Sydney. He advised us to join him at Faisi in the Solomon Islands. The closest we could come to that was

Kieta on Bougainville Island. I informed him by radio accordingly, also reported our arrival in Sydney, to the Museum, by letter. Made a number of purchases for Hamlin as instructed. Obtained passage aboard the S. S. MARSINA, Burns Philp S. S. Co., for Kieta, Bougainville Island.

July 28-August 17. Aboard the S. S. MARSINA, enroute Sydney, Australia, to Kieta, Bougainville Island, via Brisbane, Samarai, Rabaul, Kavieng, Witu, Salamua, Sorikan and Numa-Numa, a roundabout course, but the quickest available. On August 15, we found the Schooner 'France', with Hamlin and Mayr on board, anchored in the harbor at Sorikan, Bougainville Island, where they had put in with engine trouble. Because of customs regulations on our freight and baggage, we all agreed that it would be better for Eyerdam and me to go on to Kieta and await the arrival of the 'France' there, a few days hence.

August 17. Disembarked from S. S. MARSINA at Kieta, Bougainville Island, Mandated Territory New Guinea. Mr. Eyerdam and I took up quarters in a copra shed belonging to Mr. Tom Ebery. We arranged later, by compromise, to take our meals with him also. Informed the Museum by letter of our arrival at destination.

August 17-29. Mr. Eyerdam and I, not having bird collecting equipment, spent our time gathering conchological material of all kinds. We obtained some 250 pounds of shells representing about 200 species of which

Eyerdam thinks about 20 are new forms. All of these shells were collected in Kieta harbor, either on the reefs or along the sandy beaches. Wednesday, August 28. Hamlin arrived in Kieta, having come down from Numa-Numa by canoe and road. He appears badly disturbed over the engine and propeller, which must be repaired before they can be used again. I believe that Mr. Izod, the engineer who installed this engine in the 'France' in Samarai, neglected to secure the propeller to the shaft with a locking nut before the 'France' was returned to the water from the slip. As a consequence, the tail shaft is out of alignment and the main bearings of the engine worn badly.

As matters now stand, the vessel must be sailed to a slip-way where it can be pulled up and repairs conducted. Hamlin does not care to return to Samarai, but is cabling Rabaul and Tulagi, asking prices on the slipping job.

August 29 (Thursday). Kieta. With Eyerdam for shells in the morning. At 3 P. M. the Schooner 'France' arrived with Dr. Mayr and Robert Crookshank, Commander R. N. (the captain) aboard. Dr. Mayr down with a dose of fever. Hamlin assured us that, since he must await replies to his cables, we would have plenty of time to tidy up the ship before embarking our effects.

August 30 (Friday). Kieta. There are now

four members of Beck's old Polynesian crew aboard the 'France.' Teora, temporary engineer, David and Charley, sailor and bird skimmers, and Manuel, the boatswain of the ship. These men came ashore this morning and embarked our heavy stores which they arranged in the hold. Eyerdam and I along the sand beach for shells.

August 31 (Saturday). Kieta. Hamlin received a satisfactory reply from Chang Chang slip-master at Tulagi, advising that the 'France' could be slipped if the tide were suitable. There is no reply from the New York cable. Hamlin is without funds. Eyerdam and I brought only enough money to enable us to reach our destination. The cabin boys were engaged cleaning out bunk space for Eyerdam and myself while the crew were employed repairing stay sail and fitting new foot ropes to foresail and mainsail. It will be necessary to nurse our old sails along now that we must depend upon them entirely for our transportation. Eyerdam for shells. Myself aboard ship. Dr. Mayr much better. He deplores the lack of reading material in this part of the world, as do all of us. He also asked me to send a note to the Museum requesting more scientific publications covering the area in which we are working. This I did.

September 1 (Sunday). Kieta. No radios to-day. Crew engaged embarking our stores, much against their wishes. Eyerdam and I ashore for shells. We extended our range away from the beach and visited small fresh water streams and mangrove swamps.

September 2 (Monday). Kieta. Hamlin was engaged with customs and health clearances, purchases at Tom Ebery's stores and sundries. I can see right now that a small task with the Government, such as a clearance for a ship, that would ordinarily require an hour, can and does consume a day's time. I am sure that, were we to attempt bird collecting in this spare time, we would waste a week obtaining permits. Eyerdam and I did, though, comb the beaches again for shells and have, as a result, five Benzine cases of material from this locality.

September 2 (Tuesday). Kieta. Hamlin ashore with Government affairs. He has decided not to wait for a reply from New York but will have that forwarded to him at Tulagi, Solomon Islands. Crew watering ship.

At 2 P. M., Mr. Tom Ebery came alongside the 'France' with his little ketch, 'Saucy Polly,' and towed our vessel out of the harbor. We are forced to tack back and forth inside a long reef against a S/E breeze. Enroute Faisi, Solomon Islands.

September 4 (Wednesday). September 5 (Thursday) (At sea). Slow progress southeasterly direction against light and variable winds accompanied by occasional rain squalls. A few terns and a Sula leucogaster were collected at sea. No petrels, though one example of what we took to be Pterodroma becki was sighted just at dusk on the night of the fifth.

September 6 (Friday). Faisi. Vessel anchored in Faisi harbor, British Solomon Islands, at 6 A. M. Mr.

Miller, the district officer off to clear ship. He reports that the S. S. MATARAM will arrive Sunday. Hamlin is expecting ship's supplies from W. S. Tait and Co., Sydney. All of us at work skinning sea birds. I am astounded at the speed with which Hamlin and the Polynesians skin and prepare their specimens. To see Hamlin or Teora remove the skin from a tern and make it up into a bird-skin in eight or ten minutes is almost too much for me.

I have been trained in the slow, careful laboratory methods which do not attempt quick work. My first task will be to learn speed. Eyerdam will have to wait until he finds easy specimens before he begins work. Dr. Mayr is in a class with me, slow in his methods.

September 7 (Saturday). Faisi. No collecting. Eyerdam got out his long cone-shaped dredge, attached a rope to it, lowered it into the long boat and carried the thing about 20 yards astern of the 'France' and dropped the dredge into 17 fathoms of water. He returned to the vessel, attached the rope end to the windlass and began winding. At the first taught pull the rope parted and Eyerdam lost his deep sea dredge. It is just as well that he did for Eyerdam will now have to delegate some of his interest to bird collecting and skinning.

September 8 (Sunday). Faisi. S. S. MATARAM in port at 9 A. M. A radio from Dr. Chapman to Hamlin advising the dispatch by cable of \$1500.00. Eyerdam and I along the reefs for shells. In the evening, the ship's

complement went aboard the MATARAM for dinner. This is the accepted custom among island people--to go aboard every over-seas vessel (once every 6 weeks) for a meal of fresh vegetables, cold storage meat and cold beer.

September 9 (Monday). Faisi. Eyerdam and I engaged packing the specimens obtained by Mayr and Hamlin on Nissan or Sir Charles Hardy Island. Got them all into one case and aboard the MATARAM for shipment to New York via Sydney (the only route available).

Hamlin and Mayr engaged with correspondence. Myself one letter to Dr. Murphy explaining our movements. Crew engaged cutting firewood and fresh water, are the most important requisites aboard ship and oftentimes the most difficult to obtain. Every opportunity should be seized to replenish the supply aboard.

September 10 (Tuesday). Faisi. Hamlin has learned that the cargo, which he ordered transhipped from Tulagi to Faisi on the MATARAM, did not arrive with the vessel though he has received the bills of lading for the same. Burns Philp and CO.'s store manager has advised him that possibly the cargo will arrive on board the H. M. S. 'Ranadi' due in Faisi on September 13, or perhaps at a later date on the little schooner 'Myopa' belonging to Burns Philp and Co.

Hamlin has, in the past, enacted quite a saving by purchasing provender and ship's supplies through W. S. Tait and Co., Sydney, who will deliver such staple articles much more cheaply than the island firms do. Unfortunately,

for this arrangement, the Sydney purchases must be carried to the islands in Burns Philp's ships, who are competitors of W. S. Tait and Co. Quite naturally Burns Philp and Co. do delay such shipments and otherwise impede the delivery of Sydney cargo.

This is the problem confronting Hamlin at the moment. He does not have funds to duplicate his Sydney order, nor would he care to with several months' supply of commestibles somewhere in the group. He has decided to await the arrival of the 'Ranadi,' though he has no radio facilities at hand with which to check up on the vessel.

Three natives, two from Malaita Island and one from San Cristoval Island who have finished their contracts on a neighboring cocoanut plantation, came on board and asked permission to work their way back to Tulagi. This was a piece of good fortune as we will require extra hands to help handle the ship in the long beat to windward to reach Tulagi.

Hamlin went ashore to the Io Fung plantation for birds. Eyerdam and Mayr along the reef for shells.

I am afraid I incurred the displeasure of Hamlin by purchasing nails, saws, hammer, brace and bits to make bookracks, chests of drawers and benches in the cabin as well as a series of bird racks in the main hold.

I don't think the bird skins should be left exposed to cockroaches, etc. in the main hold, though I must admit that bird skins kept inside a cotton gauze enclosure

do not dry out as quickly as those left out in the open.

September 11 (Wednesday). Faisi. Hamlin and Mayr collecting sea birds. The harbor and environs are so surrounded with mangrove swamp that a penetration into the interior is an almost impossible feat. What little dry land there is, is taken up with buildings or cocoanut plantations. Eyerdam ashore for his blessed shells again. He certainly is a shell collector; no one can dispute that fact. Myself aboard ship making bird drying racks in the hold.

The crew employed scraping woodwork, the decks, and the masts with bits of broken glass. I, personally, deplore the idea of scraping masts or deck of a wooden ship. The scraping was Beck's original idea and has been carried on ever since. It is well enough to oil decks and masts but never scrape them.

All of us at work skinning birds to-night.

September 12 (Thursday). Faisi. Hamlin, Mayr and Eyerdam away at daylight in a pinnace to collect birds. They returned rather late, hungry, wet and tired, but with a good bag of material. We work very late working up the specimens.

September 13 (Friday). Faisi. Captain Crookshank and I to Sariga Island along with Charley and David for birds. The H. M. S. 'Ranadi' arrived in port without Hamlin's supplies. This puts us in a rather awkward position. What are we to do without supplies? Hamlin has concluded to purchase a few absolute necessities and sail

over to Choiseul Island to work there a short time in quest of Microgoura meeki before continuing on down to Tulagi. Mayr and I suggested that perhaps it would be better for him to drop us with Eyerdam somewhere along the coast and continue on with the ship to Tulagi while we were engaged in collecting. Hamlin contended that it was not practical to split up the party when we were dependent upon sail power only and now in the season of light and variable winds.

September 14 (Saturday). Faisi. Hamlin ashore to purchase as many stores as he had funds for. Hove up the anchor at noon and departed for Choiseul Bay at the north end of Choiseul Island, with the wind abeam.

September 15 (Sunday). Choiseul Bay. Anchored at the northern end of the bay at 3 P. M. Teora and I ashore for birds. Much to the amusement of Hamlin and the chagrin of Mayr, we brought back a beautiful collection of the most common material on the island, to wit: sun birds (Cinnyris), starlings (Aplonis), beach kingfishers (Halcyon saurophaga), megapodes (Megapodius), and pigeons (Ducula rubricera). This is a good average contribution for one's first trip ashore. The more desirable material is acquired after one becomes better acquainted with the area in which he is working.

September 16 (Monday). Choiseul Bay. Hamlin explained the nature of his return visit to Choiseul Island, the capture of Microgoura meeki and Turdus choiseuli.

neither of which Beck's party obtained on their visit to this island in November 1927. There is other good material on the island to be collected as well.

Seven hunters ashore from the ship at 7 A.M.-- Hamlin, Mayr, Eyerdam, Teora, Charley, David and myself. We rowed a mile and a half to the small village of Poro Poro at the extreme north end of Choiseul Bay. There three more single barrel twenty-gauge guns were given to the most intelligent-looking natives in the village, with instructions to them to collect the microgoura, hawks, rails, pittas, owls, bush kingfishers, etc. Guides were also obtained for the white complement.

We all agreed to return to the village at 5 P.M. to take the boats to the ship. Lunch was provided for all of us in the form of two ship's biscuits and a tin of sardines each. This is an old standard ration dating back to the days of Beck's leadership.

After questioning the natives regarding trails, likely hunting areas, native gardens, swamps, etc., each of us took off in a different direction for the day's work.

I drew a native named Misacki for a guide, who had worked in Tulagi previously, and who retained a fair knowledge of the English language. He was very patient with me, a new comer, who knew scarcely one word of this South Sea jargon that is used exclusively in these islands. We communicated our ideas by signs, grunts, and a few scattered words. Before the day was over, I discovered that my new vocabulary was increasing in size, though it

will take me months to become proficient in this new tongue.

Misacki, the guide, took me through the secondary bush, and native gardens near the village, thence on into the interior of the island where we found some true forest and great areas of mangrove swamps. If there was no path, he cut one through the underbrush with his long bush knife. Though I heard numbers of ducula, doves, crows, graucalus, and small birds calling in the trees and shrubs, I saw very few of them. Countless times my guide tried to point out some specimens to me. I could not locate it no matter how hard I strained my eyes. Misacki became disgusted with me. I became dreadfully discouraged before evening.

There is only one remedy for this plight, I must spend long hours in the bush in the future, until I learn to recognize the calls of birds, find their habitats, their movements, and their flights. Fortunately, for me, I have had a good training in North American ornithology in the field. This knowledge will be of use to me here.

The area around Choiseul Bay is composed of mangrove swamps, which cover large areas, some secondary bush and a like amount of true forest. The ground is of coralline formation with its accompanying heavy underbrush. Small streams and seepages are found in abundance. There are no hills or upland zones except to the south of Choiseul Bay and those are only a few hundred feet in

height. From Choiseul Bay one can walk seven or eight miles in an easterly direction, through lowland scrub and thickets, to the east coast of Choiseul Island. There are no hills or raised plateaus to the north and west of this bay as the maps would indicate.

The whole area of Choiseul Bay is sparsely populated. A cocoanut plantation, with a white overseer, Mr. Everett, and a line of 86 indentured natives, is located on the southeast side of the bay. Poro Poro, a native village of about a dozen houses and approximately 30 dirty, scraggly, Choiseul Island natives, is situated at the northern end of the bay. There are, to the best of my knowledge, no natives in the interior nor along the sea-coast for a distance of ten miles in any direction.

The northern end of the island is supposed to be almost devoid of natives. The whole of the population of Choiseul is dying out rapidly and what natives are left are to be found along the seacoast in the center and southern end of the island.

Missionaries have encouraged the natives to abandon their mountain homes and reside near the seacoast where the former can establish mission stations more easily. As a consequence, vast areas of the interior are devoid of all human life. Those individuals, who come down from the mountains or hills, oftentimes succumb to the heat and malaria along the seacoast. This is a sorry plight, indeed, and should be discouraged by the Government.

Choiseul Bay is one of the first known localities in the Solomon Islands, having been visited as early as 1768 by Bougainville in the course of his round-the-world voyage. Yet even at this date scarcely anything has been added to the brief knowledge of the island itself. From a hydrographer's standpoint the coast line of Choiseul is marked off in a series of dots and dashes with no definite areas or harbors located except the aforesaid mentioned bay.

It is true that there are a few local mangrove navigators throughout the group who can pilot small pinnaces and power boats along the coast in the daytime though none of them ever try it at night. Without local knowledge of the reefs and areas, it is a risky business piloting the 'France' through this area under sail only. I presume Hamlin took these matters into consideration when he chose Choiseul Bay as an anchorage for the vessel, although this place is not a satisfactory hunting-ground.

All of us returned to the ship at 5 P.M. with a moderate number of birds. Enroute to the ship I rode in a Choiseul canoe without an outrigger. They are not difficult to handle when one learns to paddle continuous, as one must do, to keep from capsizing. These dugouts without outriggers are similar to our American birch bark canoes but far more treacherous. There are advantages in learning to handle a native canoe; one can get to places where the average ship's boat cannot penetrate.

Aboard ship, and all of us into the main hold to work. The complement of the 'France' has always used the hold in preference to the deck in skinning specimens. The hold has its disadvantages in that it is hot and stuffy, especially at night with a gasolene lamp burning and seven or eight men working. Had a system of ventilation been worked out with ventilators forward near the windlass, some of this discomfort could have been overcome. Work is carried on at a long table rigged fore and aft of the ship with all of our gear, cotton, bamboos, corn meal, and wrap cotton near at hand. The arrangement is neat and compact and tends toward speed and good workmanship at the expense of discomfort.

On deck, skinning has its disadvantages. The breeze or wind is very apt to blow the feathers of a specimen about and get them messy, while one is working. This does slow down the work. As there is not room enough for the long table on the deck, each preparator must carry all of his gear with him or walk back and forth to the main supply. Time is lost here also. There is always the danger of rain squalls which no amount of canvas awnings can keep from wetting the specimens exposed. About the only advantage in the latter method is the comfort derived.

Hamlin was very discouraged with the first day's collecting at Choiseul Bay. The quantity was there but not the quality. When Mr. Everett of the plantation came for dinner, Hamlin made up his mind to go with one of the former's Chinese engineers, per gas boat, to the other

side of the island and there look for Microgoura meeki.

September 17 (Tuesday). Choiseul Bay. Hamlin, with Charles and David, departed at 9 A.M. for Senga down the coast. They obtained passage on a small pinnace that is going that way to collect Trochus shell and copra. Mayr, Eyerdam and I will carry on here until such time as Hamlin and party return. The three of us ashore hunting after Hamlin's departure. Our bag for the day showed no startling results. Eyerdam is learning to remove the skins of specimens but takes to it very slowly.

September 18 (Wednesday). Choiseul Bay. Mayr, Eyerdam and I, with Teora and Manuel up the Mulamabuli River to the south, as far as the rapids, in the ship's boat. We returned to the ship at dusk without Manuel, thinking he had gone home another way. Later, about 7:30 P.M., we heard the reports of his shotgun and returned for him. Manuel, supposedly, had shot a wild pig and wounded it; at the same time a companion to the wounded one charged him and drove Manuel up a tree. There he remained until Teora found him. I might add that it was not until after dark that we could hear the sound of Manuel's shots (two of them at a time, agreed upon, to attract attention).

September 19 (Thursday). Choiseul Bay. Mayr with Teora and Jack (San Cristoval) departed in the small boat for the highlands south and east of Choiseul Bay, there to establish a camp and remain several days. Eyerdam and two local natives ashore for specimens, myself aboard labelling skins. Our party returned early. We spent the

afternoon and evening preparing specimens.

September 20 (Friday). Choiseul Bay. Eyerdam in his bunk with fever. Myself ashore with Misacki and two other local natives. We tramped the bush faithfully, but with poor results. At work all evening on specimens. Considerable rain to-day. The Captain is able to do very little about the ship with only one sailor and two helpers. He keeps these busy at paint work and repairing sails.

September 21 (Saturday). Choiseul Bay. Eyerdam and I ashore hunting with natives. We were engaged in the same area with the same results. The natives did obtain a few desirable specimens. Mayr returned with his complement from the bush camp. He reports a wet trip and poor results. The birds, apparently, are not in that area.

September 22 (Sunday). Choiseul Bay. Mayr and Eyerdam to the reefs for shells. Myself into the bush for birds.

September 23 (Monday). Choiseul Bay. Mayr, Eyerdam and I ashore for birds. One of the native hunters returned with a splendid hawk which Mayr believes to be a specimen of Accipiter eichhorni. This addition to the collection gives us hope. We feel that, at last, the hunters are beginning to find material. Mayr has proven to be a great help to Eyerdam and me, both with bush lore and birds. To have someone with us who can identify material and direct the activities of the hunters is far more expedient than just trusting to luck. Natives have no sense of values as far as ornithological research is concerned.

They look upon one bird much the same as another, unless it be one whose feathers can be used for a tribal dance. In that case he will undoubtedly keep the bird for himself.

September 24 (Tuesday). Choiseul Bay. Mayr, Eyerdam, Teora and I ashore collecting. The ship's crew were employed cutting fire wood. The results for the day were encouraging. Teora obtained a beautiful example of Accipiter eichhorni. Mayr was able to identify the specimen without difficulty. The quantity of our day's bag kept us occupied until well after midnight.

September 25 (Wednesday). Choiseul Bay. All of us ashore hunting early. I returned to the ship at noon to help the Captain with some carpenter work. Our skipper is not a tradesman; he is a navigator.

September 26 (Thursday). Choiseul Bay. All of us ashore hunting with fair results. Eyerdam, whose "strength is as the strength of ten", managed to pull the head off an eagle (Cuncuma leucogaster) while trying to skin it; no mean feat. Eyerdam is slowly improving in his bird skinning. He will not be ready to make up specimens for many days yet.

September 27 (Friday). Choiseul Bay. The two Polynesian members of the crew and the three Solomon Islanders engaged in a free-for-all fight this morning before we could get on deck to stop them. Outside of a few

split lips and a couple of black eyes, no damage was done. Mixed crews of this kind will not cooperate.

We must dispose of either one or the other of them.

Mayr, Eyerdam and I ashore hunting with our local complement. We had a miserable time of it with rain and mist. A few good specimens were procured.

September 28 (Saturday). Choiseul Bay. All of us ashore hunting. A day of a continuous downpour of rain. Mayr and I, hunting together, took shelter in an old native lean-to in a garden area and spent our time there. Despite the deluge, we were able to obtain and make up eighteen specimens for the day.

We all feel, at the end of the week, that we are wasting time in this locality. The area does not harbor the desirable material that we should like. Hamlin should have taken one or more of us with him, for the sake of training, if for no other reason.

September 29 (Sunday). Choiseul Bay. All of the white complement to Mr. Everett's plantation for Sunday dinner. White men, who are stationed alone on outlying plantations, are lonesome individuals, who seize every occasion to foster acquaintanceship. Sometimes they overdo their hospitality to the detriment of their guests.

September 30 (Monday). Choiseul Bay. Rained all day. Mayr and Eyerdam to a small reef island near the ship where they procured a few examples of Monarcha inornatus and quantities of shells. Myself aboard ship

engaged in making another cockroach-proof bird rack in the hold.

Eyerdam has filled the ship with shells that he has not bothered to clean properly. The stench from them is terrible. The rest of us have complained bitterly about his carelessness but to no avail. From now on, if the material is not cleaned we shall throw it overboard. Another favorite trick of Eyerdam's is to bring a bag full of shells aboard with hermit crabs inside the hosts. At night we hear these crabs walking about the floor of the cabin dragging their homes after them, or, at times, listen to them dropping from beams and ledges where they have been crawling. The answer to all this is a cabin littered with shells; others drop down into crevices where the hermit crab dies and adds to the odor of other marine life in the forward hold. Little matters like these bring on ill-feeling and later quarrels. Heaven knows, there is enough of this cropping up on any vessel of this type where men live in a small confinement without much outside intercourse with others.

October 1 (Tuesday). Choiseul Bay. Mayr, Eyerdam and I hunting with our native assistants. Rain drove us in at noon. We managed to make up 21 skins for our effort. A visit from Mr. Everett. He is in distress. One or more of his natives have broken into his storerooms and have stolen trade goods and money to the extent of over \$300.00. He has asked us to help him, but we feel that

he had better go to Faisi and engage the services of the Government, whose business it is to attend to such matters. Mr. Everett spent the night with us. He is a little afraid of his line of boys, eighty-six of them, who are a few too many for one white man of his size and strength to handle.

October 2-4 (Wednesday-Friday). To Faisi and return. Mr. Everett has decided to go to Faisi, in his little pinnace, 'Aroma,' to seek Government aid. We, on board, held a conference and concluded to make use of this opportunity to obtain much needed supplies. We are about out of the essentials; rice, ship's biscuits, meats, sugar, etc., that we use every day. With the long beat to windward to Tulagi, we must have a goodly quantity aboard ship. I was elected to accompany Mr. Everett to obtain such of these comestibles as Burns Philp and Co. would credit me with.

Mr. Everett and I left Choiseul Bay at 7 A.M., reached Faisi, picked up our stores, Mr. Miller, the District officer, and returned to Choiseul Bay Friday evening 4 P.M.

Upon my return, I found the rest of the complement in open rebellion. Both Mayr and Eyerdam have been in the bush collecting. Hamlin has not returned, nor has word reached here from him. Crookshank, the Captain, is anxious to reach Tulagi and be with his wife. Mayr and Eyerdam are tired of the place. They informed me as soon as I came on board that they were going to take the ship

to Tulagi and let Hamlin catch the S.S. MATARAM, which calls at Choiseul Bay for copra on the 20th of the month. In this way, Hamlin would reach Tulagi ahead of us and make arrangements for the slipping of the 'France.' In the discussion that ensued, all agreed to wait one more day for Hamlin.

October 5 (Saturday). Choiseul Bay. Mayr, Eyerdam and I ashore for specimens; crew engaged watering ship and cutting firewood. In the evening dispatched letters to the Museum, packed up a few clothes, ammunition, and requisites for Hamlin to be left in care of Mr. Everett. A letter reached us from Hamlin at Lilio village, dated October 3. He advised us to procure supplies for the ship and make ready for the trip to Tulagi. He further stated that he would be gone another week at least.

I wrote Hamlin in turn, unwisely for it was not my original idea, that we were going on to Tulagi and were leaving clothing and supplies for him with Mr. Everett.

October 6 (Sunday). To sea.-- The 'France' put to sea at daylight. There was no breeze. We were forced to rely upon the outgoing tide to carry us out of the harbor. Mr. Everett came along with his pinnace and gave us a tow. Once clear of the reefs we drifted until 10 P.M. when a land breeze sprang up and carried us in a southerly direction.

Our stay at Choiseul Bay from September 16 to October 6 was not a profitable one. Something over a hundred forms were taken, but not nearly the quantity of

desirable material we should have obtained during the length of time we were engaged in the field. Looking over this period at a later date, I am afraid we were not as conscientious in our collecting as we could have been.

October 7-8 (Monday, Tuesday). At sea. Have found that ships rats have eaten through the cotton gauze around the bird racks and have destroyed the feet of a few specimens. This is the first intimation that we have these guests aboard the 'France.' I immediately set to work to replace the cotton gauze with copper wire screening. Several times, while the vessel was drifting, Eyerdam and I alternated with the ship's boat and chased after petrels, without success. Labeled all specimens in the hold.

October 9 (Wednesday). At sea. Hamlin, with Charley and David, in a big Choiseul war canoe caught up with the ship this morning. Hamlin was terribly upset by our action and ended up by dismissing the captain. He retired to his bunk soon after with a bad dose of gastric malaria. I am afraid he has had a hard trip. Myself down with fever for the first time.

October 10 (Thursday). Luti plantation. Hamlin has decided to put in at Luti plantation, which is abeam of us. There we will continue our search for Microgoura meeki and other material. Ship anchored off Luti at 12 noon. Mr. Berry of the plantation off to the ship to pay his respects and inquire of our business. He informed us

that we would find a beautiful, almost unknown harbor and perfect anchorage about 6 miles to the southeast of his place. His anchorage, off Luti plantation, is not a safe one in any kind of weather. P. M. Mayr and I ashore collecting. We found nothing but swamp area near the coast. Hamlin and I developed pictures at night with some success. We are using a Rhodinol solution in a tank developed. The process, which requires about 30 minutes, is too slow and causes the gelatin of some films to run. We are handicapped by the necessity of using water at 80° F. Worse luck for us. There is no other material or data at hand to work with.

October 11 (Friday). Sumbi anchorage. Mr. "Dutchy" Kleurck, an island trader, came alongside the 'France' in his vessel, during the night. Hamlin has concluded to split the party. He will take Eyerdam and David, go up the coast 20 miles with Kleurck to the village of Sasamunga and remain away 2 weeks. There, he will inspect a small black whale which has been washed up on the beach, retrieve the skeleton if possible, and continue on to Bambatani where he and party will establish camp and work the interior of the island. Captain Kleurck has arranged to take Hamlin and party up the coast, drop them, proceed to Gizo, where he will acquire additional stores for our ship, and return to Choiseul to meet Hamlin and return to the 'France' with him.

Mayr, Charley and I will outfit here and push into the interior to Mount Maitambi or Mount Gourdin, as it is called on the map, which is reported to have an elevation of 3000 feet and lie some 12 to 15 miles north-east of our anchorage. Hamlin and party got away at 8 A.M. The captain sailed the 'France' over to the new anchorage, which the natives call Sumbi. On the map of Choiseul Island, one can locate this spot on the south coast as lying just a little to the north and west of where the 157th Meridian cuts through the island.

Sumbi anchorage is a beautiful land-locked harbor, extending inland 3 or 4 miles. It is ideal for a ship but a devil's own spot for bird collecting. Sheer cliffs surround the harbor except at the eastern end where one finds a dense mangrove swamp. To reach the interior of the island, one must go out the mouth of the harbor and travel up or down the coast 5 or 6 miles before he finds the interior accessible. There are no natives living in the immediate vicinity either. The several curiosity-impelled natives, who did visit the vessel after our arrival, came from some distance. We urged those to return to their villages and procure carriers for our inland trip. After a reward of a few sticks of tobacco each, those same natives departed, promising faithfully to return the next afternoon with our 20 needed packers. How gullible we were.

October 12 (Saturday). Sumbi anchorage. Captain Crookshank has decided to make a chart of the harbor

for the Admiralty office. Mayr ashore in the afternoon to help him set stakes and flags along the reefs and beaches. Myself aboard packing materials for a three weeks' sojourn into the interior. We are terribly handicapped for lack of containers and gear for a prolonged stay in the bush. Neither Beck or Hamlin have paid much attention to bush camps and their requisites. They have worked almost entirely from the ship. Beck especially is credited with covering an astounding area in one day though returning to the ship at night.

Neither our "friends" nor the promised carriers showed up to-night. We are in a quandary.

October 13 (Sunday). To Luti plantation. Mayr and I with Charley loaded all of our effects into 2 ship's boats and pulled the long 6 miles over to Luti plantation where we will camp with Mr. Berry until such time as we can obtain carriers and get away to the interior. Berry promised to help us, but would not rent us his line of boys or even part of them, as he is expecting a copra boat within a few days and will need all of his staff to carry copra to the ship. A native mission boy, named Tamé, promised to help us to-morrow. This day, being the Sabbath, he could not engage in such worldly things as hunting carriers.

I managed to shoot a desirable hawk at sunset while looking for nighthawks (Caprimulgus).

October 14-16 (Monday-Wednesday). Luti plantation. These two days were spent scouring the vicinity of the Wuralata River for carriers. There were several isolated villages in the proximity of the river, each containing a number of boys. All of those interviewed were reluctant about helping. It was a most exasperating task attempting to induce people to undertake a project they have no interest in.

To my knowledge, these natives have never been called upon to pack cargo for a white man before. Tamé, the mission boy, talked himself hoarse, while Mayr worked himself into a rage.

Some collecting was accomplished during the three days. We used an old copra shed on the plantation as a base camp.

October 17 (Thursday). To mountain camp. Twelve small urchins showed up at daylight and announced that they had been sent, by their chief, to carry our duffle. Looking them over, we found not one able-bodied man among them. That is usually the manner of the native. The weaker ones do the work of the strong. Mayr and I ^{AS}resorted our gear and chose only the bare necessities. The rest of the stuff we left behind with Mr. Berry.

Rain began to fall shortly after we started and continued all day. We followed the course of the Wuralata River, crossing it numerous times, and made a scratch camp about 8 miles inland at dark. Our boys were

given a good feed of rice which I think held them for the night. They showed signs of bolting then and there.

October 18 (Friday). Mountain camp. Broke camp at daylight in the rain and followed up a low ridge about 4 miles to where a little mountain stream crossed the ridge. There the natives threw our packs down and refused to budge another inch. We were dumped as the saying goes. Fortunately we were near water.

We refused to pay the boys their shilling per day each until they had carried us further (we were still a good 8 miles from our objective). The natives were adamant. They complained of the weight of the packs, the rain, the cold and everything else. We compromised finally by giving them a feed of rice and no pay, if they would help us erect Mayr's tent and build for us a leaf house where Charley and I could sleep and cook our food. This they did in good time and departed for their villages.

There we were, in my first bush camp, with no help and every blessed thing wet from the two day's down-pour. Mayr's tent was a godsend. Without it we would have been sunk. My bedroll did keep our sleeping gear partially dry. The rest of our effects were soaked. Mayr and I both vowed we would never undertake another venture of this type without first procuring some sort of waterproof containers.

October 19 (Saturday). Mountain camp. Mayr and I collecting. Charley remained in camp to clear

bush, dig drains, cut firewood and add leaf to our house. We adopted a communistic form of camp, all of us helping with the cooking so that no one would be spared from the collecting and bird skinning.

October 20 (Sunday). Mount Gourdin. Mayr and I away at daylight to locate Mount Gourdin, which we ascended by noon. Our aneroid gave this highest peak on Choiseul an altitude of 2300 feet. Mayr concluded, after a survey, that there could be no mountain ornith at this elevation. He was right. Reached camp about 5 P.M. and worked specimens until dark. Since there is no light in camp, the rest must be prepared in the morning. Mayr and I found the area through which we traversed an average mountain forest with a sparse covering of underbrush. One could not call it dense, for we did work our way for long distances at a time without resorting to the uses of a bush knife to clear a trail. The soil on the ridges and mountain-side was comprised of sticky red clay with numerous outcroppings of chalky coral limestone. It could not be called a rich area by any means.

Another factor which we noted was the scarcity of birds' voices. Mayr has the idea, which I came to adopt later on, that birds frequent human habitations, native gardens and cleared area. One might contend that nesting species do not exercise their vocal organs in the true forest or elsewhere. This is quite true but

those not nesting do certainly make their presence known.

October 21 (Monday). Mountain camp. Mayr, Charley and I collecting. Mayr has been a great help in teaching me something of the bush and how to find one's way about without assistance. The average novice, when beginning his bush work, blazes boy Scout trails a yard wide that will soon confuse him in an area if he makes enough of them. I have been told that one will develop a bush sense in time and will require few if any markers. Until that time, Mayr encouraged me to leave footprints in soft earth and always break twigs of uniform bushes on my left side as I went along. In that manner, I could later on determine the length of time since I had been over this or that trail and the direction in which I had been going. Crosstrails are always confusing but this method helped to overcome this difficulty. Mayr's early advice was well grounded. I never became definitely lost in all of my time with the expedition.

October 22 (Tuesday). Mountain camp. A note arrived from Captain Crookshank, who has sent us two ship's boys. Hamlin and Eyerdam are expected Thursday or Friday. Crookshank laments the fact we are without help and has sent us all he has. We are now provided with a cook and helper. Those individuals were put to work immediately felling trees and clearing brush. By

night the sun had dried out our camp for the first time in our stay here. Mayr, Charley and I hunting, with some good results.

Mayr has located a skull house up the ridge. I went up and took a few photos. This is a small house with only four skulls. Probably belonged to a chief and his wives.

October 23 (Wednesday). Mountain camp. Shot an owl (Ninox). This was an event. Charley and natives gathered a large number of Gallip nuts for our larder.

October 24 (Thursday). Mountain camp. Mayr obtained an example of the desirous long-tailed pigeon (Turcoenas crassirostris). The bird flew right into camp. All of us collecting.

October 25 (Friday). Mountain camp. I have learned to imitate the call of the crow (Corvus). In the bush, I make a leaf blind, hurriedly get out of sight and call loudly for a few minutes. It isn't long until the trees in my vicinity are full of crows, all trying vainly to locate the source of the commotion and, at the same time, advertising their curiosity with lusty voices. These individuals attract other species. By this subterfuge I have added to our collection materially.

October 26 (Saturday). To the 'France.' Away to the ship at daylight with native Jackie (San Cristoval) to obtain much needed supplies, carry down our specimens and ascertain the whereabouts of Hamlin and Eyerdam.

Reached the ship at 5 P.M. only to learn that Hamlin and Eyerdam had visited the ship and gone on down the coast to Tauro, near Manning Straits. We are to join them within a few days.

Captain has painted the ship in our absence and has completed his chart of the harbor.

October 27 (Sunday). 'France,' Sumbi. Sorted and labeled specimens. Developed photos and packed a few supplies to last us several days.

October 28 (Monday). To mountain camp. Left the ship at daylight for the camp, with Teora and Jackie, in the small ship's dinghy. We pushed the boat about 4 miles up the Wuralata River and abandoned it, continued on foot with our duffle. At least, we will have the use of the boat part of the way to help bring our camping gear out of the mountain. Found Mayr in good spirits upon my return. He reports that he caught Charley and native John sitting under a tree feasting upon pigeons (Ducula) that they had shot. We have suspected them of this time-honored custom for some time. Unfortunately, there isn't much we can do about it except fine them and make them more cautious or else take their guns away from them. The latter is not propitious; we need Charley and he knows it.

October 29 (Tuesday). Mountain camp. Mayr and I concluded that, without assistants, we had best start our staff humping the cargo down to the ship immediately. They were advised to stop at the villages and try to obtain help on the way if possible. Mayr with John, the culprit, to carry his hunting coat and bush knife, ascended Mount Gourdin again to make doubly sure nothing had been overlooked. I collected near camp.

October 30 (Wednesday). To 'France.' Teora and co-hosts returned from the 'France' at daylight without additional carriers. We broke camp, proportioned the duffle, and started for the ship. I took charge of the specimens in Chapin's bird case, while Mayr carried his tent over his shoulders. Scarcely had we gone a mile before a heavy storm overtook us and flooded the river area. In a terrific downpour, tropical streams are known to rise 20 feet in an hour. We were forced to march through water up to our necks in depth. Mayr's tent soon became water-logged and developed into a staggering load. How the duffle all got through it is a mystery. Luckily, the specimens were kept dry.

Toward evening, as we passed through the village of Gima Gima, the natives rushed out, wringing their hands, and explaining in one breath, that if we had only told them of our intentions, they would have gladly come up to camp and assisted us. If by any chance, those boys understood profanity, I am convinced that they retained

an accurate conception of our lasting impression of them.

Reached the ship a little after dark.

October 31-November 2 (Thursday-Saturday). To Tauro. Sailed daylight, Thursday, arrived Tauro 3 P.M., Saturday. Our time on board spent in labeling specimens and drying gear. Mayr with a recurrence of fever.

Upon reaching Tauro, we sent the ship's boat ashore to find Hamlin and Eyerdam. They came on board at 8 P.M., reporting an unsuccessful search for Microgoura. Tauro, by the way, is reported to be the locality where Meek obtained his specimens.

November 3 (Sunday). Tauro. Hamlin and I developing pictures, assorting gear, etc.

November 4 (Monday). Tauro. Crew cutting firewood and watering ship. Hamlin has decided to leave David here to continue the search for Microgoura while we sail to Tulagi. Mr. Frankie Flannelmouth Hazelgreen, a recruiter, will take David to Gizo in time to catch the next mail boat. He will also dispatch letters to the Museum for us.

Eyerdam became hopelessly lost in the swamps to-day. This is not his first offense. He is a striking example of a man, who concentrates so thoroughly on the task at hand, that all surroundings become obliterated for the present and future.

November 5-16 (Tuesday-Saturday). To Tulagi. This period spent at sea enroute to Tulagi. Ourselves engaged variously: drying birds, labeling specimens, writing notes, erecting bird racks, and arguing with one

another.

Looking over the collections made in the Mount Gourdin area, I am convinced that Mayr and I should have produced better results. Seventy-six specimens of desirable (not well represented in Beck's collections), species were taken in ten collecting days. These were obtained under trying circumstances. There were no natives in the immediate vicinity nor others to help us about camp. I was making my debut to tropical camps and was more or less helpless. Though the lessons learned there started me on the way. Mayr, who was experienced, was lost without native cooperation. Lastly, our equipment was of a slap-dash composition.

Hamlin and Eyerdam, on the other hand, though not returning with quite the amount of material Mayr and I possessed, beat us hands down on the quality of desired species. They displayed some very fine contributions to our collections.

No end of controversies arose over the status of Microgoura meeki. Natives have insisted that numbers of domestic cats have been brought to the island from time to time, that these have gone wild, and, as a consequence, have destroyed the bird or else driven it into the interior.

There is also the probability that this species is one of local distribution, which restricts itself to

small definite localities where food is obtainable.

From future observations, I might surmise that this species could be similar to Reinwardtoenas browni of the Bismarck Archipelago. The latter feeds on small white and purple berries of a low tree which grows along rocky ledges near mountain streams.

Reinwardtoenas never varies his diet and, I am convinced, migrates many miles to procure food. One might spend a year ascertaining the habits of the bird, but once learned would have no difficulty in obtaining specimens.

There is no assurance either that one hunter having collected a particular species in a given area, another could return some years later and duplicate the procedure.

November 17 (Sunday). Tulagi. Crookshank brought the 'France' into Tulagi harbor at mid-night and anchored her at Ellis Cove, preparatory to slipping. Crew cleaned the ship and were granted a holiday. John and Fairbuttah (Malaita natives) dismissed from the vessel. Jack (San Cristoval) to remain. The white complement ashore to shake their sea legs and acquaint themselves with the local citizens.

November 18 (Monday). Tulagi. Captain Crookshank leaves the 'France.' William H. Burrell is enroute from Sydney to take command. This is my first intimation of this. Alfonso and Paulo, two small Malaita boys, who

have been acting in the capacity of ship's cook and cabin attendant will remain with us a few days, until others are found to replace them.

Hamlin ashore to interview Mister Chong, the shipwright and slip master, regarding the vessel. The 'France' is too large for the Chinaman's slip way. After some controversy, they agreed to pull the vessel up stern first in hopes that they could get her far enough out of the water to undertake repairs on the stern tube and propeller.

All hands occupied shifting niggerhead ballast and stores from the after part of the vessel to the bow. Toward the middle of the afternoon, the main hold being filled, began piling ballast on deck around the windlass.

November 19 (Tuesday). Tulagi. Here crew employed unshipping rudder which must be removed in this vessel while ship is still in the water. Oddly, the rudder trunk must be pushed down through the frame and not up. This inconvenience has brought on complications before. Sails were unbent and booms unshipped and stored in the main hold. Anchors and cables arranged as required preparatory to slipping vessel. At 5 P.M. an attempt was made to haul the vessel up, "on the hard," but failed, vessel drawing too much water aft.

November 20 (Wednesday). Tulagi. Montoro in at 6 A.M. with letters from the Museum. Captain Burrell to inspect the ship. Burrell, Crookshank, Capt. Saunders, Elder, Ellis, and others to render advice. All agreed

that the only way in which the vessel could be brought out of the water would be additional weight forward to force the stern farther out of the water.

Crew employed shifting more ballast forward around the windlass. This is very risky business. The vessel is becoming tender and top-heavy. 6 P.M., the stern of the vessel was drawn far enough out of the water to make repairs possible.

November 21 (Thursday). Captain Burrell takes command under a two-year contract. He is a man of seventy, with long years of experience in sailing ships behind him. At his advanced time in life, we find him irritable, liverish and exceedingly difficult to understand.

The 'France's' stern is now high and dry out of the water with tradesmen at work below. The position of the vessel is, indeed, a precarious one. The center of the keel is balanced on a coral ledge under the water, with the stern clear and the bow weighted down with store ballast. The heavy false keel, which Hamlin had fastened to the true keel a year or more ago, appears to be the only thing that is keeping the vessel from breaking her back.

Heavy lines and kedge anchors have run out forward of the ship, to keep her steady. The worst strain, of course, comes at low tide when the largest proportionate amount of the vessel is out of the water. All of us, including Hamlin, are a trifle uneasy over this arrangement.

This is the only method by which the 'France'

could be repaired in this port. Though the rest of us criticized Hamlin rather severely for this risk, it turned out that he was far shrewder than we were. Hamlin kept his ship centrally located in this group while the rest of us were collecting and furthermore was on hand when we were ready to begin operations on Malaita. Had he gone to Samarai or Rabaul, 500 or 600 miles away, in his present financial condition, it is doubtful whether Malaita would have been completed by the end of 1930.

November 22 (Friday). Tulagi. Arose to find that the strain on the vessel in her present condition had loosened the calking in the sides of the ship forward. Water had entered the main hold and flooded it. This necessitated the removal of all perishable material to the hulk of the old sailing ship 'Hawk' which was lying nearby.

One might ask why we didn't store our effects in a shed or house while the vessel was on the slip. Unfortunately, there was nothing of that nature available in the harbor.

All of Mayr's effects and notes from his New Guinea expedition, our personal things, clothing, sails, bird collecting material, shells, etc. were soaked. There was nothing to do but wash all of it in fresh water to remove the salt and hang the stuff in the sun to dry. We were disturbed over this adversity and asked ourselves why so many misfortunes should strike us all at once. John Ellis, Tulagi's sailmaker and philosopher summed up the

situation rather aptly, later on, by remarking, "such things are sent to try one, William."

November 23 (Saturday). Tulagi. Ship-wrights at work removing stern tube and repairing gland. Crew employed cleaning exposed copper normally under the water line.

It is necessary, with wooden vessels in tropical areas, to cover that portion of a ship's hull, which is under water, with either copper paint or a copper Munz metal preparation. This protection guards the hull of a ship against the action of the Teredo worm which attacks and bores into almost all kinds of wood.

Munz metal, though more expensive as an initial outlay, will often withstand 15 or 20 years of service before being replaced. While copper paint must be renewed every 6 months. To quote cash values: a \$2500 outlay will average 15 years' wear, while a \$100 job will only cover a period of 6 months.

When Beck reconditioned the 'France' in Suva Fiji in 1925 (?), he first of all put a heavy coat of tar over the lower hull of the ship, then nailed a layer of felt roofing over the tar. He then painted the roofing with another coat of tar and lastly nailed on his Munz metal. This process gave the 'France' a sound substantial under surface.

An examination of the hull while partially on the slip showed her to be sound and in good order below decks. Above, new rigging and more sails must be added

as soon as funds are available.

Mayr and I engaged drying effects, Eyerdam re-packing 19 benzine cases of shells which were taken to Burns Philp and Co's bulk store at Makambo to be stored for the present.

November 24 (Sunday). Tulagi. The Resident Commissioner of the Solomon Islands, Mr. F. N. Ashley, has granted Mayr, Eyerdam and me permission to travel on the H. M. S. 'Ranadi' (Government vessel), to San Cristoval while that vessel is engaged in visiting government outposts.

When Beck turned over the expedition to Hamlin in 1928, he left instructions for Hamlin to work the mountain area of San Cristoval if possible. Beck had previously worked only the lowlands of that island.

Hamlin seized this opportunity to place the rest of us in the field while he was engaged in Tulagi with the 'France.' He planned at this time to join us with the 'France' when the shipwrights and engineer had finished their work. The field party busy all day arranging equipment for a one-month sojourn in the mountains of San Cristoval.

November 25-27 (Monday-Wednesday). Enroute San Cristoval. Mayr, Eyerdam and I with native Jackie, a citizen of San Cristoval, sailed aboard the H.M.S. 'Ranadi' at 9 A.M. Monday. Kira, Kira, San Cristoval, the Government post was reached Wednesday afternoon at 4 P.M. Several calls were made enroute at Government

stations on Malaita and Ugi Islands.

While in Tulagi, some feeling cropped out among the personnel over the leadership of the expedition and what Hamlin intended to do. I felt, and stressed the point, that in as much as my contract with the Museum stated that I would take over when Hamlin left the field, I was reticent about assuming that rôle while Hamlin remained. I preferred to adopt a, "let nature take its course," attitude while I continued to feel my way along and acquaint myself with conditions in the field. I am afraid that this passive manner of mine was misconstrued, by others, as pig-headedness on my part though it was not intended that way.

The following letter to the Museum outlines, pretty well, conditions at the moment.

H. M. S. Ranadi.
Enroute San Cristobal

November 27th, 1929.

My dear Dr. Murphy:

The France, after many days at Choiseul Island, has at last reached Tulagi where the Chinese shipwright has succeeded in pulling her stern out of water to undertake repairs on the propeller shaft. This matter plus repairs on deck and on the engine, will take perhaps a month before their completion. I think it better that I leave these matters to Hamlin as he will cover them thoroughly

in his letters.

In the meantime, Dr. Mayr, Eyerdam and myself will collect in the highlands of Bauro (San Cristobal). The mountains of this island reach 4000 feet in height and have not been worked by this expedition here-to-fore. Hamlin plans to bring the France to Bauro upon its completion, meet us, and proceed to Malaita.

Rennell, Malaita and several small islands are all that remain of the Solomon Group. It is hoped that we can complete all of these by March 1st, 1930. Following the Solomons, Hamlin and Mayr both urge the Carolines as the next objective. They point out that that group is much more important but I remember that my instructions from you state specifically that New Caledonia should be worked after the Solomons. Hamlin has cabled you regarding this matter before this.

Mayr and Hamlin both think that a separate expedition should be sent to New Caledonia but I insist that if that Group is not worked now it probably never will be. Two months if but a short time in the life of a venture of this size.

Hamlin is quite right in feeling that the France cannot last forever. It should cover the most important ground first. The schooner was built of soft wood and that alone is dangerous in the tropics. Further-more, though it is such an easy matter to cast stones at Mr. Beck, that gentleman ran the vessel for all it was worth without a

thought of the future. Consequently Mr. Hamlin has spent much time and money on repairs the past two years.

The France is not primarily a boat fitted for expedition work. It was built to be a copra carrier, and, while it contains space and bulk, it does not support adequate facilities for the comfort of the personnel. How much better it would have been had Mr. Beck centered his attentions upon a lugger of some kind.

At present the maintenance of the schooner quickly eats up the stipend allotted to the expedition and does not permit funds for repairs or adjustments. The engine too is hardly large enough for the vessel. Though it can be considered a fair engine it is an intricate one and must be handled carefully. The element of luck must be relied upon when dealing with this machine, for it can run smoothly for a long period of time or it could be in the repair shop all of the time. Engineers in this part of the world are not registered in Class "A."

I am not discouraged about the outlook but I do feel that you should plan upon spending a short time with the expedition in the future that you might acquaint yourself with the working end of the venture. The element of time that lapses between communications tends toward laxity at both ends of the organization, it cannot help it. Just so, I feel that you should have actual acquaintance with us in the field.

Mr. Hamlin has signified his intention of turning

the expedition over to me as soon as the vessel is repaired. He also wishes to remain with the vessel if we go to the Carolines next. I realize only too well the possibilities of friction if a former leader turns the reigns over to some one else and continues with the venture. I must say frankly that I am not very enthusiastic about such a move.

Dr. Mayr and Mr. Eyerdam are both quite enthusiastic about the expedition. The latter, Mr. Eyerdam, has collected well over a thousand pounds of shells and has them stored at Tulagi. He requests that you ask Dr. Minor whether the shells are to be sent to New York or to Dr. Iredale at Sydney Australia. Dr. Iredale at Sydney will gladly identify the shells for one series of the same. Also the Sydney Museum has consented to store the shells for the expedition if Dr. Minor would care to have them assembled there. We will do nothing with these until we have a communication from you or Dr. Minor. As you will remember, I explained that Mr. Eyerdam spent some time with Dr. Iredale while we were in Sydney last July.

There are several items that we would appreciate from New York. First of all the double barrel twenty gauge shot guns are about worn out. Daily use tends to bring deterioration quickly. I wish you would forward three or four double barrel twenty gauge shot guns with a half dozen auxilliary tubes. The shot guns should be hammer guns because the hammerless ones are of too intricate a mechanism

for the tropics and besides are dangerous when the safety refuses to function.

I must stress again the need of publications for our work here. Whether we go either to the Carolines or New Caledonia we should have publications of the avifauna of the regions. If you cannot furnish books or pamphlets please let us have lists and descriptions. Furthermore do send us descriptions of the rare forms that you desire.

Enclosed you will find a descriptive sheet for field notes on birds. I wish you would please have a few hundred of these printed for the expedition. The average notebook is too small for notes and I do not like to tie a good label on a fresh bird. Much better to write out the good label at some convenient time and give legible data.

One further note of a personal nature. The tropics do retard ones mental processes and besides I never could learn to spell properly. So please make allowances for the ramblings in my letters.

Best wishes,

November 28 (Thursday). Kira Kira. Mr. F. M. Campbell, the acting district officer of San Cristoval, stationed here at Kira Kira has graciously invited our party to live with him at his Government station while we are making preparations for the journey into the interior.

Mr. Campbell, who has been a patrol officer, recruiter, district officer and plantation owner in the eastern Solomons for a period of 20 years (1929), is perhaps better acquainted with the interior of San Cristoval than any other white man living or dead.

We explained our mission to him, an ornithological survey of the highest altitudes of the island. Our host forthwith drew a map of that portion of the interior which would include the mountains required, marked off the location of the villages we would encounter there and dispatched police boys into the interior to round up carriers for us. A procedure that required about one hour in time. What a contrast this was to Mayr's and my experience on Choiseul Island.

Our party spent the day near the station making a collection of lowland material that we might familiarize ourselves with that ornis before proceeding into the mountains. The area around the station was rather poor, mostly secondary bush with little or no true forest.

November 29 (Friday). To Do Ra Ra. Away with 15 carriers at 7 A.M. We crossed an 800-foot watershed almost immediately. Then followed along a plateau to

the village of Rama Rama Bea where we had lunch and gave our carriers a feed of rice. Following this, all of us descended another ridge to the Ravo River which is the largest in this part of the island. This river has its source in southern side of the island where, contrary to the maps, the highest reaches are found. It flows in a northerly direction to Wanoni Bay, which is east of our starting point. Our party followed the course of the Ravo River all afternoon and camped at night at the village of Do Ra Ra which was situated on a ridge some 400 feet above the bed of the river.

Mountain natives, all over these islands, place their villages on some exposed spur or ridge regardless of the distance from drinking water. There are two reasons for this procedure, one, to keep above the flood line of rivers when those are turbulent, and, two, to form, as much as possible, a natural protection against tribal enemies.

Comfortable quarters were found for the night in a Government rest house. We skinned out the few specimens obtained and retired early.

November 30 (Saturday). To Huno Galdaha. Broke camp at 6:00 A.M. and followed the course of the Ravo River all day. We crossed and recrossed the river some 60 times during the process of the day's march. As the river bed was strewn with all sizes of boulders, we found

walking very difficult and tiring, indeed. Our carriers became exhausted toward afternoon and had to be driven. We were thankful that the district officer had engaged them or we would probably have been dumped (our packs thrown down and left).

The canyon through which we were passing, with 400 to 700 feet cliffs on each side, was composed, to quote H. B. Guppy, " of extensively altered volcanic rocks of great geological age, which have been formed and subjected to change at considerable depths and are sometimes highly crystalline.-----The prevailing rocks, in their order of frequency, are dolerites, usually much altered, diorites, often granitoid or coarsely crystalline; Gabbros; diabases; serpentines and serpentized rocks; felspar-rocks (saussuritic) etc."

Small mountain streams, many times containing picturesque waterfalls, which entered the Ravo River, were observed as we traveled along. The tops of ridges and mountains were covered with luxurious vegetation. Numbers of small Collocalia and a few sandpipers (Tringa hypoleuca) were observed as we marched along. Few calls of birds were heard though because of the noise of the tumbling water in the river.

NOTE: A severe earthquake visited this region in December 1931, causing landslide which changed the courses of all of these rivers.

At 5 P.M. our party reached the village of Huno Galdaha situated on a ridge 700 feet above the

bed of the river. Here, the carriers insisted, was the nearest village to the 4000-foot mountain marked on Campbell's chart. We were now about 25 miles in the interior and camped at an elevation of 1900 feet.

We pitched camp, fed our carriers a generous quantity of rice and paid them for their labors, one shilling each for each day of packing. Those departed with full bellies and in good spirits, leaving the work of straightening camp to the inhabitants of the village.

I might add that rice is conceded to be the foremost luxury in the commissariat of the native of the bush who does not have frequent contact with the white man. On the other hand, rice is the cheapest and most compact provision a white man can carry in bush with him. One ninety-pound bag of rice will feed a line of 20 carriers for 5 days.

Another trick we learned this trip was to issue each boy one ship's hard biscuit and a cup of hot tea well sweetened with sugar before he started out with his load in the morning. Natives normally do not eat until 10 or 11 o'clock. This small repast did, I am sure, give them an added push off in the cold early morning atmosphere and add miles to the day's journey.

Another incident well worth recording took place just after our arrival in this village. We had given our carriers their rice and they, in turn, looked for a container large enough in which to cook it. One

of the villagers remembered that a friend on a neighboring ridge had a large iron kettle that would serve the purpose. Why not get that? The villager picked up a stick and hammered a few times on a big hollow wooden drum (Garamout) hanging near the chief's house. Sure enough in fifteen minutes here came two young men lugging the heavy pot.

Any doubts in my mind concerning the ability of natives to communicate their language with drum signals were shattered then and there.

December 1 (Sunday). Huno Galdaha. The day was spent in arranging the camp to meet our needs. A large house was rented at the rate of one stick of trade tobacco per diem. For sleeping purposes, a lean-to was built adjoining for a cook house. Near by another leaf house was erected where we could sit outside with plenty of light and air while preparing specimens. The old chief was appointed ("Greased") with 3 sticks of tobacco per week to run our camp and keep off all interfering curiosity seekers. We had the natives dam up a tiny mountain stream near by and, with the aid of a bamboo pole cut in half, erect us a shower bath. Other natives were engaged to bring us vegetables at regular intervals, Others to procure firewood and still another, a small boy, to help "Jackie", our cook, to wash clothes and keep our part of the village clean. By Monday morning, we had an orderly camp ready for work.

Eyerdam, who turned his nose up at orderliness

and camp arrangement, went hunting and returned in the early afternoon with 16 specimens which required our immediate attention. So we were not many hours in getting to our task.

December 2 (Monday). Huno Galdaha. Mayr, Eyerdam, and I hunting. We engaged the services of three locals to help us. Those were provided with guns and accompanied us to get a little training before starting out on their own. All of us returned in the afternoon to work specimens. Right at the beginning, we found the sandflies tormenting us. These small mites gnawed at our legs, arms, hands, necks, and faces. At times, they became intolerable but pestered us throughout all of our stay.

December 3 (Tuesday). Huno Galdaha. All hunting again with various results. The specimens brought in by the natives are usually dirty and bloody. This is the usual procedure until they learn to keep their material clean. The quantity of the material right from the start was very good. But the more desirable material must come later when the natives learn what we desire most.

Mayr is making a list of the native names of birds which are identified as specimens are brought in. Mayr, having a fair knowledge of the ornithology of the island, is able to describe other species somewhat similar to material at hand. By this method, he is acquiring a working vocabulary of native names that will be indispensable in guiding the native hunters.

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early afternoon with 12 specimens which required our
immediate attention. As we were not very busy in the
morning to our task.

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vocabulary of native names that will be indispensable
in the future.

This alone is a striking example of the necessity of a working knowledge of the ornithology of a region on the part of a collector before he enters an area.

I have Mayr to thank for this lesson which was indispensable to me in the future and added many more species to the Whitney collections.

December 4 (Wednesday). Huno Galdaha. All of us hunting with our native attendants.

December 5 (Thursday). Huno Galdaha. Mayr and I remained in camp to clean up material left over from yesterday. Eyerdam hunting with native complement.

December 6 (Friday). Huno Galdaha. Mayr and I at birds; Walter hunting. The natives have gone off alone for the first time. Charley brought in a rail, a Porzana. We made a great fuss over Charley and his bird much to the chagrin of John and Willie, our object being to create a spirit of jealousy among the hunters and produce better results.

December 7 (Saturday). Huno Galdaha. Mayr and I in camp; Walter hunting, natives collecting. Mayr and I have adopted a habit of arising at daylight, having a cold bath, breakfast, and then at the birds. Work stops at dark. Those specimens left over are hung up in the cool air to keep until morning. Most species will remain fresh until the next day. Valuable specimens are prepared at once. One never risks decomposition with them.

December 8 (Sunday). Huno Galdaha. Mayr and

I at specimens; natives hunting. Eyerdam in the bush for conchological material. Hundreds of natives are passing through on their way to a big festival. Every party brings a few vegetables or fruits which they wish to sell for smoking tobacco. Our larder is filled to overflowing with all sorts of things. Taro, yams, sweet potatoes, pineapples, lemons, sour oranges, pau pau, onions, greens, bananas and even cocoanuts brought up from the opposite seacoast.

We have with these purchases the common balus, Ducula ^{pictinaria} pacifica, which is boiled into soup for a meat course. Our cook at times makes special dishes of taro and yam puddings frosted with thick cocoanut milk or covered with shreaded gallip nuts. It is such an easy matter to live here in the tropics with natives near at hand to contribute to our table.

December 9 (Monday). To Ha lau. Mayr and Eyerdam have suggested that I should accompany the village to the big festival. They agreed to remain in camp with the two native hunters and continue with the collecting in my absence.

I set out with the inhabitants of Huno Galdaba village, traveled in their party and reached Ha lau some 18 miles distance just at dusk. There leaders of the village found me a corner in a house where I could advantageously rest out of the rain and witness the forthcoming performance.

This festival is an annual affair, something

on the order of our American Thanksgiving. No one could tell me of the origin, but all agreed that, for generations, this one time of year had been set aside as a truce period when all villages and clans from this eastern half of the island assembled, feasted and settled their quarrels and differences as amicably as possible.

Each year the high chief of one designated clan is appointed or chosen to build a large festival house in his village where the next annual festival is to be held. This appointee in turn becomes the master of ceremonies for that year. Because of the number of clans and the fact that each must be represented in the annual rotation, it is rarely that one individual chief will have this singular distinction conferred upon him more than once in a lifetime. His honor and position as well as that of his clan rest upon his and their ability to conduct this one ceremony. They feel their position keenly and strive to make their performance the best that has ever been given.

A whole year is spent building, carving and decorating a huge festival house, which is usually 200 feet long by 75 feet wide by 15 feet high. This is filled to the top, at the time of feasting, with every variety of native foods obtainable. Even smoked fish porpoise, and cocoanuts are brought in from the seacoast. I might add that it is no small feat of engineering to

plant, raise and purchase such perishables as bananas, pau pau, taro and sweet potatoes to have them ripen and ready to eat just at the time of the festival.

Pigs, dogs and fowl are fattened for the consumption of the guests. Long distances are covered by the natives to seek out and purchase the largest and best porkers obtainable. Since pig now replaces human flesh, I am told that in the old days wars and raids were organized systematically to obtain human flesh for this ceremony.

Vast fortunes, according to native standards, are squandered by the hosts to make possible a successful undertaking. Years are spent, beforehand and afterward, clearing up the financial deficit that accompanies this event. Nothing is ever given or loaned by others but must be purchased,--even outside labor if that is required.

Upon the evening of the first day of the festival, the clans from directions in which their villages lie (north, south, east and west) assemble just out of sight of the village in the corresponding directions of their journey. Each of the four groups in turn makes a grand entrance into the village, running, yelling, waving clubs, spears and themselves covered with all sorts of paint and paraphernalia. Each charges around the festival house for a period of 10 to 15 minutes before retiring to the directional side to watch the other groups make their debut.

Night follows, when the time is given over to dances, singing and later tribal disputes. The old chiefs all assemble for the latter which took the form of court to hear and judge differences that have arisen during the last year. I presume that, in the past, these courts were relatively gory, when plaintiff and defendant discussed the merits of their cases with clubs, knives and spears. There are many records of deaths occurring at these gatherings. During my stay several entertaining fist fights were witnessed but nothing exceptional in quality took place.

Daylight brought a display of young women, when all girls eligible for marriage decked themselves out in strings of shell money and paraded in the nude before prospective purchasers. Those interested were the parents of some prospective groom and not that gentleman himself, strange to say. Prices ranging from a dozen pigs down to bargain counter thrift would be threshed out later on. This was but a preview.

After the parade all able-bodied men were engaged in killing, singeing, butchering and cooking with hot stoves some 65 pigs that had been assembled.

At noon the pigs and the contents of the festival house were distributed, more or less equally, to each and everyone present. I received a hind quarter of pig, stock of bananas and a bag of taro as my share.

Immediately after the festival house was emptied of its contents, the building was burned. Following this,

the elders met and elected the master of ceremonies and site for the next year's festivities. The time, I presume, was worked out by some stellar observance.

After the distribution of the food, parties began a leisurely return to their villages carrying their gifts with them to be consumed at home or enroute.

I had hoped to take a number of pictures of this performance, but was distressed with mist and rain all of the time.

Reached home at Huno Galdaha late at night.

December 11 (Wednesday). Huno Galdaha. Mayr, at the breakfast table, through mouthfuls of roast pig, informed me that the culprit, Mr. Eyerdam, had run away into the bush and had not helped Mayr with bird skinning during my absence. We concluded that Mr. Eyerdam had better remain in camp with us the rest of the time were were here.

It is strange how many able-bodied young men revolt at the idea of preparing specimens. The work is monotonous, to be sure, but at the same time very interesting.

December 12 (Thursday). Huno Galdaha. Our hunters out; ourselves in camp. One of our boys brought in a black hawk and another a rail. We have them pretty well keyed up and desperately jealous of one another.

December 13 (Friday). Huno Galdaha. Native, Charley brought in a new ground bird at noon, which Mayr thinks is a new genus and calls a Geo-pitta. Mayr became

so excited over the specimen that he had a nervous relapse and had to go to bed for the rest of the day.

NOTE: It is true with people, who have been some time in tropical countries and subjected to malarial fever, that they will come down with nervous disorders and malarial fever after a few moments of unusual excitement. I have noticed this with both Hamlin and Mayr and later with myself.

December 14 (Saturday). Huno Galdaha. Our old chief has a son, whom we call "Stupid", whom he is very anxious of making into a good shoot boy, thereby bringing glory and more tobacco into the family coffers. For two days hand running we have given son "stupid" a musket and five cartridges in hopes that this young man will acquire something extraordinary, also partly to appease the paternal conscience of the chief as well.

To-day, the stupid one returned with a new hawk, an owl, (hinox), another example of Geo-pitta, a Gallicolumba, a Hypotaenidia, and enough other desirable material to warrant a reward of 5 shillings in cash, which goes to prove that one can never tell by the looks of a native just what he will do.

The old chief, the father, nearly burst himself with pride while the other hunters, John, Charley and Bennie, became so incensed with jealousy that they caught son stupid at the edge of the village later in the evening and thumped the daylights out of him. Charley turned in his gun and basket and demanded that we teach him to skin birds.

December 15 (Sunday). Huno Galdaha. Native Charley begins roughing out thick-skinned birds. Cook Jackie shifted to hunting. Natives swamped us with birds. Mayr, Eyerdam and I preparing specimens.

December 16 (Monday). Huno Galdaha. Day of hard continuous rains, one of very few at this camp. A Hypotaenidia phillipensis walked into the village during the rain and took a bath in a pool of water caused by the rain. A most unusual observation on our part. I collected the specimen.

The sandfly bites have caused us to scratch our legs and have brought on a number of island sores among the white complement. I can hardly walk from their ill effects.

December 17 (Tuesday). Huno Galdaha. Hunters swamped us with specimens. Eyerdam and Charley both doing well with bird skinning.

December 18 (Wednesday). Huno Galdaha. All of us in camp; natives collecting. Another Geo-pitta. Packed a number of dried specimens for the journey down to the coast.

December 19 (Thursday). Huno Galdaha. Engaged as previously.

December 20 (Friday). Huno Galdaha. We are out of gasoline with which to clean specimens and have had to resort to wood ashes in place of corn meal when skinning specimens. Now about ready to break camp.

December 21 (Saturday). Huno Galdaha. Sent out a call for carriers. Hunters turned in good material including another ninox. Note from Hamlin in Tulagi, dated December 6, reached us stating that he would reach Kira Kira December 22 or 23. We concluded to break camp at once.

December 22 and 23 (Sunday, Monday). To Kira Kira. Broke camp 7:00 A.M. Sunday, departed with 16 carriers, reached Kira Kira Monday P.M. after one night on the trail. All material came through in good order. Carriers paid off and dismissed.

Results of the mountain trip were very favorable. About 400 specimens, representing 47 desirable species, were taken in 16 working days. Only material which we though would dovetail in with Beck's lowland collections was retained. Natives were engaged in preparing specimens but were found to be of no use except on large tough skinned specimens. On tender skinned birds, such as doves and the smaller species, the natives tore specimens to pieces, and those had to be discarded. Hunting was carried on almost entirely by the natives. Despite their tribal taboos on hawks, owls, doves, pigeons, they turned in examples of the species named as well as a wealth of other material.

We allotted each hunter eight large cartridges and ten aux. cartridges per diem with the understanding that each man return his unexpended cartridges and used cartridge cases at the end of the day.

Some idea of the ability of the boys may be gained from the following record:

John	141	birds	(Desirable material).
Charlie	113	"	" "
Willie	64	"	" "
Bennie	53	"	" "

The rate of pay for hunters was governed by the quality of material brought in by them. This was a graduating scale ranging from one stick of trade tobacco for 3 common birds to one shilling each for Rails, Geopitta, owls and black hawks.

By the use of native names we could guide the activities of the hunters and help them along.

Nothing was paid for very common and undesirable birds.

The hunters accepted this system quite readily and worked the whole period without one instance of ill feeling between us.

As a matter of record the following expenses were incurred during this trip:

16 carriers	inbound	47 shillings
14 "	outbound	38 "
Rent of house		1 shilling
Cash paid for birds		45 shillings
" " " "		35 "

Total Sixteen pounds and six shillings

At the end of our stay we paid the old chief a bush knife and a few yards of cheap calico for the privilege of shooting birds over his land. This technicality, though very slight to us, is all important from a native standpoint, if one wishes to spend any time in an area. Tobacco was also given to others who had assisted in routine work about camp. Under no consideration should one ever leave a village with a bill unpaid, no matter how trivial the amount demanded for services. Natives naturally demand two to five times the reward they expect to receive. The matter in question should be threshed out on the spot. If not, news will accompany one to the next camp and complications will arise.

I learned another very important lesson during this sojourn in the bush. At the beginning of our stay in camp, I called the old chief to me and demanded rather tersely that he see to it that we were supplied with a variety of native foods and plenty of them. Much to my chagrin and bewilderment a few mornings later, about 30 carriers showed up with approximately 500 pounds in weight of every variety of foodstuffs imaginable. This was far more than we could use. I had no other course than to haggle with natives and purchase all of it. Mayr snickered and recited a similar experience in New Guinea.

The natives pointed out that I had ordered the stuff, hence I should buy it. Had I not purchased all of their foods, I have no doubt but what they would have

refused to bring more. My mistake lay in the fact that I had not specified, in the first place, the quantity of commestibles desired.

The following suggestions regarding food and equipment were noted on this trip:

1. 3 or 4 tin trunks for birds skins required.
2. 2 lbs. arsenic sufficient for poisoning 400 bird skins.
3. 1 lb. absorbent cotton sufficient to make up 75 small bird skins.
4. 5-gallon benzine tin corn meal will skin 600 birds.
5. 300 sheets newspaper, one month supply.
6. one case (30 lbs.) trade tobacco, one month.
7. 2 1/2 gal. kerosene for lamps, one month.
8. 90-pound bag rice will feed 20 carriers for 5 days with sufficient amount left over to allow 3 men 1/2 cup of rice per diem for 30 days (to be used in soups).

The following, on commestibles for 3 men, were recorded:

- 25 lbs. flour, one month.
- 2 " porridge, one week.
- 3 " sugar, one week.
- 2 " butter, " ..
- 5 one-lb. tins corn beef, one week.
- 100 hard biscuits, one week (white's only).
- 2 lbs. tinned jam, one week.
- 2 " tea, one month.
- 1/2 lb. cocoa, one week.

1 lb. salt, 2 weeks.

1 large tin milk per diem.

1 tin pepper, one month.

For native carriers:

1 hard biscuit each per diem.

2 lbs. cheap trade tea per camp.

5 to 10 lbs. sugar per trip of 2 or 3 days (20 carriers).

December 24 (Tuesday). Kira Kira. Mr. Campbell has received word indirectly through Mr. Lazerus, a trader, that Hamlin expects to bring the 'France' down here by Christmas time. We are eagerly awaiting his arrival.

Campbell killed a bullock for the Christmas festivities. Myself unpacking and examining material from the bush.

A number of island sores developed on my legs during the trip inland. I am doctoring them with a chinasol preparation and wet packs.

December 25 (Wednesday). Kira Kira. Christmas Day. It didn't seem that way to us with the heat and the surroundings. Campbell distributed tobacco and calicoes to his natives as is customary at this time. Most of the bullock was given to the blacks for a feast as well.

December 26 (Thursday). Kira Kira. No sign of Hamlin, so concluded to continue collecting until we are out of supplies. We rigged up a work bench in one

of the Government storehouses.

December 27 (Friday). Kira Kira. Captain Ernie Palmer, aboard his A/K Mendana, arrived to-day with a letter from Hamlin reporting adverse circumstances in Tulagi. He advised us to remain on for the present and do the best we could. He promised either to come for us or send some means of transportation in the near future.

Ourselves collecting desirable material near the station.

December 28 (Saturday). To Santa Anna Island. Mr. Campbell will accompany Palmer to the small island of Santa Anna to collect taxes from the natives. He has invited us to accompany him there. We have accepted as we have neither materials with which to collect specimens nor food. Mayr and Eyerdam are especially anxious to meet Mr. Kuper who is a fellow countryman of theirs.

During our few days in the lowlands 35 specimens, representing 16 species, were added to the collections. Here again only material, which we thought would add to Beck's series, was retained.

December 29 (Sunday). Santa Anna Island. Aboard the 'Mendana' during the night. Reached Santa Anna at daylight. Henry Kuper gave us a rather rough welcome. He seemed to feel that visiting Americans, such as Martin Johnson, Beck, and others, hadn't shown him the proper respect. He insisted that previous visi-

tors had promised him prints of their photographs, etc., and had failed to fulfill their obligations.

After a few bottles of Mr. Palmer's beer, our host thawed out, invited us ashore, and led us through a very pleasant though belated Christmas celebration.

December 30 (Monday). Santa Anna Island. Spent the day at bird notes and visiting with our host. Kuper came to these islands a number of years before the way, after a varied career in German sailing ships.

Like so many residents of these islands, he led a rather rough life, recruiting native labor, trading and drifting until he married a Santa Anna native woman, and began to raise a family. Quite recently he has taken up religion seriously.

Kuper retains a wealth of stories of the Solomon Islands and the early residents, with which he entertained us at times.

December 31 (Tuesday). Santa Anna. Kuper, Campbell, and Palmer took off on the 'Mendana' to Star Harbor on San Cristoval Island. Mayr, Eyerdam, and I remained at Kuper's home to await the arrival of Hamlin.

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January 1 (Wednesday). Santa Anna Island lies at the extreme eastern end of the Solomon Group, being situated about 5 miles due east of the southern tip of San Cristoval Island.

It is an example of an upraised atoll, possessing a nearly circular form and in dimensions some two and one half miles in length by two in width, with an elevated rim some 200 feet in height along its shores and a sunken center which contains a lake.

The whole of the island is well populated and except for native gardens heavily wooded.

Beck spent 2 weeks here in March 1927, during which time his party made a very extensive survey and brought together a splendid representation of the ornithology of the locality.

Native T  e, a Santa Anna islander showed up about noon with 3 advanced juvenile specimens of Accipiter albogularis which he had killed with stones. The sight of these birds dispelled any hope on our part of loafing.

We set up a skinning bench in an old shed and set to work. Even without poison for the skins, it was better to keep busy. T  e and Jackie were given guns and others were engaged to set snares for ground birds.

The weather has become unsettled, with periodic sharp rain squalls which last anywhere from 10 to 30 minutes.

These approach from a northwesterly direction and are a harbinger of the approaching northwest monsoon.

January 2 (Thursday). Santa Anna. Being guests of the Kuper family we must conform to the rules and habits of their household. Though very pleasant and quite logical for plantation the meal hours play havoc with a bird collector. As in all south-sea households, coffee or tea is brought to the bedroom at daylight--6:00 A.M.--after the consumption of the same, the guest arises leisurely, makes his morning toilet and awaits the morning meal which is brought on at 8 A.M.

The host, in the meantime, having looked after his plantation labor, returns to the house to spend at least an hour over his repast.

The collector has one of two alternatives--arise early, go without breakfast and have a headache all day as a consequence, or else wait until after the meal (9:00 or 9:30 A.M.) when, upon entering the bush, he will find that most birds have finished feeding and are ready to nest during the heat of the day.

Mayr, Eyerdam and I collecting; two natives out also. A fair number of specimens were brought in and native Jack, our cook, was put to work preparing specimens. He surprised us with his speed and dexterity.

Eyerdam concluded that, in as much as Jack could skin birds, he, Eyerdam, could spend his time obtaining land snails. An excellent idea from Eyerdam's

point of view, but neither Mayr nor I would consent to it. We are having terrible time with Eyerdam; his heart is simply not in his work.

January 3 (Friday). Santa Anna. A deluge of birds from the natives. Mayr and I with native Jack engaged all day. Eyerdam at intervals though reluctantly.

Crowds of local natives visited us to-day. Those impelled by curiosity came to watch us preparing material. They stood around for a few minutes in groups or pairs, jabbering, giggling, shoving and squirting beetle nut while they watched us. These soon lost interest in the proceedings, drifted away and were replaced by others.

We set aside this day for all and sundry to come to feast their eyes on our task. To-morrow, we will clear them all out as soon as they appear. Hangers-on are not a help in the work; they maul birds, steal tools, and make themselves a general nuisance. It is best to have the visitors at one time and be done with it.

January 4 (Saturday). Santa Anna. No collecting, a day of continuous rain. Spent our time in the house writing notes and sundries.

Have hung all of our wet specimens in racks above the stove in the kitchen to forestall mildew.

Kuper returned alone from Star Harbor in a whale boat. He was wet to the bone and sick with fever.

It took him, with his 8 native boys, 18 hours to pull and sail the 8 miles against the wind, weather and tide.

Developed pictures to-night, using Rhodinal for a developer. Had fair results, but the negatives always fade in the hypo-solution. The gelatin on the films becomes soft as well. I am still a long way from good workmanship.

January 5 (Sunday). Santa Anna. Kuper with Mayr, Eyerdam, and myself, went bush loafing to-day. We visited the villages of Novenieatgo and Netagre where Kuper showed us the interior of two old ceremonial houses containing the bones of lineal chiefs, clan totems and sacred war implements and canoes.

Our host is attempting to keep all of the old culture of these natives intact. He is forever in hot water with the Government and outsiders, as well, for his blunt interference in the sale or disposal of native paraphernalia (curios, we call them). In the past, he has received several severe reprimands from the Government for driving native mission teachers away from the island by his resorting to physical force. A less determined man than Kuper would become discouraged with his task, knowing that natives are perfectly willing to sell spears, axes, etc. for tobacco and bright calicos. Not Kuper though.

In the end, the missions will establish their stations and the culture will disappear despite the ef-

forts of any one man.

January 6 (Monday). Santa Anna. A pure white Demi egretta saca was brought in to-day, and a small Porzana. The rain hampered activities, consequently very little was accomplished.

The skins are drying well above the stove despite the lack of the alum coating we always give the inner side.

January 7 (Tuesday). Santa Anna. A white Barn Owl (Strix alba) was brought in to-day. I believe this is the first record of the occurrence of this species in the Solomon Islands.

The whole party engaged with specimens and shells.

January 8 (Wednesday). Santa Anna. The Government medical ketch H. M. S. Hygeia with Captain John (Pansy) Elder reached here this morning, bringing mail, a note from Hamlin, and stores.

We are to return with the 'Hygeia' to Tulagi and meet Hamlin who is in difficulties over financial matters.

Mayr received an abrupt note from Berlin ordering him home at once. This upset the man terribly.

My share of the postal service included the many letters which have accumulated in the 7 months since leaving the States. One can appreciate news after such a long interval.

Spent the day packing all effects preparatory to departure. Our host, though very gruff upon our arrival, broke down and wept upon our bidding him farewell. It is indeed trying for one to give up contact with their own kind, especially when one lives for eight months to a year without seeing another white man.

January 9-11 (Thursday-Saturday). Aboard H. M. S. Hygeia. Sailed from Santa Anna Thursday morning daylight, reached Tulagi Saturday 10:00 P.M., after numerous stops along the coast of San Cristoval and Guadalcanal.

Enroute I suffered considerably from malaria fever. My first serious attack. Nothing to do but take quinine and plasmochine, get into bed and sweat it out.

Saturday afternoon, while enroute to Tulagi, the engine of the ship broke down at the beginning of a severe and prolonged storm. For several hours we were in danger of losing the little ship, but saved her by eventually getting a jib sail lashed to the stays and in place. This enabled the helmsman to turn the bow of the ship quarter on to the storm and steady the vessel.

Captain Elder could have saved himself anxious hours had he kept sails in their proper place and not stored below decks. He, of course, had no power over his crew, who went to pieces when the trouble began.

January 12 (Sunday). Tulagi. Aboard the 'France' at daylight with all of our duffle.

Hamlin, during our absence, brought the vessel off the slip in good order, and had time to engage in some collecting on Beuna Vista and Ngela (Florida Island) as well.

He reported the 'France' ready for sea, but added that he must wait in Tulagi until he received his quarterly stipend from New York. There are a number of outstanding accounts upon which his creditors demand a settlement before he takes the ship out of the harbor.

Hamlin announced the receipt of a cable from the Museum reiterating that, at the last meeting of the Whitney Committee, we were advised to work Malaita as quickly as possible and follow this with a survey of the Caroline Islands. A number of new faces were seen aboard the 'France.' Leong On, a Chinese, who is acting in the capacity of cook; Arabo, cabin boy; Jack Ulava, seaman; Tivo, Santa Cruz, an engine boy, were all engaged as crew.

Hamlin has had his hands full with the four Polynesians. They have been in a spirit of revolt for some time and have periodically approached the leader regarding an advance in wages. All four feel that they are indispensable to the expedition and know full well that we are dependent upon their abilities as bird skimmers. They cannot help but realize that the local natives are not bird preparators and never will be.

The Polynesians feel and act their superiority over the locals who come aboard to work and others who are engaged in the bush as hunters. Constant ill-feeling between the two factions is forever cropping out aboard ship and ashore.

The Polynesians will not eat the same food as the local residents, neither will they turn a hand aboard ship if a local is present.

Ashore the four obtain liquor from the Chinese and live, more or less, in an alcoholic stupor despite Hamlin's insistence that liquor must not be sold to them.

Beck engaged the services of these men 5 and 6 years previously when he had a full complement of Polynesians. One by one the others dropped off until only these four remained. They are well trained and can do excellent work when they are in the mood.

Lately they have become insolent, have taken to wasting their time in the bush shooting pigeons and eating them or else trading specimens to local natives for services rendered. On numerous occasions one or more of them has slept all day in a native house, slipped out at the last minute, procured a few specimens and returned to the vessel with all of their birds warm.

Hamlin, in a fit of desperation, decided to dispose of them all at the first opportunity and depend upon what we could get in the way of local talent. With four whites aboard, we could do most of the preparation and ob-

tain Solomon islanders for the hunting.

We, Mayr, Eyerdam, and I, heartily agreed with Hamlin's decision. We had only one criticism of him at the time. He should have dispensed with the Polynesians months earlier.

Later we learned that the Whitney Committee deplored the loss of the Polynesians. Under the circumstances, there was no alternative.

It is true that a vessel equipped with a foreign crew will have a regular staff of bird men and can pass freely from one group of islands to another without being hampered by Government labor regulations. At the same time, a foreign crew in a distant port can cause more trouble ashore than an army of white men. Natives have no sense of discretion and feel their independence at every turn.

Local natives, on the other hand, are far more successful in their own locality where they know the bush and ornis of that particular area.

Any ship master or expedition who engaged the services of natives is headed for trouble no matter who they are or where they come from. As a contrast one might cite the labor problems in our own country.

It is best to visualize these forthcoming problems, as best one can, and deal with them as judiciously as possible when they arise.

The soundest argument in favor of the dismissal of the Polynesians lay in the fact that 5 Solomon islanders

engaged at Pound Sterling per month, could be employed for the price paid one of the former.

January 13 (Monday). Tulagi. Eyerdam has poisoned himself with repeated overdoses of quinine and plasmochin. He complained of spells of light-headedness and later fainted.

We put him to bed and later learned that he had taken over 80 grains of quinine at one gulp. Mr. Eyerdam has a sterling constitution as one might deduct from such behavior.

Mayr engaged with letters to Berlin, New York and Dr. Sanford.

Hamlin received a cable from New York announcing that funds had been placed at his disposal in the bank in Sydney, Australia. Hamlin took this message to the Manager of Burns Philp and Co. and tried to engage passage for the Polynesians to Noumea on the S/S Mataram, which is leaving the group to-morrow. The Manager, Mr. Scott, insisted upon a cabled confirmation from the bank before he would do any business with Hamlin.

Four natives hunting across the bay from Tulagi. They returned at dark with 5 specimens.

David has returned from Choiseul with a fine series of skins but no Microgoura.

Myself at work unpacking material from our last camp. Hamlin was quite pleased with our results but felt that we had not penetrated into the mountain area far

enough. We thought we had. Perhaps Hamlin was right, I don't know.

On Santa Anna we obtained 63 specimens representing 19 species. These were prepared without arsenic poisoning, but have been kept free ^{of} _^ dermesties.

January 14 (Tuesday). Tulagi. Hamlin's cabled confirmation from the bank arrived just one hour before the S/S Mataram sailed for Sydney. We bundled the 4 Polynesians, Teora, Manuel, David, and Charley, with their effects, into the ship's boat and got them aboard the steamer just as she weighed anchor.

This course of action was entirely beyond the comprehension of the boys, who felt up to the last minute, that we couldn't possibly do without them.

They elected to go to Noumea where they hoped to obtain employment aboard French sailing vessels. As none of them carried passports or identification cards of any kind, nor were they signed on ship's articles, we were under no obligation to send them anywhere except out of Australian territory.

Had they elected to proceed to their homes in Tahiti and Samoa, we would have been out of pocket a small fortune.

After the incident related, all of us returned to the ship to label specimens.

January 15 (Wednesday). Tulagi. At work relabelling and checking birds. In the field we gave each specimen a number and kept a record of each, in a small

field book. On board we now stencil a label with proper data of locality, include a description of soft parts and a final number.

This method is a bit costly in time, but I believe more satisfactory. The labeling is done in India ink which means clarity for nomenclatures in the future.

Our field record book is a hit-and-miss sort of thing, entirely too small and inadequate. That must be changed.

Lebrua, a Santa Cruz boy, black as the ace of spades, signed on as engineer assistant at one pound sterling per month.

Hamlin has cabled the Museum for \$3500.00 to pay off all obligations as well as an additional \$5000.00 to undertake the Caroline campaign.

January 16 (Thursday). Tulagi. At a gathering of the staff this morning, all agreed that the island of Malaita should be the next objective. The specimens on board should be forwarded to the Museum, supplies purchased and gear overhauled. Following this, we would proceed to Auki, Malaita, interview the resident Government officer, obtain his permission to work the mountains and interior, set a base camp, and proceed accordingly.

Hamlin expressed his desire to turn the expedition over to me at once. In the ensuing discussion, it was agreed that I would handle the financial end and all would have an equal say in the collecting. Hamlin further

agreed that he would move his effects into the engineer's compartment and leave his cabin space to me.

Mayr cabled Berlin to the effect that he could not leave the expedition until he had permission from New York.

Hamlin engaged with the engine. Mayr, Eyerdam and I labelling San Cristoval material.

Leong On, Chinese cook, deserted ship. Probably because of the interfering tactics of the old Captain who will not stay out of the galley. Arabo, cabin boy, was promoted to cook. He will carry on under the tutelage of the captain. Arabo is not a stupid boy and apparently enjoys having the "old man" fuss and fume at him all day long. I predict that he will lead Captain Burrell a merry chase before months are gone. Arabo soaked the dried peas in caustic soda as his initial blunder, which is a fair criterion of what will follow.

January 17 (Friday). Tulagi. Hamlin has discovered that salt water has again found its way into the cockpit of the engine and the lubricating system. This necessitates a several days' overhaul.

Mayr, Eyerdam and I working at labelling in the main hold, all agreed that Hamlin's vocabulary had improved wonderfully since he had taken to overhauling the machine..

Myself to Burns Philp and Co. at Makambo in the P.M. to purchase 2 months' supplies for the vessel. I

was astounded by the prices charged for every day commestibles.

Here in this out-of-the-way part of the world, Burns Philp and their co-partners W. R. Carpenter and Co. figure anything from 200 to 1000 per cent profit on all transactions. They have a monopoly of the stores and hold mortgages on nearly all plantations and business enterprises as well. Consequently, one does not shop for the best bargains, but accepts what is offered or else goes without.

There was no alternative but to purchase the barest necessities from the stores and vary our diet later on with vegetables and fruits acquired from the natives.

January 18 (Saturday). Tulagi: Hamlin at work on the engine. Mayr and Eyerdam finished labelling during the day.

Myself with Captain and crew, checking stores and overhauling the lazaret aft. Captain removed the door of the same and substituted a lattice frame with hinges and padlock, thereby permitting a circulation of air into that part of the vessel which houses the commestibles.

We should have a vegetable locker on the main deck where perishables could be exposed to the air, but this method has been abandoned long ago for several reasons. The box got in the way of the main boom and crew when working ship, salt spray aided the deterioration of the contents, and lastly, the crew were forever discovering

means of pilfering onions and potatoes despite a padlock.

January 19 (Sunday). Tulagi. Packing specimens all day. We are using a tin-lined Swedish match case which is serviceable though not water-tight. Each specimen is well wrapped in a newspaper which acts as a cushion and gives the whole of the contents of the case a springiness that, it is hoped, will overcome breakage enroute to the Museum. We feel that small specimens should be packed in small boxes and forwarded by parcel post to save them from being crushed by larger specimens. As no small boxes were available, we neglected to do this.

January 20 (Monday). Tulagi. Finished packing the case of birds, removed the same to Burns Philp and Co., Makambo for shipment to New York, February 2, via S/S Marsina. Most of the day wasted obtaining customs clearances and bills of lading for these.

Eyerdam engaged with carpenter work about the vessel.

The island sore on my right ankle has broken out again. Began doctoring it with corrosive sublimate solution and covering same with wet packs. Unless I can beat the sore, I shall be laid up for several weeks.

January 21 (Tuesday). Tulagi. Hamlin engaged at the engine. Ourselves occupied variously about the ship. Eyerdam at work on a chest of drawers and a filing cabinet. Crew at work on the painted awnings. These have just about run their course and must be replaced as soon as practicable.

Tivo, native, deserted ship. Leong On, Chinese cook, returned to the vessel and complained that he had been sick. Illness was undoubtedly due to opium smoking. He was given his clothing and discharged without pay.

January 22 (Wednesday). Tulagi. Hamlin engaged with engine. He succeeded in getting that to run by 4 P.M. Eyerdam and I at carpenter work. Mayr a touch of fever.

January 23 (Thursday). To Gavutu. Hove up anchor 6:30 AM. and proceeded alongside carpenter's whard to fill tanks with water. Seems almost a shame to wast time taking on water from tanks when tons of it has been falling these past few days. Catchment areas aboard a ship have always been an unsolved problem though.

Cast off at 1:45 P.M. and proceeded under power through the harbor to Gavutu, Lever Brothers Plantations Ltd.'s headquarters, where we will pay a few bills and purchase such supplies as Major Hewitt, the Manager, will permit.

Lever Brothers dispense commestibles to their staff at about one-third the price charged in the Tulagi stores. It is seldom though that an outsider can wangle supplies from them. There is some sort of a gentleman's agreement between Tulagi and Gavutu which eliminates any chance of competition.

The old Captain refused flatly to take the ship to sea at night, insisting that he would be endangering our lives and the ship as well, with a new crew unfamiliar with the workings of the vessel. The

Old Man was merely concerned with a night's rest, nothing more.

This incident was the beginning of a drawn-out battle of wills. We never succeeded in overcoming the Old Man even to the end of his stay with us.

January 24 (Friday). To M'boli. A little trouble with the engine, didn't get away until 10:30. Took the inside passage through the reefs and proceeded through Utuha Passage to M'boli, anchorage on the eastern side of Florida Island where we anchored for the night.

The passage from M'Boli to Auki, Malaita, must be undertaken during daylight hours because of intervening reefs. For once the Captain had his night's "rest" without protest. Though I might add that the mosquitoes were so thick at this anchorage that none of us slept.

Eyerdam finished the cases and cabinet.

A small urchin, Belleu, from Malaita, joined our complement as cabin boy just before we left Tulagi. He will become of great assistance to Arabo, the cook, in that the Captain will find it necessary to delegate some time to the training of Belleu and thereby give Arabo intervals of rest.

January 25 (Saturday). Auki, Malaita. Under way at daylight, negotiated Indispensable Straits with power and sail to reach Auki, Government station at 2 P.M.

Ashore at once to pay our respects to Mr. Wilson, the District Officer of Malaita, but were informed by a police boy at the "Residency" that that official was in-

disposed and would not receive us. Returned to the ship and appeased our wrath in sleep.

Salt water natives aboard at dusk to invite us to their annual shark feeding ceremonies and festival which will take place Monday and Tuesday next.

Issued the crew their regular weekly rations, comprising 4 sticks of tobacco, one box matches, one sheet newspaper, one small piece of soap each, as required by law.

January 26 (Sunday). Auki, Malaita. A note from Mr. Wilson this morning asking us to please come ashore and state our business. Ashore we went, and very tactfully explained that we wished to make a survey of the island including a trip into the mountains. Wilson heaped cold water on our venture and flatly refused to permit our trip into the interior. He became so eloquent in his pessimism that he offered us one chance in a hundred of coming out of the mountains alive.

Later, Mr. Wilson suggested that we go down the coast to Maramasiki and interview his patrol officer, Major Saunders at that place.

Finally, he announced that he was to be relieved by Mr. Barley within a day or two and we could await the verdict of that district officer.

We all felt greatly relieved, regarding the arrival of Mr. J. C. Barley, whom we knew to be a broad-minded individual.

Eyerdam ashore collecting shells along the reefs.

January 27 (Monday). Auki, Malaita. Sent four boys hunting; they returned with a varied quantity of material ^{including} a Zosterops which is undoubtedly new.

All of the white complement to the island villages to watch the shark feeding ceremonies. They turned out to be rather disappointing.

The entrails of pigs were fastened astern of canoes and these paddled back and forth some distance from the shore for an hour or more, then returned to the land. Sharks attracted by the blood do come to the canoe causeways along shore and seize other bits of pig and entrails placed for them.

A number of small sharks did put in their appearance during our stay, but nothing like the number previously advertised by the natives. These people worship sharks as their ancestors.

A few pictures were taken of this ceremony and the succeeding dance. Hamlin used his motion picture outfit while I used a still camera.

Perhaps the most unique part of this place is the village itself built upon a tiny island and entirely surrounded by a hand-built stone wall,--a veritable stone fortress in a wilderness, no doubt, a few years ago, when mountain people were ever ready to attack the islanders.

January 28 (Tuesday). Auki, Malaita. All of the complement hunting, returned at noon to witness a big

dance on the mainland. This was an interesting affair, good costumes and rhythm of movement on the part of the participants interspersed with excellent musical harmony. The orchestra used reed flutes which gave out a weird wail, enhanced by natives blowing on them through their noses.

At specimens in the evening. Later, Hamlin, Mayr and I to interview Mr. Barley, the relieving official. He didn't hesitate a minute in his decision, told us to go ahead but get out at the first sign of trouble. He admitted that, with the exception of one heavily armed party and later Patrol Officer Koenig, no one had ever been into the central interior of the island, so could give us no definite information. Barley felt that under normal conditions, we should have no trouble whatsoever.

Returned to the ship rather late to find that Eyerdam and native Jackie had skinned out all of the specimens. Eyerdam gained undying fame by making up three starling skins, his first.

January 29 (Wednesday). To Suú. We have decided to go on down the coast to the anchorage at Suú, which will be our closest approach to the high mountains of the interior. Under way at 6 A.M. Hamlin lost the compression in the air bottles, hence we were forced to sail out of the harbor and down the coast. Captain Burrell made a terrible botch of his work getting out to sea. We are beginning to doubt his ability to do anything properly. Eyerdam and I occupied with various carpenter work about ship. Hamlin at work on the engine.

January 30(Thursday). To Suú. Hamlin succeeded in starting the engine just as we reached Suú. Proceeded inside and anchored at 3 P.M.

Suú harbor is barely an indentation in the coast line and only moderately safe during heavy north-west weather. Yet it is the best that the island affords along this stretch of the coast line.

Here are situated a saw mill and also headquarters for the Malaita Company's plantations, an enterprise owned by the South-Sea Evangelical Mission.

Mr. Aldington, the company manager, invited all of us to his home for dinner. There we met a number of white men who are associated with the company in various capacities. Mr. Aldington extended us every privilege available around the station and assured us that if the natives in the hinderland were not quiet and peaceful, he and his station would not be here.

It is true that a few years ago Malaitamen were vicious and troublesome, but at present have settled down to a reasonably quiet behaviorism. Our host stressed the fact that Malaita had been badly played up and overestimated by the press and transient visitors to the islands.

January 31 (Friday). Suú. Took the ship alongside the wharf to fill all tanks with water, thence to a permanent anchorage at the far side of the harbor. Hamlin engaged with the engine enacting minor repairs.

Myself to see Mrs. Dootor Mac Crimmon at the

saw mill about my sore leg. She informed me that I had been doctoring that unruly member too much. She ordered me to dust the sore with dry powder, a bismuth solution, keep it dry for a short time and I would soon be able to return to the bush.

Mayr and Eyerdam hunting alone, our native crew (not Malaita men) refusing to budge from the ship through fear of the local inhabitants ashore.

Hunters returned in the P.M. with a fair bag of birds, but reported rough going in the bush, the ground being rugged and rocky and the slopes of the mountains, to the inland, steep and slippery.

February 1 (Saturday). Suú. During a heavy torrent of rain last night, the deck above the bird racks sprung a leak. This will necessitate extensive repairs immediately.

Mayr, Eyerdam and native Jackie ashore hunting, returned in P.M. with 33 specimens. Some new material among those obtained.

Hamlin engaged with engine. Myself aboard employed with crew at various tasks.

Major Saunders, patrol officer, arrived in his ship 'Veronica.' He ordered the local native policeman, "Whiskey", to procure carriers for us at once and offered us police protection if necessary, for which we were grateful.

February 2 (Sunday). Suú, Malaita. Hamlin at

the engine. Eyerdam ashore collecting shells and a few birds. He returned with one *Edolisoma* which proved different. Developed pictures which turned out indifferently. Far from pleased with results.

Purchased quantities of native foods. These Malaita rascals are by far the most shrewd of any we have encountered.

February 3 (Monday). Suú, Malaita. Hamlin, Mayr, Eyerdam hunting. Myself, sore leg. I engaged the services of Whiskey and Brown as hunters for several days until we have some indications of carriers and how we will proceed into the mountain area.

Hung up Mayr's tent as an awning over the forward hold. Captain and crew engaged about ship.

February 4 (Tuesday). Suú, Malaita. Hard rains. Mayr and Eyerdam with natives ashore collecting. Hard rains all day. Sent Jackie and Luaba to hospital for injections against yaws.

Mr. Aldington returned from an inspection trip permitting Hamlin to avail himself of the services of the work shop (engineers) where Hamlin wishes to make a spare part for his engine.

February 5 (Wednesday). Suú, Malaita. Hamlin, Mayr and Eyerdam with 3 local natives collecting. They returned in the early afternoon with 48 specimens which took our time until very late at night.

The remnant left over shall engage my time tomorrow morning. Very heavy rains to-day.

February 6 (Thursday). Suú, Malaita. Hamlin aboard with engine. Mayr and Eyerdam with natives collecting. Myself finishing specimens and labelling material.

22 specimens brought in despite the rain.

Raised native Jackie (San Cristoval) 5/- per month for his ability in bird preparation. I tried several other members of the crew but without success.

February 7 (Friday). Suú, Malaita. Hard rains intermittently. Hamlin and Eyerdam for birds. Mayr in bed, down with diarrhea and fever, probably a mild form of dengue. Natives collecting. Crew of the ship engaged with cleaning paint work.

The leak in the deck has taken up with the repeated rains. Eyerdam began making up bird skins to-night.

February 8 (Saturday). Suú, Malaita. Mayr some better but very weak. Hamlin and Eyerdam ashore collecting. The former fell while trying to cross a swollen river and returned to the ship with every blessed thing about him soaked. There is no hope of our getting into the interior with the rivers in their present condition. All roads and trails, I might add, follow the course of

the rivers and not over the mountains. Engaged another local "Teake" as a shoot boy to-day. Hunters returned with 48 specimens. Most of them wet and dirty but workable. Eyerdam returned very late again having lost his gun while picking up land shells and later misplacing himself while trying to locate the musket. It does no good to scold him. Eyerdam's heart and soul are in shells and that is the work he should be engaged in.

February 9 (Sunday). Suú, Malaita. Continued hard rains and northwest squalls. The ship rolled badly and early in the morning dragged her anchor. Hamlin started the engine and we shifted across the harbor to get out of the swell as much as possible.

Worked specimens until 1 P.M. when natives, including another local (Charley), showed up with 16 more specimens which kept us engaged for some time.

February 10 (Monday). Suú, Malaita. Deluge of rain. Four local natives hunting. We are giving each hunter a single barrel 20 gauge shotgun, 5 large cartridges, 10 aux shells, newspaper and cotton. They return the shells each night so that we can keep a check on them.

Natives returned at noon with 43 specimens. All of us engaged with preparation. This is one of the few times that all of the white complement have remained on board all day to skin birds.

February 11 (Tuesday). Suú, Malaita. Natives collecting; all of us on board all day engaged in preparation of specimens. The natives are keeping us busy day and night.

Crew engaged scraping paint off the sides of vessel. The Captain wishes to paint the outside of the ship white. It is now black.

February 12 (Wednesday). Suú, Malaita. All engaged as yesterday. This continuous deluge of birds is getting on our nerves. We are cross, irritable, and spend much time grumbling at one another. 38 more specimens came in at noon.

Hamlin and Mayr concluded to make a preliminary trip into the mountains. Whiskey, local police magistrate, flatly refused us carriers, but moderated when we threatened him with a visit from Major Saunders.

It is quite easy to understand why these natives are reluctant to transport our cargo. As long as we are stationed here, natives can obtain tobacco and trade goods from foods sold and rewards earned from hunting. If we leave, that source of revenue is cut off. I suspect that the old heads of the village are behind Whiskey in his reticence.

February 13 (Thursday). Suú, Malaita. Hamlin and Mayr away to the highlands, early in the morning, with 9 boys and 3 women as carriers. They plan to establish a camp when they locate mountain ornith and send for Eyerdam and me.

I will pack up the lowland material and forward that to the Museum via the S/S Mataram which calls at this port Saturday (15th). Eyerdam will be better off here with me.

February 14 (Friday). Suú, Malaita. Eyerdam and I packing one case of 350 specimens representing low-land material of Malaita Island. Whiskey down from the bush with a note from Hamlin, advising that they have a makeshift camp at 3000 feet, near a fresh landslide which we heard taking place during the heavy rains last week.

February 15 (Saturday). Suú, Malaita. S/S Mataram in port to collect copra. Took the case of specimens on board and dispatched them to the Museum.

Some mail for Mayr and a series of cables from Burns Philp and the French Government at Noumea regarding the Polynesians who were landed at Noumea and arrested by the French authorities as prohibitive emigrants.

I dispatched a note to Hamlin. The bearer of same met Hamlin, Mayr and party returning from the bush. They arrived at 5 P.M. and reported a not worth while trip. No vertical variation in species was noted. The old villager with whom they were staying ordered them off his land, giving as an excuse the surmise that hunters might accidentally shoot the village pigs, which were in great demand for an approaching feast of some kind. Mayr and Hamlin decided to return to the ship, reorganize and later try another locality.

Mayr received some news from Berlin and cabled the Director of the Museum as follows:

"Wire immediately your opinion concerning my departure. Permission New York. Will leave if you advise. Reply immediately.

Mayr."

February 16 (Sunday). Suú, Malaita. Hamlin must return to Tulagi to straighten out the Polynesian crew difficulty with the French authorities. Mayr is anxious to be in Tulagi near a cable station where he can settle his status with Berlin. We agreed to sail this night for Tulagi to be there in time for business hours Monday morning. The thought of the loss of a night's rest on the part of the Captain gave the old gentleman the jitters. He started a terrible fuss, but soon lost heart when we extended him an invitation to accompany us as our guest. We felt perfectly capable of taking the ship over to Tulagi without the services of a master mariner.

February 17 (Monday). Tulagi. Anchored Tulagi harbor at 10 A.M. Hamlin ashore immediately to the Government Sec'y and to Burns Philp where necessary statements and credentials covering the expedition's part of the Polynesian crew were cabled and mailed to the French authorities in Noumea. As explained previously, these boys were without citizenship papers and elected to go to Noumea of their own accord.

Such identification papers as Hamlin had given the natives were lost in Sydney. Myself to Makambo to replenish our supplies.

Eyerdam in the large boat to gather up all cases of shells that are stored about Tulagi to bring them aboard and repack them for shipment to the Museum and not Seattle, Washington.

Mosquitoes have begun breeding in the main hold. Was necessary to pour kerosene into both water tanks and fumigate ship with burning oiled rags.

February 18 (Tuesday). Tulagi. Mayr received a cable advising his return. He has made up his mind to leave on a French boat bound for Marseilles and due here March 5.

I cabled the Museum advising them of Mayr's intended departure, and requested 100 pounds passage money for him.

Mayr in turn advised Berlin and his parents of return to Germany in April.

Hamlin learned that 200 pounds sterling has been placed to his credit through the London office of Burns Philp and Co. This will offset our debit somewhat.

Eyerdam engaged packing his shells.

February 19 (Wednesday). Tulagi. Hamlin to Gavutu to purchase some spare parts for the engine. Captain and crew engaged roving new peak and throat halyards for the foresail.

John Ellis aboard to measure area for a new stay sail which we need badly.

Mayr and I packing his effects. Eyerdam at shells. He cannot pack, just throws things into the boxes. Fortunately, shells are not as easily damaged as bird skins.

Hamlin has cabled Hanley and Clay Co. of Samarai, relative to an exchange of the 'Royal Endeavour' for the 'France.' The 'Royal Endeavour' is a sailing ship out and

out with a splendid reputation for quick passages. Hamlin has asked my opinion of the exchange, but I should like to see the other vessel before I make up my mind.

February 20 (Thursday). Tulagi. All of Eyerdam's shells (18 cases) to B. P's. Cargo sheds to be shipped to New York via the S/S Carisso, an American vessel, calling shortly.

We are awaiting further replies from cables.

February 21 (Friday). Tulagi. Four members of the crew, Ulava, Jackie, Luaba, and Belleu, struck for higher wages and a tin of salmon each for "dinner" every night. They were dismissed without ceremony.

Arabo, the cook, was raised to 3 pounds per month. We can't afford to gamble with a new cook at the moment.

Later in the day--Lonsdale (Charley) and Willie signed on at one pound each per month.

Hamlin purchased a secondhand oil separator, which he will use to filter his used lubricating oil in the engine. Deisel engines fairly eat lubricating oil. With this machine Hamlin will, no doubt, enact a considerable saving on his oil bills.

February 22 (Saturday). Tulagi. "Joe", a gangling Guadalcanal native, signed on as "Boatswain" at 3 pounds per month. Taro, a San Cristoval native, signed as seaman, ordinary, at one pound per month.

Hamlin and Eyerdam at work bolting the new separator to the floor boarding of the engine room. Eyerd-

dam is in his element at heavy work of this sort. He is to be complimented upon his ability with carpenter's tools.

February 23 (Sunday). Tulagi. Very hot and sultry. Mr. Eyerdam wishes to sever his connection with the expedition, get married and continue in New Caledonia or elsewhere as an independent unit. He is writing to Dr. Murphy on this account.

Mayr has finished his packing.

February 24 (Monday). Tulagi. Ashore with Hamlin to the Government Secretary, Mr. Kidsen, and made a formal application to that person to be permitted to take 5 natives of the Protectorate out of the group for the period of one year.

A rather tardy cable reached Mayr this noon: "Decide yourself no danber staying longer--Zimmer." Mayr has threshed the problem out in his own mind and has decided to return to Germany. After all Mayr has been out longer than any of us, over 3 years, and he feels that he should be getting home.

All of us hate to see him go, but realize that he must be his own master. We bid our august colleague Godspeed at 4 P.M. Sailed out of the harbor to Gavutu where I made a few purchases at a nominal price from Lever Brothers' store and continued on toward Suú, Malaita, not without a misunderstanding with our Captain, though, who felt that he had earned an honest night's repose after his difficult 30 minutes of navigation from Tulagi to Gavutu.

February 25 (Tuesday). To Suú, Malaita. Our passage of the night and morning should have a fitting place among the annals of the Whitney South Sea Expedition: It might be termed the finest piece of "circular navigation" ever performed during the 9-year cruise of the schooner 'France.' Full credit must be given to William Henry Burrell, master marine, of Bathurst, New South Wales, Australia, for the masterful way in which he handled the whole situation from its inception to the end.

Hamlin took his post in the engine room to look after that instrument while Eyerdam and I retired shortly after dark to catch a little sleep before we went on deck to take our allotted watches. Between 9 and 10 the Captain called Joe, the new boatswain, to the wheel and gave him the course to be steered. Being a normal night, the Captain paid no further attention to Joe, but presumed that, in as much as Joe had been on ships 7 years (as a fireman, we learned later) he, Joe, could steer a course. The Captain came below to catch a nap, I presume, and did not return to the deck until just before midnight. Then and then only did he learn that Joe had managed to get the ship turned around and was headed back for Tulagi. I was awakened by a beautiful display of 1870 maritime language and came on deck to see what was the matter.

Shortly, after I arrived a light was sighted dead ahead. It faded and appeared periodically. The Captain was sure that the light came from one of the station

houses on the hill above Suí harbor. The old man even went so far as to climb half-way up the rigging to convince himself that he was right. Yes, that was it-- turning to the new boy, Charley, at the wheel, he directed that individual to steer in the direction of the light, keep the light dead ahead.

The Captain, Hamlin and I went below and made ourselves a cup of tea on the kerosene primus. A half hour later, upon returning to the deck, Captain found that Charley was still pursuing the light, but was going in the direction of Tulagi again. It turned out that Burrell was chasing the masthead light of the Malaita Company's small schooner which was enroute Tulagi.

The next few minutes were pitiful. The old man lost his head, made Hamlin stop the engine and insisted upon drifting until daylight until he could learn where he was.

Daylight came and the Captain was still lost, had no idea where he was and wanted to run close in to the land, send a ship's boat ashore to inquire our whereabouts. Hamlin and I would have none of this unseamanlike conduct. We refused to let him. Finally, Arabo, our cook, advanced the information that, given charge of affairs, he could pilot us to the Suí anchorage without further ado. This he did in short order, and old Burrell roared tripes out of the lad for not having breakfast on the table at 8 A.M. sharp.

Reached Suí at 9 A.M. alongside to fill ship's

tanks with water, thence to anchorage in harbor at 11 A.M.

All of us to bed to sleep, the last hours being a constant drain upon our resources.

February 26 (Wednesday). Suú, Malaita. Hamlin at the engine to put it in good order before leaving the ship. Eyerdam, natives and I hunting. Returned with 21 specimens.

I went ashore to visit sundry and varied old men in quest of carriers. Whiskey has informed us that the old men are the ones to decide such an issue. Apparently, his police boy's uniform doesn't carry much weight.

The old men insisted upon a payment of 5 shillings each per diem. These individuals are shrewd and are accustomed to receiving a rake off on all transactions that deal with the interior. In the past, every boy that came from the mountains to the beach to recruit as labor, paid a premium to the old chief of the beach through whose land he passed. Likewise when the native finished his labor and returned home, he paid another premium to the beachside chief for a transient passage to his village. Inasmuch as bird collectors are transients, they too should contribute to the financial assets of the community. We don't feel that we should pay more than the regulation, one shilling per diem per boy. In fact, we had implicit directions from the Government not to pay more.

Two French Marist mission Fathers visited Suú

to-day. I had a talk with them and was told that Mount Kolovrat and Torimbusu, to the north and east, was the highest position on Malaita. Those men assured me that we would have no trouble with the natives in that region. The Fathers have covered a fair bit of the interior at various times.

Crew of the vessel employed cutting firewood and burning the paint off the sides of the ship with a blow torch preparatory to painting same. During the evening, I outlined, in a letter to the Museum, the financial position of the expedition at the moment. A transcription of the letter follows:

Su'u Malaita

February 26th, 1930.

My dear Dr.:---

Upon receipt of his mail from the Mataram Feb. 15th at this port, Dr. Mayr became uneasy and asked us to return to Tulagi with the vessel in order that he might telegraph Berlin and receive a definite answer from them. Previous to this time Dr. Stresseman had written Mayr repeatedly urging him to resign his position with the expedition and return to the Fatherland. Mayr did wish to remain with the vessel until the Carolines were reached and he had likewise finished his one year with the W. S. S. E.

On Feb. 18th, Dr. Mayr received the fol-

lowing communication from Berling, "Return advisable Zimmer." This cable from his director, Dr. Zimmer, was final and Mayr began making preparations for his departure on a French steamer from Tulagi March 5th. He will arrive in Germany the middle of April.

Feb. 19th, I cabled you as follows: "EMayr will leave in about a fortnight. Please send immediately 100Pounds E. Mayr this port. Coultas." As you will see later, we have no cash funds available at the present time. And our credit at Burns-Philp is extended to the point where I do not care to ask them many more times for advances. Last August Dr. Mayr loaned to the expedition, all of his available cash money, 303 Pounds to be exact. Now when he wants to return to Germany he is without funds to pay his own passage and we too, have nothing to give him. I hope that you have not misconstrued the meaning of the last cable. We are not paying for the Dr.'s passage to Germany.

Mayr left the France Feb. 24th and we returned to Su'u at once. Before the Dr. left the ship he asked for a nominal rate of interest on the 303 Pounds loaned to the expedition. With the consent of Hamlin, I have given the Dr. a promissory note for 303 Pounds, bearing simple interest at the rate of five percent per annum dating from August 1st, 1929. This sum of 303 pounds does not include the 80 pounds due Dr. Mayr for his services with the expedition the past eight months, June

15th, 1929 to Feb. 15th, 1930.

We remained in Tulagi until the evening of the 24th, hoping to have an answer to our cable of the 19th to you, before we left Dr. Mayr. Hamlin was confident that the money would reach him in Tulagi in time and advised that we continue our work on Malaita.

Malaita is reputed to be very quiet now and we anticipate no trouble whatsoever. The missionaries, who have been into the interior, tell us that we should find but a few natives and those very submissive since the Sinorango affair of two years ago. At that time the natives killed two Government tax collectors. The authorities in Tulagi organized a bush party and wiped out most of one clan.

There now remains in the Solomon Group; Malaita, to the north of that, Gower Island; to the southward of Malaita, Ulava and the Three Sisters. We should finish these by the middle of April. There will still remain the large coral Atol, Ontong Java (Lord Howe) 150 miles to the northeastward of Malaita and to the southwestward the two islands, Rennell and Belone. Hamlin has visited Rennell but says that there are several species that he missed.

Should we cut these out of the category, we will be able to leave the Solomon Islands by the first of May by the very latest---providing that we have received sufficient funds to enable us to continue to the Caroline Islands.

In the middle of January, Hamlin told me that he had advised you some time in November to the effect that he was turning the expedition over to me and he would remain without salary until we reached the Carolines. At the time, I pointed out that my contract stated specifically, that I was to place myself under his charge until such time as he leaves. Hamlin insisted that this was the best course, as he had already remained with the expedition longer than he should have. I should like your opinion in this matter as soon as possible as there are several things hinging that do not augment harmony.

I have taken over the financial part of the expedition and will report that with this letter, but I do not think it advisable for me to take over the whole thing until Hamlin leaves. That is a matter of policy.

Now let us get into the financial side of the France first:

We will have April 1st. the sum of 680 Pounds (\$3400) debts to be paid here in the Solomon Islands before we will be able to leave. This includes captains and crews wages, but it does not carry with it the Sydney debt nor the others that we have.

In Sydney there is an approximate debt of Pounds or \$2415 that must be met sooner or later.

Dr. Mayr's loan and wages of 383 Pounds minus the 100 Pounds we presume is forwarded to him will mean \$1415.

Hamlin's wages due of 320 Pounds--\$1600

The New York deficit of say \$10,000

Debts Tulagi-----	680 Pounds-----	\$3400
" Sydney-----	483 "	2415
Dr. Mayr-----	283 "	1415
Hamlin-----	320 "	1600
New York		-----10000
	Total deficit	\$ 18830

At present it would seem that the total deficit of the expedition will be \$18,830 on April 1st, 1935 and that exclusive of the wages of Eyerdam and myself to the present and the small amounts incurred by yourselves there in New York.

Now if the expedition does go the Carolines as Mr. Hamlin wishes you must forward an additional \$5000 besides the \$3500 quarterly statement that is due April 1st. I should like to know too, if the additional \$5,000 is forwarded what effect that will have upon the future stipends that will be forwarded in quarterly payments. Will you take that \$5,000 out of the next allotment and leave me stranded in the Carolines until that is made up or will you borrow from another fund? It will be impossible to get the credit in the Carolines that we have been extended here. This is a matter of pure business and with me a serious one, for when I take over an expedition with a deficit of \$18,830 it is up to me to know something of the scheme of things. I certainly do not want to take the ship over in the Carolines and then have the thing seized for non-payment of debts. Nor do I think it advisable to go to the Carolines until some sort of a financial basis is

reached either.

Will you please cable us on the first of April, stating definitely what amount is being sent April 1st, and what amount can be sent us July 1st, inst. Please. I do not wish to continue further in the dark.

Let us go at this from an entirely different angle:

Insurance (annual) on vessel-----	\$1200
Incidentals New York-----	1000
Coultas wages-----	1200
Eyerdam " -----	1200
Ammunition-----	600
Annual expenditures	<u>\$5200</u>

The annual expenditure of \$5,200 in New York from the allotment of \$20,000 leaves a surplus of \$14,800 for the maintenance of the vessel and the expedition in the field. By the most rigid economy I think that it is possible to run the ship on \$10,664 per year. That will mean an allotment of \$2661 per quarter and will give the Whitney fund \$4,156 per year to cancel deficits.

When I use these figures of \$2,661 per quarter I am figuring without accident to the vessel and the possibility that I can take the Solomon Islands crew to the other groups with me.

These are the best figures I can give with the most rigid economy expended. We have economized to the last drop as it is for prices here in the islands are anywhere from one hundred to five hundred percent higher than in your part of the world.

If you do not find it possible to extend the

credit of the Whitney fund over the \$3500 quarterly allotment on April 1st it is possible that we can go to New Caledonia with the vessel and get caught up a little there before proceeding to the Carolines. For as I told you I do want a few dollars in hard cash in the ship before we go into the territory of the Japanese.

At the most the expedition does not need the France more than fourteen months longer. The Carolines Marshalls and Gilberts can be worked as a whole and the outlying islands of the New Guinea coast and the Smaller islands of the Admiralty group as well. It may be possible to sell the ship in Rabaul as there is a demand for such a type of vessel in the Gold fields trade from Rabaul to the northward. After the islands have been completed, the expedition can work the larger Admiralties, New Britain and New Ireland as a land unit.

The old France is still sound below the water line. Above decks there are a few small places that are not in the least serious. But the demand for this type of vessel is not very heavy. Copra has dropped in price to such an extent that many of the smaller planters are being frozen out. There is absolutely no demand for this type of vessel in the Solomon Islands. What she will bring when the time comes, remains a gamble.

Hamlin sent the Polynesian crew away the latter part of January. It will be necessary for us to train a new group of bird skimmers. I have petitioned the Government in Tulagi to permit me to retain the Solomon Island

crew for a period of one year. With them I should be able to economize and eliminate the bolshevism of labor for one year. These imbeciles can learn to skin birds. I have taught a couple of them already.

Mr. Eyerdam is obsessed with a "betrothed" in Germany. He would like to have her with him on the France but the rest of us have told him frankly that would not be satisfactory. We have no individual cabins for the two of them and he would be without privacy in his family life. Mr. Eyerdam has, I think, written to you outlining a plan to work New Caledonia. He would like to spend a matter of a year or more in that region collecting birds, shells and botanical specimens. Such an idea would be a good one providing the money for his expenditures were not taken from the Whitney fund. Mr. Eyerdam's interests do not center in birds. He is primarily a collector of Botanical and Conchological material. He does a fair piece of work on birds now though he has much to learn yet.

If the museum could find him a fund where he could spend several years in one place with his plants and shells and birds, on the side, I am sure that he would be of much more value. A discontented mind doesn't produce the best results.

If Eyerdam were sent to New Caledonia, I am sure that he must have credentials from you and the French Embassy in Washington before he could be permitted to land there.

I am forwarding with the S. S. Carisso of San Francisco, a tramp American vessel, eighteen cases of conchological material and two cases of materials belonging to Mr. Hamlin. Those should reach you some time in June.

In your letter of Nov. 30th to Mr. Hamlin, you asked him to have me write more frequently. I can assure you that I have kept the two weeks schedule with as nearly as possible. Mail leaves the islands once every six weeks and often then we are miles away from any one who is meeting the steamer. With our case now, we will be out all communication until we return to Tulagi the middle of April.

Let me ask you again to send me some sort of a Carte blanc credential. A "Dago Dazzler" with a nice official stamp and the trimmings would be as satisfactory as any. Hamlin has been using his contract with the museum as his identification. In the Carolines or New Caledonia we will be asked for credentials of some sort. And the same applies to the Mandated Territory of New Guinea likewise. I do not need a specific letter of entry to any one territory but I should have some sort of a "Who am I"

I am pleased to know that publications are on the way. We will devour these during our spare time.

Don't think from the remarks preceeding the financial summary, that I am in the least discontented. Quite the contrary, I am willing to see the expedition out to the end.

Best wishes,
(Signed) William F. Coultas

February 27 (Thursday). Su'u Malaita.

Eyerdam and three local natives ashore hunting. Myself at the discouraging task of trying to obtain carriers. We have learned from other sources that the natives boast that they will make up pay through the nose before they take our gear into the bush.

February 28 (Friday). Su'u Malaita. Hamlin engaged at the engine as previously. Crew employed burning paint off the ship's sides. Eyerdam collecting. I have decided to call a halt on the native collectors in hopes that their reaction will be favorable toward carrying.

March 1 (Saturday). Su'u Malaita. With Eyerdam to the village of "Hoe" in the interior to a big festival where we hope to obtain carriers. Our appeal was met with large guffaws on the part of the inhabitants. We are dreadfully discouraged and are thinking of shifting to another locality, where no doubt we will be confronted with the same conditions as here.

March 2 (Sunday). Su'u Malaita. Eyerdam collecting. Hamlin and I aboard engaged in sundries. A ray of hope gleamed at 1 P.M. when the Government pinnace 'Veronica' was sighted. Sure enough Patrol officer Saunders was aboard and had heard of our difficulties. Mr. Whiskey, the local representative, was brought aboard and told to have 25 carriers ready at daylight in the morning. Whiskey pleaded that the natives demanded 5 shillings each per day. No matter, we were instructed to pay one only.

I felt a trifle sorry for Whiskey, who in the end, must make up the difference out of his own pocket between our pay and that demanded by the natives.

The balance of the day spent in preparation for the bush trip.

March 3 (Monday). To interior Malaita. Myself painfully ill with cramps and diarrhea this morning. Doctored with chlorodine and was able to proceed at noon with Eyerdam and 25 carriers who were awaiting us.

We followed the source of the Kworiekwa River into the highlands and camped at a small village of Nadidiah for the night.

The country through which we passed is broken and mountainous with ridges running up to an average of 3000 feet elevation. The island is volcanic in origin and looks similar to that portion of San Cristoval through which we traversed.

March 4 (Tuesday). To interior Malaita. Away at daylight and followed the course of the river Kwariekwa to the village of Eringo Manu, which we reached at 3 P.M. We are now at an elevation of 1300 feet and some 5 or 6 miles in the interior (as the crow flies).

Our carriers announced that we had reached the border of their territory. We would now be obliged to find mountain people to carry us further. They were paid off and dismissed.

Hamlin, who had remained behind to receive an

answer from Hanley and Clay, Samarai, regarding the exchange of the 'Royal Endeavour' for the 'France,' reached camp at dark. He announced a favorable reply to his message. We were to compare vessels in Samarai later when the 'France' visited that part preparatory to her departure to the Caroline Islands.

March 5 (Wednesday). Eringo Manu. Hamlin is to go on to Arola to find a reliable police boy by name Charley Ba Ba Ma and forage for carriers. I wanted badly to accompany Hamlin on this trip, but felt it advisable to remain behind with Eyerdam.

Hamlin away at 8 A.M. with two locals who know the road to Arola.

Myself out all day with a guide, Antai. We covered three distinct ridges of 3000 feet or over without discovering a mountain ornis.

Eyerdam collecting south of camp. Returned to camp to work birds until late at night.

March 6 (Thursday). Eringo Manu. Our camp is a makeshift affair inside a native hut. If one can accustom himself to the dirt and filth around the place, life isn't bad at all. We have plenty of fresh air and a wealth of beautiful mountain scenery. There are hordes of weird, naked savages who offer us as much interesting speculation as we give them in turn.

Antai has been engaged as a cook while native George began lessons in bird skinning.

Eyerdam and I collecting all day with fair re-

sults but no new material. We are certainly bringing together a splendid representation of lowland material.

March 7 (Friday). Eringo Manu. Prospective native hunters demanded that we pay them in money for birds collected. We refused them, knowing that in time they will be eager to obtain tobacco. Eyerdam and I collecting. We encountered considerable rain during the day.

March 8 (Saturday). Eringo Manu. With our landlord "Willie" to Hau Fardi, a long range to the south and east of camp. We encountered difficulties in getting around and over numerous landslides. These ridges are sharp and steep throughout this region.

During the day we passed through a number of well-cultivated native gardens. They were clean and orderly and showed evidences that these people are good agriculturalists. The area appeared to be well populated though few natives were observed. Natives, and particularly women and children, hide when strangers are in their midst. Hau Fardi is also a ridge of over 3000 feet elevation.

March 9 (Sunday). Eringo Manu. In camp all morning attending to left-over specimens from yesterday's collecting. Charley, Su Su Mai, a well-proportioned stalwart, applied for a position as hunter and bird skinner. He was engaged and later turned out to be one of the finest natives I ever associated with. Charley is married but left his wife and family in care of his parents.

Hamlin returned from Arola at 4 P.M. with Charley Ba Ba Mai, police magistrate, and 18 carriers. As fine a lot of savages as I have ever set eye on. Hamlin announced that these "friends" of his would take us into the Mount Torimbusu area.

Included in Hamlin's retinue was a badly disfigured old scoundrel named John Lah homme Lem Besse. Informants gave us to understand that John had had a varied career. As a child he had fallen into a fire and had burned himself badly. Later in a raid on his village, John had lost the sight of an eye and had become crippled and deformed. John married later on, but lost his wife after a few years of matrimonial bliss. The only child of this union, a son, was killed in a fight a number of years previously.

John became demented after the loss of his wife and son and was known to spend long intervals wandering alone in the bush.

This is not a dissertation on witch doctor, but goes to show how they are made.

As the natives believed, the devils had gone inside John and had made him a supernatural being. The Arola people included John in their party to look after their interests when they were travelling to and from Mount Torimbusu where we are led to believe strange gods and devils dwell.

For the price of a shilling John could make

the rain stop or the sun shine or bring on the rumblings of thunder--all of these things and others as well.

He and Eyerdam took to one another like ducks to water.

March 10 (Monday). To Su'u. Hamlin and carriers to rest for one day and thence to Torimbusu with Eyerdam and all of the gear.

Myself to Su'u and the ship to take down all specimens and requisition rice and as many other commestibles as I can find carriers for.

Charley Su Su Mai and Jack Antai will await my return and guide my party to Torimbusu.

Left camp at daylight and reached ship at 3 P.M. Found everything in good order with crew engaged painting ship. Native Belleu, cabin boy, has returned to the vessel. He will receive the generous sum of ten shillings per month for services rendered.

March 11 (Tuesday). To Eringo Manu. Away at 7 A.M. with six local natives and 2 boys from the ship. Traveled all day in the rain to reach Eringo Manu at 4 P.M. There I found my two guides awaiting me and a note from Hamlin stating that he and Eyerdam had gone on to Mount Torambusu. I camped for the night.

March 12 (Wednesday). To Kwau Kwau. Resorted the baggage. With mine and the small amount that Hamlin was forced to leave, now have 10 carrier loads.

"Willie" petitioned me for payment of rent on his house and firewood before I left, but, fortunately, I

was able to remind him that Hamlin had attended to that technicality before he departed yesterday. Such are the virtues of the written word.

My two boys, from the ship, gave out on me after 2 hours of hiking. They insisted that their feet were not accustomed to the hard stones in the river bed and they must return to the vessel. I suspect that our boys were frightened of the local natives who have been their hereditary enemies for generations of time.

I was forced to reapportion the loads and leave one trunk behind. The crew returned to the ship, while the coastal people were shortly afterward replaced by mountain men. Thus two untimely delays in one day.

We turned away from the river bed shortly after noon and began a steady climb up one ridge after another to reach the village of Kwau Kwau, elevation 3000 feet, at dusk.

This place is a striking example of natural fortification again. It is so placed on the end of a spur of a ridge that approach is accessible from one side only. The other through sides being protected by sheer cliffs which drop at least 1000 feet to the valleys below.

The term village in Malaita usually signifies a one-family area. Each has its own name. Tribes or clans congregate in one area, certainly, but every family lives separately. Thus one might find every peak or ridge within hailing distance inhabited by numbers of

people all more or less closely related but every house a number of yards' distance from the other. Natives hold that family life is more congenial when people live apart than when clustered close together. Gardens are placed on the steep slopes of ridges where nothing but a mountain goat would feel at home.

March 13 (Thursday). Torambusu. I experienced a remarkable morning, climbing up and down ridges to reach the Torambusu Mountain. We descended from 3000 feet to the valley (1200) and up another ridge to 3000 feet again. This required over an hour of time at a gain of several hundred rods of distance. After several performances of this kind reached the camp of the other party at noon.

There are a number of new species here including a Gymnophaps and a mountain Rhipidura.

Camp has been established at 4000 feet well inside the moss line, which indicates quantities of rain. There is the tent fly for the main house and another temporary shelter for the cook and followers. Conditions are very crowded but will do for the time being. Though all carriers have been paid in full, we are hampered by camp followers who have no other ambition than to see what we are doing and pick up whatever comes their way.

There is another factor about bird expeditions which attracts natives and account for their popularity with the latter. No sooner is a bird skinned and the body examined than there are a dozen eager outstretched hands ready to receive the prize.

The abandoned body, no matter the species nor the size, is flung, dirt and all, into the fire. There it receives a hasty scorching on the outside before it is consumed by one or more natives.

One becomes accustomed to the crowding, jostling and snarling, in time, that accompanies the completion of each specimen.

March 14 (Friday). Torambusu. We suffered a cold, miserable night,--not sufficient covering nor bedding underneath us. Put natives to work to cut fern fronds and build us a deep bed.

Chas Ba Ba Mai, the leader, assured us that he and associates would collect our birds and supply us with food. This was his polite way of informing us that we were not wanted in the bush.

We engaged 4 hunters for the present and they lost no time in supplying us with specimens. A Phylloscipes was brought in during the morning, a very desirable bird.

The sun was visible until about 8 A.M., following which we were beset with rain and fog the rest of the day. I am afraid that we are camped a few hundred feet too high and are just inside a continuous fog belt.

This morning at daylight Hamlin and I walked the 300 feet up to the very top of the mountain. There we were afforded a wonderful view of the whole of the surrounding country including the island of Guadalcanal over 70 miles distance. We likewise watched the mountain

Gymnophaps at their tumbling antics. It was a pleasure to watch individuals of this species fall over backwards from a limb of a shrub or tree upon which they were perched and turn over and over while they fell many hundreds of feet before righting themselves.

March 15 (Saturday). Torambusu. Bebingah, self-styled terror of this district, appeared in camp to-day. He is a blustering individual, trouble bent.

Began to rain early in the morning and continued all day. In our camped quarters, we are far from comfortable. The cold makes it necessary for us to put on all available clothing to keep warm. We sit up on the edge of the bed with a box lid or flat board on our laps and prepare specimens. The rain has come in such torrents that we have small rivers running under our beds. It is a problem to keep our feet dry.

John, the medicine man, irritated us terribly by emitting a blood-curdling yell every few minutes. He insisted that he was chasing away devils and spooks that kept hovering around the camp.

Fortunately, the hunters, eager for tobacco, have swamped us with specimens which they have managed to keep reasonably dry despite the weather.

March 16 (Sunday). Torambusu. Hamlin has developed a nasty cold. He has concluded that he will return to the coast and take the ship to Ulava Island,-- possibly the "Three Sisters" and then Gower. He will

return for us at Ulamburi on the other side of the island shortly after April first. This was a sound idea and kept the ship engaged while we were at work in the mountains.

Hamlin left at 10 A.M. with 2 volunteers who will return to us with ammunition and comestibles.

Eyerdam and I engaged as previously. The material continues to pour in while we sit and prepare specimens.

March 17 (Monday). Torambusu. Engaged at birds. Rain and high winds all day.

March 18 (Tuesday). Torambusu. Same as yesterday. Every blessed thing we own is damp from the mist. I am a little troubled about the specimens. They will never dry while we are camped in this locality.

March 19 (Wednesday). Torambusu. We have had 56 hours of continuous rain and wind. This must not continue longer. Sent Su Su Mai and Antai down the slope to pick out a flat spot near water, and under the fog line where we can camp and still be within striking distance of the mountain. They were instructed to put up frames for our tent and build a large dry cook house.

How these hunters of ours and camp followers have been able to ward off pneumonia in all of this rain is a mystery to me. They have been sleeping on the ground in the cook house, huddled together like pigs, without coverings or blankets, yet are still as good-natured as ever.

Eyerdam and I have scarcely moved. We tumble out of bed, skin birds and tumble back again.

March 20 (Thursday). Wanga fu fu. Moved camp down the slope half a mile to 2200 feet altitude. Our boys picked out an excellent spot for us. We were moved to the new quarters and back at birds in a little over 2 hours.

Be bing ah played up to-day by demanding that he be made the cook. Even tried to drive Antai out of camp. A few terse invectives from me discouraged him. Like all bullies, he is bold only so long as he can get away with it.

Rain and mist to-day but not nearly so uncomfortable in our new quarters where we have protection from the prevailing northwest winds.

Our locality is undoubtedly an old sacred festival ground of some kind. I think this spot is where this tribe brought their dead chieftains to burn them in days past. Natives are close-mouthed about their own affairs.

March 21 (Friday). Wanga fu fu. The blessed sunshine appeared this morning. We are just under the fog line. Spent a busy day drying out our effects, building wind breaks around the tent, padding bunks with fern fronds, adding leaf to the cook house, drying specimens, digging drains and putting the camp in shipshape order. We still had time to prepare 34 specimens.

I dismissed hunter Di An Taro and engaged the

terror Be Bing ah in his place. Started Jack, Anti Mai and Areke at bird skinning. Engaged Hankepaw John as hunter.

Ba Ba Mai was dispatched to Arola to start vegetables to our new camp.

Hunters agreed to collect birds at the rate of 2 desirable birds for one stick of tobacco and found themselves.

March 22 (Saturday). Wanga Fu Fu. A note reached us from Hamlin; he is away to Ulava Island with the 'France.' Accompanying this note was some ammunition, cocoa and sugar. The latter we need badly during this season of cold rains.

Continued with birds all day. Our two native helpers rendering valuable assistance.

Natives report a small, ground bird which we think to be a Gallicolumba. This one is a "taboo" bird of theirs. They admit seeing it occasionally, but will not shoot a specimen nor do they want us in the bush hunting for it either. There must be other sacred individuals as well though we can get no definite word from the natives regarding them.

March 23 (Sunday). Wanga Fu Fu. Called a halt on hunting to put in our time labeling specimens and devising means of drying material. Eyerdam cut the side out of a benzine tin after which we filled that with small birds and hung it above the fire in the cook

house. There it will keep warm and ward off more mold I hope. This is not a satisfactory method by any means, because of the smoke which stains the wrap cotton around each specimen but the best we can think of at the time. I wanted badly to lay out the larger specimens as well but was afraid of smoke stain. I don't know what we will do if the sun doesn't shine soon.

Be bing ah, trouble maker, demanded higher wages for specimens, so we took his gun away from him. This individual is our stumbling block in an otherwise peaceful surrounding. We will have to watch him, and get rid of him as quickly as possible, for Be bing ah is trouble bent and may lead us into serious difficulties.

March 24 (Monday). Wanga fu fu. The 9th day of rain. Hunters out and procured some very good material, though nothing new. Finished labeling and prepared specimens.

Be bing ah returned again from somewhere and tried to drive off the native vegetable carriers who had been sent by police boy Charley Ba Ba Mai at Arola. This led us to a dispute in which I threatened to give the culprit a thrashing. He sneered and insisted that I had a pistol which was an unfair advantage. I produced the same from the tent and perforated a small tinned 5-cent milk can set up at 25 yards,--an act of braggadocio and sheer luck on my part, for I hit the can 6 times in succession. This performance had its desired effect,

pleasing to my hunters and satisfactory to Be bing ah who left camp again almost immediately.

I think a short history of this surly gentleman is in order.

There are to be found in every Malaita tribe one or more treacherous individuals known as professional killers. Their purpose in life being to revenge a wrong for some one else for a stipulated financial consideration. The position of a killer among the clan is one of respect and fear. No one knows when or upon whom he will strike. The killer in turn lives a life of suspicion and dread because there are others who seek his life.

Several years ago, this tribe, the Ari Ari people, killed Patrol officer Bell and Cadet Lilly's. The Government stepped in following the murder and punished these people severely.

The famous Bessiana, a professional killer, had led these people at the time of the killings. Bessiana had for years accepted payment in advance from relatives of boys who had died on plantations and elsewhere. He in turn guaranteed the relatives of these deceased that he, Bessiana, would kill one or more white men to balance the score. It was a head for head sort of business.

Bessiana lived well on the accruing promissory funds, but reached a time when his tribesmen forced him to act. His untimely slaughter of Bell and Lilly's along

with 18 police resulted in the death of Bessiana and a good two-thirds of his strong tribe.

Since the death of Bessiana, Be bing ah has striven to take his place, according to the reports of our bird skimmers who dread and fear the latter. Be bing as has the height, strength and cunning of a promising duplicate, though I am afraid he lacks the intestinal fortitude necessary in his calling.

March 25 (Tuesday). Wanga fu fu. Another day of continuous rain. The hunters out and ourselves engaged with specimens.

Be bing ah showed up again, having returned from the old medicine man, John, I was told. I was prepared for the former. I presented him with a letter to Hamlin at Ulamburi across the island, and told him to wait on the beach with the letter and deliver it in person. Included with the letter was five shillings expense money with which to purchase food during this interval.

I even made Be bing ah a pretty speech in which I elaborated his virtues and my absolute faith in his integrity. I stressed the point that the hunters had done so well that we must have more containers at once to hold all of our specimens (which was the truth).

Upon the completion of my utterances, Be bing ah swelled with pride, stalked off across the island never to interfere with us again.

March 26 (Wednesday). Wanga fu fu. A whole day of sunshine. Had my boys build bamboo racks and put all

of our material in the sun. Some of it dried sufficiently to be packed away for transportation to the ship.

We are badly handicapped by lack of tin damp-proof containers. I tried to find some in Tuglagi when last there, but discovered none in the stores.

Hunters out all day. Returned with a wealth of material.

Natives Fah fu li ah and Fe fi im'u ah have tried for two days to steal a spool of thread without success. At last we gave them a few yards of thread each and diverted their minds to less lucrative pursuits such as cutting firewood.

March 27 (Thursday). Wanga fu fu. Rain again to-day. We remained in camp and continued with specimens. We always have some on hand, no matter how long or how hard we work. I must say that these natives have kept up their end of the bargain. They supply us with more birds and more vegetables than we can use.

Charley su su mai, our best hunter, informs us that we are living on his land. I have often wondered about his excellent behaviorism and upon learning that he was our landlord remunerated him at the rate of one stick of tobacco per diem (5 cents) rental.

March 28 (Friday). Wanga fu fu. Continued as previously. We receive a wealth of material but no new

species. I wish we could devise some way of getting into the bush, but the natives will not have us there. They insist that this is not a part of the contract, which is true. We think it best not to break faith with them. Undoubtedly there are ceremonial grounds and burial places and skull houses that they do not want us to see.

March 29 (Saturday). Wanga fu fu. Heard a number of Garamaut's (drums) beating this morning. Our natives inform us that Charley Ba Ba Mai is calling in carriers. We can expect a visit from him shortly.

Some sunshine to-day which gave us a view of our surroundings. In every direction, there are peaks of extinct volcanoes. What a wonderful place it must have been ages ago.

Natives out again, but a marked falling off of material. I presume they know, what we do not, that we are to move camp.

March 30 (Sunday). To Arola. Charley Ba Ba Mai, police boy, showed up this morning with 17 carriers. He explained that he intended to take us to Arola where we would be near native gardens, since those natives he had engaged to carry foodstuffs over to our camp refused to do so any longer. He stated further that one of his children was ill and that he wished to be close at hand if anything happened. He also wanted to assist in the hunting.

I suspect there were other motives besides those

speakers. I wish we could devise some way of getting into the bush, but the natives will not have us there. They insist that this is not a part of the territory which is true. We think it best not to break faith with them. Undoubtedly there are ceremonial grounds and burial places and skull houses that they do not want us to see.

March 22 (Saturday). Wangs in the forest a number of German's (Arms) beating this morning. Our natives inform us that Charley Ba Ba Mal is calling in carriers. We can expect a visit from him shortly. Some snatching to-day which gave us a view of our surroundings. In every direction, there are peaks of extinct volcanoes. What a wonderful place it must have been ages ago.

Natives out again, but a storm falling off of material. I presume they know, what we do not, that we are to move camp.

March 23 (Sunday). To Aroia. Charley Ba Ba Mal, police boy, showed up this morning with 14 carriers. He explained that he intended to take us to Aroia where we would be near native gardens, since these natives had engaged to carry foodstuffs over to our camp refused to do so any longer. He stated further that one of his children was ill and that he wished to be close at hand if anything happened. He also wanted to assist in the hunting. I suspect there were other motives besides these

mentioned, but could never discover them.

We had no course open but to follow the police boy's advice, who after all knew what he was doing. We loaded everything on the backs of 17 carriers and proceeded to Arola which we reached about 5 P.M.

Our journey during the day took us over 3 distinct mountain ranges of 3000 feet each and through two large rivers, the Quare Lafa and Quare Mareta.

The country over which we passed was rugged indeed. In one place we were forced to scale some 700 feet up an almost perpendicular cliff. Landslides were met with frequently. There were no indications of human habitations.

After our journey I had nothing but admiration for those native women who have been supplying us with food from Arola.

At Arola we found a Government rest house built by Mr. Koenig, a Patrol officer in 1928. This building was situated on a cleared knob and was some 60 feet in length by 20 feet in width. By far the finest dwelling we have encountered in our travels. This new home will give us ample space in which to store our effects and work our material.

March 31 (Monday). Arola. Here we are camped at an elevation of 3000 and about 10 hours walking distance from the east coast.

The whole area about us is in the form of a

mentioned, but could never discover them.

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boy's advice, who after all knew what he was doing. We
loaded everything on the backs of IV carriers and pro-
ceeded to Arois which we reached about 5 P.M.

Our journey during the day took us over 5 dis-
tinct mountain ranges of 3000 feet each and through two
large rivers, the Ganga Jala and Ganga Narya.

The country over which we passed was rugged
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length by 20 feet in width. By far the finest dwelling
we have encountered in our travels. This was home will
give us ample space in which to store our effects and
work our material.

March 21 (Monday). Arois. Here we are camped
at an elevation of 5000 and about 10 hours walking dis-
tance from the east coast.

The whole area about us is in the form of a

huge plateau with ancient volcanic peaks protruding here and there. Rivers and streams have cut deep valleys irregularly through the terrain.

Near at hand in the scattered village of Arola with some 50 or 60 inhabitants, the remnant of a once populous group of people.

Those natives who escaped the wrath of the Government's expedition have banded together here, under the leadership of Charley Ba Ba Mai.

Hunters out all day and returned with good material practically the same as on Mount Torambusu, which we can see in the distance, except for the mountain Gymnophaps.

April 1 (Tuesday). Arola. Ba Ba Mai has joined our staff of hunters. He very kindly offered to supply all foodstuffs gratis and give us the house rent free. Why I don't know; I have never experienced an act of gratitude of this kind either previously or since.

Our faithful Antai turned over his duties as cook to Ole Fene Lak Mo and will devote all of his attention to bird preparation. With Eyerdam and the two natives skinning I can just keep even with them making up the birds. We have found that we can go faster than when all are skinning and making up material.

Ba Ba Mai turned in our first example of Ceyx lepidus to-day. This is indeed a find. This same man promises to bring us examples of Spiloglaux as well.

April 2 (Wednesday). Arola. Employed as previously. I took some time to label up specimens and make a check-list of the amount of material received.

Three carriers bring much needed supplies and a note from Hamlin. He has had a very unfortunate trip to Ulava, was forced to pass up the "Three Sisters Group" and has gone on with the ship to Gower Island to the north of Malaita to spend a few days. He will return on or about April 7.

April 3 (Thursday). Arola. Employed as previously. I have also been able to label specimens as we go along.

Broke our kerosene lamp, but borrowed one from Queensland Joe. We are living in up-to-date surroundings after all.

April 4 (Friday). Arola. Hunters brought in 30 birds, including two examples of the mountain Gymnophaps.

April 5 (Saturday). Arola. Had a number of severe earthquakes during the night. These brought on a landslide not too far distant from camp, which frightened the natives terribly. Some of them came running to us for moral support, I suppose, and kept us awake until daylight with their jabbering. Employed all day with specimens and labels.

April 6 (Sunday). Arola. Stopped the hunting to label specimens. I am in a hurry to finish this task in order that Eyerdam can take the two tin cases full of birds to the ship when Hamlin returns and bring the containers back for more. I do not wish to chance the skins in anything but

fairly water-tight boxes.

Likewise I hate to sacrifice Eyerdam from the preparation, but will not trust the skins to natives alone who are entirely too careless.

It is a relatively minor task to collect and prepare specimens. The work and care comes in later, in getting material from the field of activities to the Museum and into careful hands.

Charley Ba Ba Mai turned in a pair of black owls (Spiloglaux). This is truly the catch of the season. We have heard this species calling at night a number of times, but could never induce the natives to collect it. I shouldn't be surprised but what it is mixed up in their culture in some way.

April 7 (Monday). Arola. Hard rains and fog all day. Didn't send the hunters out, but continued with labels and packing for Eyerdam's trip.

He got away about 2 P.M. in the rain after we had wrapped the cases of birds carefully with old canvas and later leaves.

April 8 (Tuesday). Arola. Boys brought me 19 birds which engaged all of my time. I ran out of labels, was forced to use slips of paper until supplies arrive.

It is the devil's own job trying to keep on and on with only a limited amount of material and a class of carriers who balk at a load of over 25 pounds. How fortunate the African expeditions must be with boys who can handle 50 pounds with ease.

April 9 (Wednesday). Arola. The day employed as previously. Hunters turned in only a limited number of specimens. I am using Mayr's method of dealing with the natives in their own bird language. More recently, I have cut down materially on the number of species required, which means that we have nearly completed our series of each species. Consequently, this diminishes each day's return in proportion. I do not pay for material that is not wanted.

The natives are pretty good-natured about all of this. As I look back at it, I'm convinced that they could have been much worse than they were.

April 10 (Thursday). Arola. This day employed as previously. I ran out of cotton which was an inconvenience.

April 11 (Friday). Arola. Hunters out; myself employed as previously. Hamlin and Eyerdam with 11 carriers showed up some time after noon. They brought much needed arsenic, cotton and ammunition, but no food. That, of course, was not necessary as we have tons of it here.

Hamlin announced a successful trip to Gower Island, where he collected a number of rails.

He was somewhat perturbed over our leaving Torambusu, but under the circumstances related previously, we had no alternative, but to shift camp.

After Hamlin had seen a list of the material taken, some 500 specimens, including many desirable spe-

cies well represented I believe he felt better over our work.

There is no doubt but what we did miss some species that the natives would not collect and which are mixed up in their culture but which ones those are we were never able to ascertain.

April 12 (Saturday). Arola. Hunters out, rest of us at specimens and myself labeling another lot of material. One young man brought in an example of Strix alba, the barn owl which he had collected with a bow and arrow. This species must be a migrant here. Very few natives recognized it. Rain again to-day. Two good hunters took off for a sing-sing to return Monday and bring specimens with them.

April 13 (Sunday). Arola. One hunter turned in a Spiloglaux which he had ruined in shooting. We preserved the remnants in alcohol. All of us engaged as previously.

April 14 (Monday). Arola. Hunters returned from their dance with a poor showing. We have about finished our work here. The shooters have reached the place where hunting is a burden to them. Their interest has dwindled. Hamlin feels that we must be getting back to the ship as there is not much food left on board.

I should have liked to establish a camp in another locality and remained on some time, but one can not continue indefinitely when there is a costly ship

eating up expenses and lying idle at anchor.

April 15 (Tuesday). Arola. This is to be the last day. Hunters out and returned with a very desirable hawk as well as other material.

Ourselves engaged labeling specimens and packing for the trip down.

The Hotel Arola Reed orchestra entertained us with a number of selections to-night. The whole spirit of the place has changed since it has become known that we are leaving. Apparently we have been unwelcome guests all of these days.

Called in all of the guns and paid off the hunters at rates fixed previously.

A concise record of native collecting on Malaita Island follows:

NATIVE	BIRDS COLLECTED	SHOTS EXPENDED	
Whiskey	68	92	
Hagora	27	41	
Brown	77	123	Su'u
Teake	64	98	
Charley	21	34	District
John	1	5	
Olefenelamo	90	144	
Antai	3	3	
Fafuliah	65	112	
Tuewanna	2	3	Ari Ari
Deantaro	52	75	
Ba ba mai	96	125	District
Be ging ah	24	50	
Limpekuva	2	3	
Sumburigene	85	127	
Oetavo	5	8	
Ofusiah	15	25	
Su su mai	7	10	
Hankepaw John	7	26	
Okamare	61	101	
Total	782 birds	1195 shots	

This is not a complete record of natives employed. It is, however, a general average.

In all 1039 specimens, representing 63 species of birds, were obtained from the whole of the island.

Over 600 of those taken were from the mountain area, at an average of 3000 feet elevation.

At the beginning, I paid the native hunters one stick of trade tobacco (5 cents) for every three birds delivered. Later on, when the quota of more common species had been filled, I raised the scale to 2 birds for one stick. More desirable species were reckoned as follows:

Hawks: 2 sticks	Micropsitta: 1 stick
Flying fox: 1 stick	Phylloscopus: 1 stick
Owls: 5 shillings	Rehipidura (new sp): 1 stick
O'possum: 1 shilling	Ceyx Lepida: 2 sticks
Rail: 1 shilling	Turcoenas: 1 stick
Thrush: one calico	any new bird: 1 shilling

The payment of one stick of tobacco per diem rent on house and the same for tax for shooting over a chief's land was paid except at Arola where foods, house, and hunting were tax free. Carriers were remunerated at the rate of one shilling each per diem. This is a fixed Government rate and was strictly adhered to.

During most of our campaign in the bush, we lived almost entirely upon native foods. Locals supplied us most generously and well throughout all of our stay. I paid, roughly, the following prices for native foods when delivered:

2 rings bananas, 1 stick tobacco or:

1 stock (6 rings bananas) 1 shilling
 10 pound sweet potatoes, 1 stick weighed
 10 large taro, 1 stick
 5 large Pau Pau, 1 stick
 1 basket lemons, 1 stick
 3 large yams, 1 stick
 1 large pineapple, 1 stick
 5 ears sweet corn, 1 stick
 3 hen's eggs, 1 stick
 5 lbs. gallip nuts hulled, 1 stick
 1 bundle greens for soup, 1 stick

These prices are fairly uniform throughout all of the Solomon Islands, if the prospective purchaser is patient enough to haggle with the vendor.

Although we had heard any number of stories regarding the maliciousness of these Malaita men, we found them quiet, peaceful and quite willing to cooperate with us throughout all of our stay.

April 16 (Wednesday). To the sea coast. Some difficulty was experienced finding enough bearers to handle our duffle. We compromised by putting everything into the hands of Charley Ba Ba Mai and instructed him to see that all of our effects reached the coast. In this particular case the suggestion worked, but such tactics are not recommended. Natives will run off and leave cargo behind unless they are watched carefully.

Away at 9:30 and reached Sandy's village about 4 in the afternoon. We experienced hard rains all of the way. Hamlin, who has not been well, came down with a dose of gastric malaria. We got him into bed early with plenty of hot tea for gruel.

I have been dubbed "Master Joe." Where the name came from I will never know.

April 17 (Thursday). To Ulimburi. Away at daylight. Hamlin though far from well and weak from fever concluded to push on. One cannot help but admire his determination. Reached the coast at noon and had all effects aboard shortly after two P.M. The road from Arola is fairly level and regular until one is within a few miles of beach when it stops abruptly. And one must descend a cliff to the coast. After all, that part of the interior where we were, is a large table-land. The soil and formation near the Ulimburi side is mostly coralline. This is much different from the basaltic formations on the opposite coast to the westward.

All carriers were paid off and departed after a visit to the ship.

We awarded Charley Ba Ba Mai and Sumburigene a free trip to Tulagi for their good work in bird collecting. The former earned his holiday, if anyone ever did.

Engaged all afternoon unpacking material from the bush. That came through without damage.

Eyerdam and I found the ship painted white when we reached her and quite a contrast to her former color. Captain Burrell was down with gastric malaria again. The old man is suffering continually from this malady, principally because he will not look after himself.

Sent a note to my old friend Be bing ah to come down and see our nice ship but that gentleman was too smart for me. He remained at home.

April 18 (Friday). Enroute Tulagi. Sailed a

little after 10, Hamlin having had a little difficulty starting the engine. The Captain tried to sail the 'France' out of the harbor, but was hardly capable of such an undertaking.

Hamlin with the engine. Eyerdam and I in the hold engaged with specimens. Both of us feel the intense heat at sea level after our weeks in the bush.

April 19 (Saturday). To Tulagi. We passed around the north end of Malaita during the night and set our course for Beuna Vista Island which we reached at 4 P.M. Arrived there in a rain-squall. Captain anchored off the tiny island of Olevuga at 4:40 P.M. insisting that his general health would not permit his remaining on deck another night. In all fairness to the old man, he is sick. So is Hamlin, but the latter doesn't complain about it.

Eyerdam ashore for shells and pigeons. The latter for ship's provender.

April 20 (Sunday). To Tulagi. Underway at 7 A.M. and reached Tulagi shortly after 1 P.M. The Captain anchored the ship in the harbor proper and close to Butcher Johnson's establishment much against our wishes. All of us ashore for the evening meal.

April 21 (Monday). Tulagi. Hamlin awakened me at 6 A.M. The ship had dragged in a S/E squall and had touched the coral reef astern. Hamlin started the engine and we took the vessel down the harbor 2 miles to Ellis Cove where we anchored her in a safe location. Tulagi Harbor is a poor holding ground at best.

Burrell was furious at us. He will not be obliged to walk two miles for his mug of beer and his evening game of cribbage.

Bank Holiday ashore. We remained on board engaged in checking specimens.

April 22 (Tuesday). Tulagi. Shipped our two Malaita guests back to Su'u with Mr. Aldington.

To Burns Philp where we received a number of supplies ordered previously from W. S. Tait and Co.; Sydney; most of these are ship's stores.

Hamlin and I engaged checking specimens. Violent rain-squall at intervals prevented much work aboard ship.

No mail has arrived from the Museum. We are in a quandry.

April 23 (Wednesday). Tulagi. To Burns Philp with Hamlin. The manager is determined that we shall settle our account at once, though he is perfectly willing to extend us more credit. I am beginning to suspect that he wishes to seize the ship, an old trick of this firm's.

Purchased enough commestibles to tide us over for the present and returned to the vessel to continue with specimens.

Set the crew to work cleaning guns and straightening up the hold.

A beautiful day but the captain could not find courage to return to the vessel. Burrell is a "terrible piece of work," to use the Australian vernacular, but just as good or better than the average ship master in this part of the world.

Developed pictures; obtained poor results. I simply do not know how to take photographs nor develop them.

April 24 (Thursday). Tulagi. Captain Burrell returned this morning and was severely reprimanded. He refuses to eat with us any longer. Hamlin feels that we should give him his 3 months' notice, but I am afraid he will leave us stranded without another man available. Such an instance would incur an enormous waste of time and expense by a replacement from Sydney,

Hamlin has received a reply to his radio to Bank of New South Wales, Sydney. There remains a small balance in his favor there.

Cabled the Museum as follows "When can we rely upon remittance now ready to leave. W.F.C.H.H.

Myself at birds and bird parasites. Eyerdam at his notes.

Hamlin to work on the engine to overhaul the same before ^{LEAVING - SAMARAI} and the slip our next objective.

April 25 (Friday). Tulagi. Billi or Bele, Guadalcanal native, paid off and left the ship. Crew engaged hauling fresh water in the big boat. Anzac day, everything closed ashore. Myself at birds. Eyerdam notes and Hamlin engine.

April 26 (Saturday). Tulagi. The following cable from the Museum received, "\$10,000 sent to Bank New South Wales between 1st January and 9th day of April. Next payment \$4000 to be deposited July 1st. Murphy-.

This money has been forwarded by mail apparently and will reach Sydney about the middle of May.

Celebrations ashore, hence we remained aboard ship employed with specimens. Hamlin took off for Gavutu to avail himself of the services of the workshop there.

Captain down with gastric malaria.

April 27 (Sunday). Tulagi. Hamlin and I engaged on board. Eyerdam shell hunting. The boat's crew took Eyerdam to Nigela Island and left him to return with a local canoe. Eyerdam did not return so sent a boat for him at 8 P.M. Locals had left Eyerdam stranded in a mangrove swamp.

April 28 (Monday). Tulagi. Hamlin and I to see Mr. Scott, Manager of Burns Philp and Co. We showed him the recent cable from the Museum and asked him to please accept a post-dated check for the balance of our debit. Scott would not accept this arrangement, but agreed to consult the Sydney headoffice.

Very little work accomplished aboard ship. Eyerdam packing shells. Hamlin engaged with the engine.

April 29 (Tuesday). Tulagi. The S/S Marsina arrived in port but no mail from the Museum. Sent Dr. Murphy the following cable: "Malaita Island as complete as possible 1050 forms will proceed first to Samarai."

The Manager, Mr. Scott, has informed us that Burns Philp and Co., Sydney, will transfer our accounts to Samarai where we can meet them. This is a decided advan-

tage for us as there is a branch of the Bank of New South Wales in Samarai where we can do business direct.

Crew engaged variously. Hamlin at engine. Eyerdam shells, myself birds.

April 30 (Wednesday). Tulagi. The S/S Marsina departed for Sydney. I dispatched a letter to Dr. Murphy outlining activities of the past campaign as well as a summary of our present financial condition.

Burrell and I took the ship's chronometer to the 'Marsina' to have it checked and learned that that instrument is losing time at the rate of 28 seconds per day. The old instrument must be replaced before we make an extended voyage at sea.

May 1 (Thursday). Tulagi. To Makambo. To go over all accounts with Mr. Scott, the manager of Burns Philp. I left with an exact record of all of the expedition's dealings.

Obtained a Swedish matchcase and returned to the vessel to pack the Malaita material.

Hamlin at work on the engine. Eyerdam hunting. Crew engaged repairing sails and sundry tasks.

May 2 (Friday). Tulagi. Myself engaged packing specimens. Hamlin employed with the engine. Crew employed mending sails. John Ellis, sailmaker, aboard with the new stay-sail, for which he charged seven pounds and 10 shillings. This was bent immediately and discovered a very mediocre piece of workmanship for the price. I firmly be-

lieve Burrell and the sailmaker engineered some sort of backhanded business whereby the Captain received a commission on this job. I shall never trust the old man with any financial dealings again.

Eyerdam ashore hunting and became hopelessly lost another time. He did return with an example of Centropus ?, a bird frequently heard booming, but never obtained. This species has been eagerly sought on N'gela Island since the beginning of Beck's visits to Tulagi in 1928.

May 3 (Saturday). Tulagi. Ashore and paid a number of bills in the city. Returned to the ship and packed birds. Hamlin with the engine. Crew employed painting ship. Eyerdam along the reefs collecting shells.

May 4 (Sunday). Tulagi. Captain confined to his bunk with gastric malaria. We are highly amused listening to an old reprobate like him calling for spiritual assistance. Burrell's untimely illness will delay our sailing time. We have decided to wait for him and the mail Wednesday.

May 5 (Monday). Tulagi. Captain very sick. We recommended a doctor, but the stubborn old rascal insists that he knows his ailment better than professional men. Myself engaged packing a case of Santa Cruz curios for the Museum. This is some of Beck's old material and should be out of our way. Hamlin with the engine. Eyerdam with shells; crew employed painting ship's decks.

May 6 (Tuesday). Tulagi. To Burns Philp with

3 cases of birds and curios consigned to the Museum via S/S Carisso, an American copra boat. Captain still in his bunk with fever.

Eyerdam collecting shells. Hamlin with the engine.

To interview the Government again regarding native boat's crew for our proposed trip to Samarai. The Government does not appear to be very favorably inclined toward our proposition.

May 7 (Wednesday). Tulagi. Took the vessel to Carpenter's wharf to fill up with fresh water while Hamlin was testing out the engine.

Mr. Kidson, Government Secretary, was very disagreeable about our requisition to engage a native crew for services outside the group. This proposition is hanging fire and shows signs of delaying us indefinitely.

May 8 (Thursday). Tulagi. Hamlin engaged with the engine; he is not satisfied with the performance of yesterday.

Had the misfortune to tear my right hand badly while working in the hold. It seems that no sooner is one member off the sick list than another is on. Even Eyerdam is suffering from some 50 island sores on his legs, brought on by carelessness and lack of attention.

To W. R. Carpenter and Co. to purchase a number of supplies for the vessel. It is disheartening the amount of commestibles four whites and six natives can consume in a week's time.

Sent a cable to the Bank of New South Wales, Sydney, asking the bank to transfer the balance of Hamlin's account to my name.

John Boyd Riddall, late accountant of Lever Brothers Plantation, joined the staff of 'France.' I must have someone to help me when Hamlin and Eyerdam leave. Riddall is purely a novice, but as acceptable as the average in this part of the world. I hope that he will be competent enough to learn the ins and outs of the Deisel engine before Hamlin leaves the expedition.

Riddall and I agreed that the former would work gratis the first month, would receive a salary of five pounds the second month and ten pounds the third, with an advance when he had mastered the engine and showed proficiency in bird skinning.

The 'Montoro' brought us no mail but landed among the passengers, Dr. Sylvester, M. Lambert of Suva Fiji, who is carrying on a yaws and hookworm campaign throughout the South Sea groups. He is serving the Rockefeller Foundation in cooperation with the British Crown Colonial office at Suva.

Dr. Lambert is anxious to visit Rennell Island as quickly as possible. Purely by chance, Hamlin met him and suggested that the schooner 'France' would be the most logical means of transportation to that island. Dr. Lambert liked the idea and agreed to put the plan before the Resident commissioner the following morning.

May 9 (Friday). Tulagi. Day of rainy weather.

Hamlin at the engine. Eyerdam shells; myself incapacitated with hand.

Ashore to W. R. Carpenter and Co. to give them a check issued in my name for our stores purchased.

Captain sufficiently well to spend his time ashore.

May 10 (Saturday). Tulagi. The Resident commissioner has granted Dr. Lambert permission to visit Rennill and Bellona, an uncontrolled restricted group of islands.

This is indeed a piece of good fortune on our part and offsets a great deal the loss of time we have encountered in this port over finances and native crew.

Hamlin and I had planned to visit Rennill again enroute Samarai and run the risk of being fined by the Government for visiting a portion of the group while we were under a foreign clearance.

Had we gone ahead as we planned, the Government vessel with Dr. Lambert aboard would undoubtedly have discovered us at work there. The timely arrival of Dr. Lambert offset this exigency and gave us a clean bill of sailing. Hamlin must be given full credit for a splendid piece of engineering. It is doubtful whether the British Government would have issued us a permit had we asked for one.

Monday midnight was the hour set for sailing. I did not bother to inform the Captain of our intentions, knowing full well that we had a competent enough staff to operate without his assistance.

Hamlin and Riddall spent the day with the engine.

May 11 (Sunday). Tulagi. Worked on accounts all

day to find that we have dispensed with our April remittance before that arrives in Sydney in May. This leaves us just where we were before without funds and relying upon credit for supplies until the July remittance.

I therefore prepared the following cable to the Museum: "Please telegraph immediately Bank New South Wales, Sydney 500 pounds sterling debit the account to July remittance. Letter follows. Coultas.

For my part, I see only course open for the present that is continue the Rennill campaign, then proceed to Samarai, put the vessel on the slip and give her a good overhaul. Following this, lay the vessel up and dismiss the captain for a ^{period of} months until such time as I have accumulated sufficeint funds to carry on properly.

There is the pending exchange of the 'France' for the 'Royal Endeavour' which would give us a faster vessel, but would leave us no better off financially than formerly.

I plan one of two objectives for the next months. Either lease or charter the vessel to some individual or corporation around Samarai or else take the vessel to Noumea, lay her up, and continue as a land unit until such time as we are ready to undertake the Carolines.

I feel that it would be madness to go to the Carolines in our present condition.

May 12 (Monday). Tulagi. A busy day. Dr. Lambert has purchased and contributed more than a generous quantity of supplies for his share of the trip to Rennell and Bellona. These came on board and were stored.

A cable to Hamlin from the Bank in Sydney announcing that they must have written instructions from Hamline, including specimens of my signature before they can transfer his account to my name.

Crew engaged cutting firewood in the morning. In the afternoon hove up anchor and proceeded around the harbor to try out the engine. It responded well so proceeded alongside Burns Philp wharf at Makambo to fill up with fresh water.

At 11 P.M., hove up and proceeded for Berandi, Guadalcanal, to pick up Gordon White, medical assistant, and boys who will accompany us and assist Dr. Lambert.

We tried to obtain the services of a Chinese cook before leaving Tulagi, but were not successful. Beyond doubt, the former celestial who was engaged aboard spread detrimental rumors among his kind.

May 13 (Tuesday). Berandi. Reached Berandi anchorage at daylight after a favorable passage. Dr. Lambert ashore to locate Gordon White. They returned to the vessel about 10 A.M. with gear which was promptly stowed aboard.

The whole party to lunch with Mr. Robinson, plantation manager, at his station house.

Got under way with the ship at 1 P.M. headed south down the coast. The ship labored badly punching into a steady east swell.

Toward evening Hamlin and Burrell entertained us with a desperate battle of words. The Captain wanted to put into Aola and rest for the night as usual. This senseless suggestion was pooh-poohed at length.

Burrell is one of these cross-grained cantankerous old devils who would rather die than be agreeable. I am afraid we take him too seriously.

May 14 (Wednesday). At Sea. Passed down the coast of Guadalcanal during the night and through Marau Sound at 10 A.M., thence altered course to S/W to strike center of Rennell Island approximately 120 miles' distance.

Leach of the foresail carried away at 8 A.M. Took the Captain well over 3 hours to unbend the old one and set the new.

During the course of this operation Hamlin and I shook out the reef in the mainsail that Burrell has been carrying for months. We learned, as we suspected, that the unused portion of the mainsail had mildewed badly, through this act of gross carelessness. Burrell has always insisted that there were not hands enough aboard to operate the ship under full sail. Heaven help me, full rig sailing ships in the Australian grain trade sometimes only carry 19 hands aboard, and here we are seven whites and ten natives (17 in all) and not enough to handle a tiny 54-ton vessel.

May 15 (Thursday). At Sea. Punching a quartering sea with engine running and all sails set. Picked up Rennell Island at 3:30 A.M. Captain altered course to pass down the long 50-mile windward side of the island. Why I don't know, unless it be spiteful seamanship.

The whole day spent tacking back and forth to the windward to reach the southeastern end of the island.

May 16 (Friday). To Rennell. Approaching Rennell

from the eastward, one is impressed by the fortress-like perpendicular blue gray limestone cliffs which rise straight out of the sea. These gain an altitude of from 400 to 600 feet, are clean cut, free of vegetation and of so recent an age that the action of the sea has not worn them appreciably.

There is no indentation on the eastern side of the island, no anchorage, no holding ground; nothing but a straight unbroken mass of limestone.

Toward morning we rounded the southern extremity of the island and set our course for Kungava Bay in the center of the western or lee side of the island.

About 8 A.M. while running down the coast, we passed a large flock of black petrels resting on the water. Hamlin wanted, quite rightly, to stop the engine and collect specimens, but I felt that with the present master aboard we had better get to an anchorage without risking the ship hove to so close to shore. A good seaman would have handled the vessel anywhere, but Burrell was not trustworthy.

We reached Kungava Bay, passed around numerous reefs and anchored about 11 A.M. This bay, the only real one on the island, indents several miles; except for the hazard of reefs, it affords an excellent anchorage during the southeast monsoon.

Only a few natives came off to the ship to meet us. They announced that the others were back in the interior attending a festival. Runners were dispatched to bring the non-attendants to the beach post haste.

The arrival of a vessel at Rennell was an event

of some consequence. Only a limited number of white parties had called there during the years succeeding Rennell's discovery in 1801 by Captain Butler in the 'Walpole.'

Hamlin had spent eleven days on the island in August and September 1928, but felt that a return visit would yield additional species to his collections.

Hamlin and Eyerdam ashore collecting. They returned shortly with a good number of specimens which engaged our time until 9 P.M.

May 17 (Saturday). Rennell. Shifted the vessel inside a protruding reef and anchored in 10 fathoms of water near shore. This will simplify our transport problem. Dr. Lambert and Gordon White disembarked at once to set up tents ashore. They are to engage in a yaws and hookworm survey of the native. A native census is to be taken as well.

By noon the vessel and the foreshore were swarming with natives who had heard of our arrival and had come to trade ethnological material for any kind of metal we had to offer. Volcanic or metamorphic rocks are almost unknown to these people who have had to rely upon the use of limestone for their stone implements. There are instances of volcanic rocks being found embedded in floating refuse which has washed up on the shores of the island from time to time and they are prized most highly.

This was the story given us by the inhabitants though Stanley, the geologist, who visited the island in August 1927, reports finding pebbles embedded in the limestone on the shores of Kungava Bay.

So rarely have foreigners visited these people that only a very few knives, steel fishhooks, and axes are among their possessions.

We found these people strikingly Polynesian in character and a marked contrast to our dark Solomon Island crew. The former are tall, straight, well proportioned, light skinned, and decidedly coordinate in their movements. They appeared decked out in tappa cloth loin girdles made from mulberry bark and well smeared with a bright yellow tumeric paint. The odor of the latter being very pungent and not agreeable to the European nostrils. Each, male and female alike, was tatooed according to their rank.

We all remarked upon the healthy, clean skins of the inhabitants. None of them showed up with ugly, running sores and deformed bodies as one is so accustomed to encountering in villages in the other islands. Dr. Lambert only discovered evidences of yaws by examining the bottoms of the natives' feet.

All of us ashore hunting. Birds there were in abundance everywhere in the bush. We encountered them almost as soon as we put foot ashore. Because of their numbers and indifference to human proximity, we could pick and choose as we went along.

Our object in this second visit to Rennell being to enlarge upon desirable species not taken in sufficient quantity during Hamlin's previous visit.

The locals were far from being an assistance in our efforts. They swarmed after us in mobs shouting,

pointing, and pestering us all of the time. It was not an uncommon occurrence to have half a dozen of them pulling, punching and hauling at one all at the same time in an effort to attract the hunter's attention, and induce him to shoot some particular specimen that that individual had sighted.

To try and induce these people that one would like to go by themselves was a hopeless task and only added to the bedlam.

Once a specimen was killed, a dozen individuals pounced upon it before it touched the ground. Each one wished to handle it and examine it before relinquishing possession. Many good birds were pulled to pieces in this manner.

After a few hours we gave up the job and returned to the ship to work up our material.

Aboard ship, we were assured of no more privacy than ashore. Locals swarmed over the vessel, into the rigging, down in the hold and even into the main cabin. Not unlike a band of monkeys bursting with inquisitiveness we herded them out of one area only to find them congregating in another.

Despite their exuberance of interest, we found them kindly and courteous in their own way, "--far too friendly," Hamlin remarked.

They were chronic thieves from the beginning. Our great problem lay in getting everything of value under lock and key or else securely bolted down. We did enjoy a mild

recompense in watching them at their pilfering.

An individual would sight an old piece of wire or a tin can placed by one of us in a not too conspicuous place, which he would carefully take and hide under a piece of canvas or behind a projection until opportunity arose to get it off the ship. Another native would see the first one hide the object of quest and he, in turn, would steal and hide as opportunity arose. So the game went on.

May 18 (Sunday). Rennell. Found a dead rat in the water tank. This will make our water problem a serious one. There is no fresh water ashore only brackish from the seepages. We shall be able to recover some with the aid of the sails but not the quantity required. Our catchment area is too limited.

The natives are accustomed to scooping out a hole a few feet in from the salt water and subsisting on the brackish seepage.

We shall have to resort to this means in the end with its accompanying diarrhea.

Considerable rain to-day, but we managed to add 20 specimens to the collections.

Natives were with us in abundance despite the rain. We found a few of them who could converse in "Pigeon English" which they had picked up in former contacts with whites. These we bombarded with questions. Dr. Lambert worked with them in trying to compile a census of every native on the island. He met with complications. Some individuals have from two to half a dozen names.

We asked them from whence they originated. They knew nothing of their origin except that their ancestors arrived in canoes from a distant island. Probably from Sikianna or the Santa Cruz group as C. M. Woodford infers.

May 19 (Monday). Rennell. I am still troubled with a sore hand which hampers activities. Captain and Riddall both down with fever all day. Hamlin and the Doctor wish to visit the lake in the interior. Hamlin is particularly anxious to obtain examples of a rail and a large water or shore bird (crane) that he missed on his previous excursion.

Crew were employed cutting firewood and bringing off fresh water to the ship. They were ably assisted by fourscore or more natives who insisted upon riding every time a boat was launched.

May 20 (Tuesday). Rennell. Captain and Riddall still down with fever. Another day of rain. Hamlin, Dr. Lambert, Gordon White and Eyerdam got away at 11 A.M. with hundreds of natives, assisting in carrying the gear. Destination Kassawala and the lake in the center of the island.

These Rennell people have no conception about landing cargo. Hamlin had a most trying time attempting to shift the stuff off the beach. A native would pick up a bundle, lift it, put it down and scramble for another. How the stuff was transported to the lake and returned is beyond my comprehension.

I remained with the ship to journey to the lake

later on if all goes well with the Captain. Though I do feel that it is a little risky leaving the old man alone with the natives. He is entirely too jumpy and irritable.

Anavé, a local, has attached himself to me in true Polynesian style. He will do my every bidding and ask no return, simply records himself as my brother; consequently I have given him a musket and have sent him hunting. Later he returned with some fair material. Charley cleaning engine. Crew catching rain water and mending the old fore-sail.

May 21 (Wednesday). Rennell. A day of sunshine. Riddall and I hunting with Anavé. Riddall fell on the rough coral and hurt his back. Returned to the ship and worked specimens until 10:30 P.M.

We found walking in the bush very difficult. The whole of the island is composed of raised limestone, whereas, to quote Stanley, the "weathering of the limestone produces all the features of Karst topography." That is the surface is broken and covered with sharp jagged points which catch one's shoes, tears clothing and injures one when he trips and falls.

Riddall was given his first lesson in bird skinning. Anavé joined us and showed marked signs of being an addition to our staff. It is remarkable how quickly natives can learn to immitate another's operations. Unfortunately, they do not seem to be able to handle preparation satisfactorily after they are skinned.

Captain Burrell upset the equilibrium of the ves-

sel by engaging in a fight with native Panio, a sub-chief from across the bay. Burrell was entirely at fault by pushing and striking the man. Timely intervention saved us from serious complications. It was necessary as a precautionary measure to close all cabin doors and keep the natives out of our quarters. This move will make the cabin oppressively hot.

May 22 (Thursday). Rennell. Dull and cloudy with moderate rains. Crew engaged cutting firewood. Riddall incapacitated with a lame back.

Myself into the bush hunting. I covered considerable distance through the underbrush and was cognizant of the scarcity of large trees. Those observed were scarcely more than 40 feet in height and quite uniform in size. Brush, vines and shrubs grew in an almost impenetrable mass.

Occasional gardens were met with but those were only rudimentary. Probably due to the lack of suitable soil.

The small boys who accompanied me were highly entertaining in their quest for food. I experienced a new lesson in native behaviorism, watching these urchins hopping about gathering insects which they consumed on the spot.

Although the food of these people comprises fish and crustacea, clams, lobsters, green Pan Pan, Pana (small yams), bananas, sweet potatoes and a kind of nut not unlike tainted cooked meat in flavor, Pandanus, shoots, and birds in sufficient quantity to keep them healthy. Grasshoppers are consumed in enormous quantities and are credited with

being both nourishing and palatable.

Rennell also boasts of the largest coconuts in the group. They grow to enormous size, but are used by the natives for ceremonial purposes only. They do not grow in sufficient quantity to make them of economic value.

No houses or villages are to be found in the bush; the inhabitants spend their hours of rest or repose in the abundant limestone caves or out in the open wherever they happen to be. It is not an uncommon sight to witness them lying sound asleep in the rain.

A few isolated miniature lean-to's mark the burial grounds of the chiefs and leaders. These are occupied only upon festival occasions and then by those of rank.

May 23 (Friday). Rennell. A downpour of rain all day. We are terribly handicapped by the weather. I went out long enough to obtain a thrush, a ground dove, and a flying fox. The small birds were all too wet and sticky to handle easily.

Dr. Lambert and Gordon White returned from the interior. Dr. Lambert is suffering from a badly lacerated leg which he bruised on the rough coral. They report the road the worst they have ever encountered in all of their travels.

G. A. Stanley in his Physiographic notes on Rennell Island describes the route into the interior as follows "Behind the immediate shore line the land rises steeply. Native tracks to the interior usually lead to a lower gap in the rim, (of the cliffs), so that though the average

height of the rim may be 400-500 feet, the interior may be gained in places by a climb of but a couple of hundred feet. The ascent is not uniformly steep. The tectonic history of Rennell has not been simple, and in places on the outer side of the rim, there are still relics of an elevated barrier reef, behind which is an elevated lagoon.

In climbing the rim, then the first steep rise is over the old barrier reef; then follows a descent into a hollow representing the lagoon; then comes a longer and steeper climb up the main mass of the rim.

In general, once the summit is reached a more gentle descent is commenced into the great central depression. The top of the rim is not level. There are low gaps and higher peaks. In many places it is extremely narrow, being only a few feet wide, knife-edged and jagged. Exposed as it is to the full force of the weather, it is everywhere much fissured. The ragged limestone pinnacles of the rim are quite the most difficult part of the island to traverse.

The central depression represents the one time lagoon of the Atoll. The central depression is occupied by an extensive brackish lake. The surface of the lake is about 70 feet above sea level."

May 24 (Saturday). Rennell. Continuous rains. Anavé brought in a number of good birds which kept me occupied. Both Dr. Lambert and White resting from their journey. Riddall in bed with his back.

Note from Hamlin. He reports a miserable camp

in the rain. His rail turned out to be Dupetor flavicollis and the crane a spoonbill. He will return the night of the 26th.

Panio or Shroda made his peace with Burrell by bringing the latter a number of fine large coconuts according to his ceremonial custom. We rewarded Shroda with a knife in exchange.

Shroda's sudden change of temperament was probably brought about by the anticipated return of the two chiefs who are with Hamlin. These two men (the chiefs), one a sand beach leader and the other a bush man, share the responsibilities of Government over the people. Sub-chiefs, such as Shroda, govern the outlying areas as proxies for the big men.

The leaders do not tolerate fighting without their consent.

Put the crew to their duties, scrubbing paint and work. If we remain much longer we shall have a yellow ship from the tumeric which rubs off the natives' bodies.

May 25 (Sunday). Rennell. Another day of rain. We accomplished almost nothing with the crowds of natives aboard.

Got ashore in the evening and obtained a number of swifts Collocalia which we found roosting in one of the limestone caves.

May 26 (Monday). Rennell. Ashore hunting. Mr. Riddall still indisposed, not an auspicious beginning for him. Tahoa, the salt water chief, aboard to pay his re-

spects. This was supposed to be a marked ceremony, but was interrupted by the rain. We gave him an axe, some tinned meat, and bright calico and received in turn a few mats and the keys to the city.

Hamlin and Eyerdam returned late in the P.M. wet and tired. They reported a hard trip into the interior and only a limited number of specimens because of native interference.

May 27 (Tuesday). Rennell. Eyerdam took the small boat relegated to Dr. Lambert which caused us some rather uncomfortable moments. We had hoped to have a congenial ship throughout our voyage.

Rained all day, as usual, but a few specimens were brought in by Anavé.

Developed pictures with Hamlin. Foolishly, we hung the wet films in the hold to dry and the inquisitive natives had them on the floor and ruined them almost before our backs were turned. We are all becoming rather touchy and irritable with the droves of natives around us all of the time. The constant rains haven't helped our temperaments either.

May 28 (Wednesday). Rennell. Eyerdam ashore with a number of hunters and returned with a few good specimens. Myself at photographs and Hamlin engaged with the engine preparatory to departure. Riddall in his bunk; Captain with fever. Crew engaged hauling water to the vessel. Fresh water is a problem with us now.

May 29 (Thursday). To Bellona. Hove up anchor at daylight and proceeded toward Bellona Island to the northward. Natives Ben Yah and Moah, the sons of the two chiefs accompanied us as interpreters.

Toward lunch time we hove to near a patch of coconuts which the boys told us was a fishing site for the inhabitants of that area. No natives appeared along the foreshore. We were cautioned by our guests against them should they make their presence known.

Fighting is undoubtedly carried on between the people of Kungava Bay and those of the north end of the island. We noticed though that these people, with whom we had spent our time, were surprisingly free of scars.

Anchored off Bellona Island just at dusk after having used the engine all day.

With the lowering of the tide about 9 P.M., the ship swung around and bumped against a coral patch which we had not observed when anchoring. Captain ordered the engine started, anchor hove up with the intention of shifting anchorage.

In the process of heaving in the anchor and cable the latter fouled on a coral ledge or patch and parted. We were forced to proceed into deep water leaving a good anchor and eleven fathoms of chain behind.

The Captain could have saved us this accident had he put out a kedge anchor to the starboard quarter and hauled us off the coral patch instead of trying to haul the anchor in at low tide and in the dark here.

A smaller anchor with inferior cable was set at once. We spent the night hove to offshore without a stay sail set for some strange reason.

May 30(Friday). Bellona. Ran back to our anchorage--a very poor one off the northeast corner of the island, at daylight.

Crew were put to work diving for the anchor and chain lost the night before. They located them in deep water. An improvised dredging hook was brought into use but failed to rescue our much needed equipment.

All of the white complement with the exception of Burrell and Eyerdam made an excursion into the interior of the island.

Bellona like Rennell was teeming with natives. These were bolder and more aggressive than those we were accustomed to. They lost no time in telling us that they did not want the Government nor doctors nor white men of any description.

Our party followed them to their village, proper villages on this island. We found them neat, clean and orderly.

Walking was much easier here with the ground of a more clayish nature and without the sharp pinnacles of coral rock that hampered us on Rennell.

Many more gardens were in evidence than on the other island with each of these fenced in to keep out the marsh hen Porphyrio which is regarded as a pest. This bird

does considerable damage in scratching out and destroying native garden truck.

Bellona Island is very small in comparison with Rennell. We noted, too, lack of true forest, which may be accounted for by the smallness of the island and the large native population. This naturally requires nearly every available inch of ground to supply it with commestibles. A few large trees were in evidence.

Bird life was found to be very sparse in comparison with Rennell. Scarcely a call note was heard in the bush. We were able to obtain a few species including 2 species of cuckoos and a fine hawk.

The party returned to the vessel at noon but decided to wait until that night before returning to Rennell in order that we could reach Kungava Bay in daylight hours.

During the afternoon I laid out representative species of Rennell birds and asked Bellona people to stipulate which were inhabitants of their island.

A comparative list of Bellona species will be found in notes of collections at the back of the book.

May 31 (Saturday). Rennell. Put to sea at 3:30 A.M. for return run to Rennell Island to deliver natives Moah and BuhYah.

During the morning two natives from Mungghenus approached the vessel in their canoe. Dr. Lambert, through our interpreters, tried to get a census of their village but had little success.

Anchored in Kungava Bay at 4 P.M. Hamlin and I developed pictures, but with little success. I feel badly about this because we did want good photographs of this island particularly.

June 1 (Sunday). Rennell. Crew engaged watering ship and cutting firewood.

Eyerdam with several natives collecting and they obtained an excellent representation of thrushes as well as other material. What a blessing a few days of sunshine would have been to us during our stay on Rennell.

Hamlin engaged with engine, myself with photos.

The two old chiefs were brought on board and presented with axes, knives and small locked boxes, the latter being considered the greatest treasure of all.

My assistant, Anavé, was presented with an axe in return for his services.

June 2 (Monday). To Tulagi. Hove up anchor at 6:30 and proceeded out of the harbor after we had chased all of the locals off the ship. Made use of the engine until we were clear of Rennell Island.

At 2:30 P.M. stopped the engine and spread sails. I had a terrible dispute with Captain Burrell who wanted to continue with the engine all of the way to Tulagi. The rumpus ended by Captain Burrell and me agreeing to part company.

June 3 (Tuesday). Enroute Tulagi. Captain tendered his resignation in writing, effective 3 months from

date or September 3, as per contract with Hamlin.

Moderate S/E breeze all day with ship under sail. Each of us took turns at the watches.

June 4 (Wednesday). To Tulagi. Sighted Guadalcanal 8 A.M. Passed through Marau Sound 1 P.M., anchored Aula at 11 P.M. for the night. The Captain refused flatly to take the vessel on to Tulagi.

All of us engaged in a heated brawl which accomplished nothing but hard feelings.

Eyerdam is seriously ill with malarial fever. Dr. Lambert gave him several quinine injections which dissipated the fever somewhat.

June 5 (Thursday). Tulagi. Reached Tulagi at 1 P.M., went alongside Carpenter's to fill vessel with fresh water first of all. Our brackish water was dumped and tanks cleaned thoroughly.

Following watering episode, returned to anchorage off the Post Office.

Dr. Lambert, Gordon White, and natives ashore with duffle.

We have learned from harbor gossip that the Resident Commissioner, Police Magistrate and 30 armed native constabulary have sailed aboard the Government vessel 'Ranadi' to Rennell Island thinking we had been attacked by the natives there.

We had been granted a two weeks' stay on the island, but did not make an allowance for sea time to and from the island.

Captain Robinson with his 29-foot "A.V. Svaap" in harbor. He is an American making a round-the-world tour alone. We had him aboard for dinner.

June 6(Friday). Tulagi. Eyerdam no better; continued giving him injections. Hamlin engaged overhauling the engine. Myself ashore to Burns Philp to purchase a new anchor and chain, drums of oil, oars and sundries for the ship and commestibles.

Crew engaged cleaning ship which needs it badly.

Riddall packing curios for Dr. Lambert who is unable to undertake such tasks.

June 7 (Saturday). Tulagi. Eyerdam taken to the hospital. Hamlin and I ordered before the Government Secretary, Mr. Kidson, who reprimanded us severely for not giving him official notice of our intended visit to Rennell Island and also for overstaying the two weeks' leave granted Dr. Lambert.

This Parliamentary move was only engendered to cover the Resident Magistrate's trip to Rennell, in his report to the High Commissioner at Suva Fiji. In other words we were used as pawns in the game of affording that executive a chance to see Rennell which he could not otherwise have done.

June 8 (Sunday). Tulagi. Violent rain squalls. Were forced to let out 45 fathoms of chain in a poor holding ground. Engaged packing Rennell material all day.

June 9 (Monday). Tulagi. Burns Philp and Co.

have informed me that the Captain of the motor ship 'Carisso' an American vessel, would not accept the cases of Malaita skins. Hence, they are still in the warehouse awaiting shipment. This is an old trick of Burns Philp who will go to no end of trouble to make consignees ship with their vessels.

Cleaned up all material and delivered Rennell skins to B PS for shipment to New York via the 'Marsina' calling to-day.

Captain Burrell and Hamlin both down with fever.

Gave Riddall the task of supervising the crew at their cleaning operations. Visited Eyerdam in hospital. He is better.

June 10 (Tuesday). Tulagi. S/S Marsina sails with Dr. Lambert aboard. Our bird skins as well.

Hamlin has cabled the Bank of New South Wales regarding our balance there.

Mr. Johnson, Government Treasurer, attempted to persuade us to take a crew of Chinese instead of Solomon islanders.

Dispatched a letter to Dr. Murphy outlining course of operations of expedition for past weeks.

June 11 (Wednesday). Tulagi. Day of rain and strong winds. Put down the two anchors. Captain really seriously ill with gastric malaria. We cannot induce him to go to the hospital.

Riddall and Hamlin at repairs on big boat which was damaged when leaving Rennell Island.

June 12 (Thursday). Tulagi. Crew ashore cutting firewood. Eyerdam returned from the hospital. Captain still down with his fever. Still awaiting word from Sydney and disposition of Government regarding crew.

Hamlin engaged with engine.

June 13 (Friday). Tulagi. "Svaap"--Captain Robinson, sailed for Samarai enroute Singapore. No radios. Heavy showers all day.

Eyerdam out all day collecting shells despite his recent illness. One marvels at his constitution.

All of us engaged as previously.

A letter from the Government granting me the services of six Malaita boys outside the group for a period of one year with the understanding that I deposit 15 pounds sterling per boy as a guarantee. This letter was dated March 7, 1930, and only delivered to-day. I am unable to understand such procedure.

June 14 (Saturday). Tulagi. Attempted to sign on Freddie and Taro as boat's crew but they demanded 5 pounds each per month. Did manage to get Charley Lonsdale and Belleu at 2 pounds and one pound respectively.

The Government demands that we pay the crew engaged out of the territory at the rate of 2 pounds per month per boy while in the same breath they condemn those who overpay the regulation one pound per month rate. This is also beyond my comprehension.

The ship has developed an epidemic of rats which

must have come on board months ago at Gavutu. We set traps for them and must fumigate ship in Samarai.

All of us engaged variously making preparations for sea.

In the evening with Hamlin to visit Pansy Elder and Bob Perry. The latter is the first officer of the 'Ranadi'. Both Perry and Elder wish to join the staff of the 'France' as Captain and engineer respectively. Their insobriety is enough to frighten me out of such an arrangement.

June 15 (Sunday). Tulagi. Impossible to accomplish anything ashore. Engaged aboard ship.

June 16 (Monday). Tulagi. No cable from the bank. Decided to leave for Samarai. Ashore and signed on one more native, Jack Ulava, as boatswain. Paid bills, obtained a statement from Burns Philp and Co. for my accounts in Samarai. Received a clearance and sailed at 1:30 P.M.

Set a course to pass to the north'ard of Guadalcanal Island. Weather fair with a moderate southeast breeze.

June 17 (Tuesday). To Samarai. Murray Island abeam at noon. We have broken the complement into 3 watches. Native Charley and myself 12-4, Hamlin and Riddall 4-8, Eyerdam and Jack Ulava 8-12. Belleu is the cook and Captain Burrell is our guest. Moderate southeast breeze all day.

June 18 (Wednesday). To Samarai. Light winds and calms made it necessary to use the engine several times,

during the 24 hours. Captain Burrell spent most of the day trying to work out the ship's position. He gave as figures latitude $9^{\circ} 26'$ S. and longitude $157^{\circ} 30'$ E., a run of 67 miles, but these are only approximate. Burrell would be a hindrance on a long voyage.

June 19 (Thursday). To Samarai. Day of calms and variable winds, used the engine several hours. Coast of New Georgia still in sight to the nor'ard. Noon position: latitude $9^{\circ} 36'$ N., longitude $157^{\circ} 16'$ E., distance covered 18 miles.

Had another squabble with Burrell and was told that I was the most sacrilegious man he had ever known. I feel that this is a compliment as well as an accomplishment.

For a mere lad of my tender years to outswear an old man who has spent his life in sailing ships is an achievement and should be duly recorded.

Charley has been set to work preparing buckets of boiling water to which I add a generous quantity of lysol and then souse the interior of the galley (cook house) and the accompanying boys' quarters on deck forward. We have accounted for thousands of cockroaches which have multiplied there. This hot lysol purge was continued daily throughout the whole of the trip and with gratifying results.

June 20 (Friday). To Samarai. Moderate S/E winds. Bright and fine.

Noon position, latitude $9^{\circ} 14'$ S., longitude $155^{\circ} 00'$ E. distance run 75 miles. Used sails continuously. Employed painting the small boat and rigging up a new pipe

for the galley stove. This instrument was fashioned out of old benzine tins.

June 21 (Saturday). To Samarai. Dull and cloudy. No sights. Wind rising to sharp squalls during the night with reasonably high seas.

June 22 (Sunday). To Samarai. A hectic night. During the 12-4 A.M. watch, Charley and I experienced numerous strong squalls. We were running free before a S/E wind.

Numbers of sea birds hovered over the ship screaming and crying. Charley insisted that he could smell reefs. On 3 different occasions I awakened Burrell and got him on deck but each time he insisted that we were alright and returned to his bunk.

At daylight we sighted the Woodlarks dead ahead which gave us a terrible shock. A dead fish was also discovered on the troll line which we had trailing behind the vessel.

During the early morning hours the ship had found her way through a 6-mile stretch of clear water that separates the Laughlin Islands from the Woodlark group. The fish had broken its head on shoals over which we had passed.

- We were roughly 30 miles north of our course, having been set in that position by the tide.

Sheer luck and nothing more saved us from the loss of the 'France,' Weather continued dirty all day. We tried to find Strathard Island before night in order that we might anchor but missed it.

June 23 (Monday). Samarai. Nearly ran into Dawson Island just before midnight. Eyerdam and Ulava must have been asleep on their watch. We got the ship turned after she had got herself into calm water--a bad sign?

We are all as jumpy as a cat on hot stones after these two experiences.

Continued on to Samarai and anchored in the roadstead by noon.

Medical officer off to clear the vessel and inform us that this day is the Prince of Wales birthday, consequently there is no chance of any business being transacted ashore.

A small batch of mail was brought aboard including communications from the Museum. These cleared up a number of points that have been hanging fire and are quoted herewith:

April 9, 1930

Dear Coultas:

Your letters from Malaita dated February 25 and 26, and the one written at Tulagi on February 18, have proved very illuminating. They contained for one thing the first full and bald statement of our debts in the field that I have had up to date. It looks to me as though hitherto you men had either not known the full extent of the indebtedness, or else you have lacked courage to tell us the hard truth. I presume that the former is the true explanation, for doubtless the accumulated bills have been sprung upon

you one at a time.

The most unfortunate and humiliating feature from the point of view of the Committee is that several of you men should have gone without your salaries, and especially that Dr. Mayr should have had to return to Europe without being paid what we owe him. We were aghast at such an idea, and I have immediately written Dr. Mayr in Berlin, enclosing a draft which I trust will cover our entire indebtedness to him. You may therefore wipe that matter off your slate. I figure as follows:

303 pounds advanced by Dr. Mayr, Aug. 1, 1929	\$1474.10
Interest at 6 per cent Aug. 1, 1929 to May 31, 1930.	73.70
Total	<u>\$1547.80</u>

In addition to this I asked Dr. Mayr to accept the hundred pounds which we cabled him on February as payment in full for his salary.

You can see how it would never do for a European to go back home with the story that he had lent funds to the representatives of a rich American museum, and had then accepted an indefinite promissory note! We thought of course that Mayr had been paid in full before he left the schooner.

Now while it is just as necessary as ever that we economize in every possible way, my immediate charge to you is that you square up every penny of indebtedness regardless of what may follow. In December 1929, we sent the expedition \$4,500. Up to the present in 1930, we have deposited in the Bank of New South Wales at Sydney, a total

of \$10,000. The prior use of whatever part of these funds you may now have is to pay the bills, so that we may begin again with a clean slate. I have written the same story to Hamlin, and enclose here a copy of my letter with the idea that he may have left before he hears from me. We all desire very much that Hamlin should come home at the first possible moment. He need have no fear of any lack of appreciation on our part, for we think that he has made the most of a very difficult situation. We want to get a full personal report from him, and we stand ready to assist him in whatever future work he takes up.

Now before taking up the details of your recent letters, let me say that we would appreciate from you a cable stating that all debts are cleared, and that you will need approximately \$---- for the balance of the campaign of 1930. Hereafter, credits will be made in your name instead of Mr. Hamlin's, and until further notice they will be deposited in the Bank of New South Wales at Sydney. The next formal deposit would be \$4,000 on or about July 1, 1930, but we shall increase the sum for that particular occasion if we hear that you must have more.

We note with pleasure that a case containing 350 birds from Malaita has been shipped on the S. S. Mataram. I find no papers for these, but they will doubtless come through all right. The Registrar likes to have consular invoices accompanying the notifications whenever that is possible. It helps much in the entry of the specimens. Doubtless, however, your shippers are attending to this.

We hope that your work in the Kolovrat district, and other parts of the highlands, will yield much that is new. In any case, negative evidence will be only slightly less interesting than the other kind. The main thing is to send us material and notes for a genuine ornithological survey of this unknown island.

I am noting your request for convenient pictures of birds, and am sending a full set of the Audubon cards which have recently been published partly under the direction of Dr. Chapman and myself. I hope also to find other material which will show a more extensive variety of birds. An A.O.U. check-list also goes, but the new edition of Chapman's handbook will not be available for several months. Dr. Chapman is completing it now. Finally, I am getting together papers on the region into which you will soon be penetrating. It is quite proper to have all of these things as field equipment. We have got more or less out of the habit of supplying them because Beck never requested anything of the sort. Beck had not particular scientific training, and was not especially interested in the literature of any region. On the other hand, he was an amazingly good collector. The papers we are sending ought to give you an advantage over his method.

You have had sufficient instructions about the future route of the expedition, so that further details may be left to your own judgment. If possible, however we hope that you may take time before leaving the Solomons to work the small islands of Gower, Ulava, and the Three Sisters.

Ontong is so far away that it might well yield new species of land birds, while return visits to Rennell and Belona would likewise be profitable if they can be made conveniently. You may remember that I found a couple of interesting new species among the Rennell birds obtained on Hamlin's visit. By the way, have you on the France a full set of the Whitney Expedition reports to date?

As I have already written Hamlin, it was the original understanding of the Committee that you should supersede him in command within a reasonable time (three months or so) after your arrival. We think therefore that there should be no further question on this score, and that you should have the full responsibility of leadership whether or not Hamlin has left by the time this letter has arrived.

I am taking up your letters seriatim, and am returning again to the question of indebtedness. So far as I can make out, you have about this time the following bills to worry you:

Tulagi	\$3500
Sydney	2500
Hamlin	1600
	\$7600

To this you need add only what is due yourself and Eyerdam. The Mayr matter is cancelled, and the deficit at this end is for us to worry about. As I said above, bring every account up to date and then let me know your needs. There is no reason for you to worry about shortage in the subsequent quarterly payments. We shall send you a credit of \$4,000 to be available about the first of July, October,

January, and April. If you can save us anything on this, always let us know so that we may begin to run down our deficit here. On the other hand, if you need more for the next few months, do not hesitate to say so.

We note with interest what you say about Mr. Eyerdam, and draw the conclusion that because of his engagement to a lady in Germany and the fact that his primary interests are not birds, he may not care to remain much longer with the Whitney Expedition. I have every sympathy with his situation, but I feel that there is no possible way of obtaining a separate fund for his work at New Caledonia or elsewhere. Money is tight in the United States since the stock declines of last autumn, and you already know of the straightened circumstances of the Whitney fund. We must devote all our energy to retrenchment until once more we bring ourselves up to date. Moreover, by the terms and plan of our expedition, it is always first and foremost ornithological. We are pleased to receive material of another nature, and the thought that studies of shells may be made to parallel those of the birds of the region is altogether agreeable. Such joint undertakings often supplement one another in a way that is very illuminating. At the same time, it is for birds that the funds were given, and no other line of activity is to be allowed to interfere with thorough ornithological work. If Mr. Eyerdam is discontented with that situation (which he was surely made to understand thoroughly before he left), he should plan for some course more to his tastes as soon as opportunity of-

fers. If you are by any chance likely to lose his services and wish him replaced by another American, do not fail to give us plenty of warning so that we can meet your wishes. I have note of the fact that 18 cases of conchological material, and 2 boxes of specimens belonging to Hamlin, are en route on the S.S. Carisso.

I fully appreciate that you have done your best to keep us constantly informed, and we regard your letter of February 26 as one of the most informing that has come in from the field. Full and concise letters such as this do more than anything else to tell us what the exact situation is in the field. You are so far from headquarters that it is well to leave out discussions of anything which in last analysis must be decided by yourself. In other words, don't ask for advice in any instance which we cannot practically advise you. Use your best judgment, go ahead, and count on us to stand behind you.

Along with other enclosures, I am now sending you a dago dazzler signed by the Director of the Museum. This sort of thing is always useful. I had thought that you had one before you left here.

Morden made out very well in Siberia, took his quota of tigers, and is now on the way home. Before that he had already collected a group of saiga antelopes in Turkestan, or some such place.

Stationery with your name as field representative has been requisitioned, and will go forward before long in care of Burns Philp, Sydney.

For alcoholic containers, we suggest that you buy one or two milk cans, if resoldered gasoline tins are not suitable. I have used milk cans in the field, and it would probably be better and cheaper to purchase them than to ship containers off around the world from here. As to a motion picture machine, we cannot afford to buy one now. Neither would a camera using half-size film be very practical. This does not enlarge well, and the standard film is the only sort of any use to the Museum.

As regards the difficulty of Chapin transporting fresh bird skins in your container, he suggests that you have made a smaller drying box similar to the one from the Museum, and then to have this carried in a tin case made to fit it. He thinks that anyone who can use solder could make such a case from gasoline tins. To prevent molding of the skins during drying, the only necessity is a plentiful supply of naphthalene. Damp skins do not form a medium of mold if there is plenty of this substance in the container. One other important point is to remind you to extract the tendons from the legs of large birds, especially birds of prey and megapodes. Some of your specimens have soft and bad-smelling legs, because the tendons take so long to dry. Such specimens could probably never be mounted successfully. You will find directions in Chapin's booklet for removing the tendons, and for putting arsenic or alum into the spaces from which they have been removed.

This is enough for the present, and I hope for an early and cheerful report on your plans, especially the

assurance that all debts are paid.

Yours sincerely,

(Signed) Robert Cushman Murphy

William F. Coultas, Esq.
Whitney South Sea Expedition
c/o Burns Philp and Company
Sydney, New South Wales

Copy for Coultas

April 7, 1930

Dear Hamlin:

A big batch of letters dated between the 15 and 25 of February and written by all hands has just arrived. As usual it is difficult or impossible to answer these satisfactorily because of the length of time that always ensues between communication. You ask many questions that I cannot possibly answer, one of them, for example, being whether the draft for 204 pounds that has just reached you is the money sent by Dr. Chapman last September. This I cannot possibly know. I will say, however, that we have been mystified and annoyed by the failure of that money to reach you or to be reported in any way until after the expiration of six months.

Perhaps the following summary of recent transmittals may help you. This is the money that has gone:

December 2, 1929	\$3500	(draft)
December 26 "	1000	(cabled)
March 8, 1930	5000	(draft)
	<u>\$9500</u>	

In view of your statement of heavy expenses still to be met, we are sending another \$5000 to your account at the Bank of New South Wales at Sydney. This means that you will have had \$10,000 of 1930 money long before the close of the half year. Clear up all debts and then proceed as economically as possible. We are not expecting the miraculous, and we want you all to stop lying awake nights thinking about money. Let us hope merely that future management will be able to keep out of such a hole as that into which we have been forced during the last two years or more. The thought that you, Dr. Mayr, or anyone else should have to go without salary for a long period and should even have to lend money to the expedition is quite humiliating. Pay everybody every cent that is owed, and then let me know the worst regarding funds needed for future running expenses.

Is it possible that Dr. Mayr has now gone back to Germany with money still owing to him from the expedition?

Several other matters are of such a nature that we cannot answer them from this end. One is the question of exchanging the *France* for a smaller vessel. My advice would be to go exceedingly slowly about such a step. It is a responsibility to be avoided unless it seems imperative. In any event, the decision would have to be mainly up to the man in charge for the next period of a year or two, or possibly longer.

I am sorry that there has been any shadow of misunderstanding concerning the leadership. Our intention was that Coultas should work under you until the date of your departure, but we also expected that your departure would take place within two or three months of the date of his arrival. Under the circumstances, you have probably worked it out as well as you could. It is something that we can hardly settle by any hard and fast rules from this end in view of the unexpected developments.

Even now we are not quite certain whether Dr. Mayr has already started for Germany or whether he has decided to stay until July. The prospects have been changed several times, and Dr. Sanford's cable of three days ago was sent on the understanding that you and Mayr were to remain until summer. The newest letters seem to imply a still later decision to have him start for home.

Unless I hear to the contrary we shall send all future credits to Coultas. In other words, the draft for \$5000 now en route will be the last in your name. I understand you have arranged matters so that Coultas may draw upon your account for a period of six months, and that after that all credits will be transferred from you to him. We are very eager to have you return, not because we think it will in any way simplify affairs in the field, but because we want to talk over the circumstances of the expedition without this hopeless feeling that every question will require months for its answer. I hope therefore that you will take the earliest opportunity to head homeward,

leaving Coultas to face the problems as best he can. When you arrive, we can balance up all sorts of affairs, including financial ones. We certainly have no intention of letting your services go unrepaid even though you yourself consider that you have "retired."

On the other hand, there is still standing on the books a debt of \$664.43 representing funds cabled to your father on August 16, 1928. We shall have to settle this by some arrangement with you which will be agreeable to the Bursar and the auditors.

As Dr. Sanford has already written you, he and the other members of the committee stand ready to assist you in every way if you intend to go on with Museum work.

It is great news that you have found Malaita so relatively workable. Do not be discouraged because of what seems to be only a small proportion of new birds. I have no doubt that distinction will become more and more apparent as you work into the hills in various parts of the island. In any event, the discovery of new things is not the prime object of our research, and any information throwing light upon the bird fauna of Malaita will be highly important for the reason that next to nothing has hitherto been known about the island. We want the vessel to work Malaita and its outliers very thoroughly even if it means a delay in proceeding elsewhere.

Looking over your back mail in connection with the latest letter, I have tried again to visualize all your problems. In the first place I am astounded to learn that

up to the end of last year you did not know the total amount of money available in Mr. Whitney's annual contributions. I thought of course that we had informed you even before you and Guy went out to the Pacific that this amounted to \$20,000 per year. Mr. Beck ran the expedition for nine years without a single croak concerning heavy expenses. We on our part had no idea that he was accumulating debts that did not appear in the record and which you subsequently inherited. The only point about these debts which we cannot now fully understand is the fact that they seem to be sprung upon us a little at a time. Doubtless that is the way in which you also have learned about them. By this time, however, you should know the worst about everything, and the message we want to receive if you get this letter before you start for home is the following:

"Debts paid to the last cent. We shall need approximately ---- for operating the expedition through the balance of 1930."

I have written the above on the assumption that the \$14,500 sent you between December 2 and the present date has been sufficient to settle all your debts. If under the worst possible circumstances even that sum has not been sufficient, please to not hesitate to wire the whole truth. If we can once get cleaned up and start from a new base, we shall at least know exactly where we stand.

I am writing Coultas, Eyerdam, and Mayr all separately, and am also enclosing a carbon of this letter in

my message to Coultas. I am taking this step because of the possibility that you may leave before this can reach you.

Looking forward to seeing you as early as possible in the summer, and with warm good wishes from all of us, I am

Yours sincerely,

Hannibal Hamlin, Esq.
c/o Burns Philp & Co.
Sydney, New South Wales

June 24 (Tuesday). Samarai. Light misty rains all day. Cable from Museum "Omit New Caledonia make Kusaie and Carolines next move--Sanford."

The receipt of this upset my plans to continue on to New Caledonia, lay the ship up and get funds ahead before continuing on to the Caroline Islands. I am not so sure I can do the Carolines with finances as they are.

Another letter from Dr. Murphy including Museum credentials.

A cable from W. R. Carpenter and Co. stating that last two checks were dishonored. Went ashore to Mr. Fowler, the local manager of Bank of New South Wales and enlisted his aid in getting our accounts straightened out.

Mr. Clay radiod that he will be down on the next montoro regarding exchange of 'France' for 'Royal Endeavour.'

June 25 (Wednesday). Samarai. Were informed that we cannot put the vessel on the slip until July 3 or later. This indicates more delays.

Day of continuous rains; all of us aboard.

Rats have eaten holes in all of my good white clothing.

Captain has gone down with gastric malaria again. We will have a task keeping this old man from becoming seriously ill.

June 26 (Thursday). Samarai. Took the ship alongside the Government wharf to fill her up with water. Thence back to the roadstead.

Ashore and purchased supplies for the ship.

Captain not improved.

June 27 (Friday). Samarai. Aboard ship engaged in drying sails. Found 2 holes in the main sail, caused by pure negligence on the part of our master. To work with crew on sails.

An interview with Mr. Kress of Steamships Limited who advised strongly against the exchange of the 'France' for the 'Royal Endeavour.'

June 28 (Saturday). Samarai. Cabled Museum asking them to telegraph July remittance to Sydney so that I can get started on debt settlement.

Hamlin cabled Captain Lang, the former master of the 'France' offering him the command of the vessel.

Sent Captain Burrell to the hospital much against his wishes. Hamlin and Riddall took off for Gilli-Gilli to attend a wedding.

Eyerdam and I engaged in accounts.

June 29 (Sunday). Samarai. Young gale of wind blowing all day. Remained in bed with a dose of fever. Eyerdam ashore collecting shells.

June 30 (Monday). Samarai. Cable from Lang accepting command of the 'France.' We are to forward him passage money.

Eyerdam has decided to go to Germany for Christmas. Cabled to his prospective bride as a consequence.

Hamlin and Riddal returned from the ceremonies.

July 1 (Tuesday). Samarai. Captain Burrell in hospital. Shifted vessel because of S/S Beulah, an American copra ship which is underpowered and having difficulties getting alongside the Government wharf.

Remained on board for the day marking time.

July 2 (Wednesday). Samarai. Captain Burrell out of the hospital. Dr. Lewis advised me to get rid of the old man at once before serious complications set in and we would find ourselves with a sick man on our hands.

Informed Captain Burrell that he could leave on the 7th inst. for Sydney.

No work accomplished.

July 3 (Thursday). Samarai. Rained all day. Crew at work in the hold. S/S Montoro arrived and later departed for Sydney carrying mails. I dispatched 2 letters to the Museum, one advising the resignation of Walter Eyerdam and the other dealing with financial problems.

July 4 (Friday). Samarai. Dressed ship in honor of the day. To Manager Fuller of the local Bank regarding

banking facilities in the Caroline Islands. As far as he could learn, there are no banks of any kind in the Caroline Islands.

Hamlin cabled the Government in Port Moresby asking permission for himself and Riddall to collect on Missima Island while I am engaged with the 'France.'

July 5 (Saturday). Samarai. Purchased supplies for the table. Received word that the ship would be available Monday or Tuesday. Hove up at 4 P.M. and took the ship to Bellasana where we anchored close off the slip way.

July 6 (Sunday). Bellasana. Ship was pulled up on the slip ways during the night.

Spent the morning going over the hull. That portion of the vessel was found to be in fairly good condition. A number of copper plates or sheathing must be replaced as they have oxidized and are very thin in places. Flakey one should term them. No damage had been done by the late encounters with reefs except that the false keel was slightly chewed in places. There were no indications of Teredo worm.

July 7 (Monday). Bellesana. S/S Morinda in. Captain Burrell leaves the ship enroute Sydney. I should have liked to have had the old man with us during our time on the slip ways as his advice might have been of some use.

Forwarded an order to W. S. Tait and Co., Sydney, for ship's gear, rope, wire, and incidentals that we need badly.

Mr. Clay to look at the 'France.' He was not impressed with her. He felt that the cost of installation of the 'France's' engine into the 'Royal Endeavour' would not compensate him for the small amount of additional cargo space he would gain with the 'France.'

Captain Mitchell of Burns Philp and Co., Sydney gave the vessel a very close survey, which is not an auspicious omen.

Manager Fowler of the bank informed me that my account was short \$5000 in comparison with money supposedly remitted by the Museum.

Cabled Museum as follows: "was second \$5000 mentioned in your letter of April 7 to Hamlin remitted to Bank of New South Wales, Sydney. Money missing urgently needed Reply--Coultas."

Hamlin's permit to work Missima arrived. He will be able to collect there while I am engaged with the ship. We did not ask permission to collect around Samarai, fearing that two requests would not be granted by this Government at one time.

Engineers discovered that the outer stern tube bearing was cracked and necessitated a new one. Hamlin engaged with engineers.

Natives under supervision of shipwright stripping copper sheathing from the hull of the vessel.

Ship's crew drying and stowing sails aboard vessel

July 8 (Tuesday). Bellasana. No work done aboard vessel. Slip people away on another job.

Riddall and Hamlin to Yela Gelli with the small compressor to give the manager a hand out of difficulties.

Mr. Leather of the A/V 'Yela Gelli' agrees to take Hamlin and Riddall to Missima with him on July 16 or thereabouts.

Eyerdam, disgusted with native methods, took all of our clothes up the river, boiled them, and returned with a creditable clean white washing. The first good work of that kind since we have been on the ship.

Myself in bed with fever all day which is unusual for me.

July 9 (Wednesday). Bellesana. Shipwright engaged on vessel. Eyerdam collecting shells. Crew engaged scrubbing paint work and wetting down decks which are leaking in places again. Hamlin and Riddall returned at 6 P.M.

July 10 (Thursday). Bellesana. Hamlin with engineer Gunter working on stern tube. Natives repairing copper on hull. Riddall and I at ship's accounts. Eyerdam painting cabin.

July 11 (Friday). Bellesana. To Samarai to purchase supplies for the Missima trip; others employed as previously.

July 12 (Saturday). Bellesana. Cable from the Museum. Missing funds have been located; they had been placed in Hamlin's name and were not accessible to me.

Eyerdam down with fever. Hamlin and Riddal working with engineer, finished stern tube housing, Crew painting.

July 13, (Sunday). Bellesana. Eyerdam fever.
Myself packing supplies for Missima trip.

July 14 (Monday). Bellesana. Vessel came off the slip at 1 A.M. Shipwright had replaced about 50 sheets of copper which puts the hull in good condition.

Engineer Gunter aboard in the morning. Started engine and undertook a one-hour trial run down China Straits. Engine working well with stern tube job apparently satisfactory.

Returned to the slip yard and anchored, there being a number of repairs above the water line necessary before we are ready to leave.

July 15 (Tuesday). Bellesana. Hamlin, Riddall, and native Charley to Samarai to receive hunting permits from the Resident Magistrate.

Crew employed chipping iron work and red-leading above water line.

Shipwright engaged calking the sides of the vessel.

July 16 (Wednesday). Bellesana. Hamlin, Riddall and native Charley got away for Missima Island to return about August 6.

Ulava painting the large water tank with cement. Eyerdam employed at carpenter work in main cabin.

Shipwright employed as previously.

July 17 (Thursday). Bellesana. Shipwright completed calking on sides of vessel above water line.

Eyerdam and Ulava engaged as previously. Myself painting Captain's cabin.

July 18 (Friday). Bellesana. Shipwright at work on big boat which had been damaged at Rennell and only repaired temporarily.

We found considerable borings from Teredo worm in this boat and also learned upon examination that the small boat of Beck's is about eaten up and must be replaced at once.

Made an oil smudge to drive mosquitoes out of the vessel. They are breeding aboard again. Also put kerosene in the water tanks.

Eyerdam cut a row of scuppers in the railing around the main deck. I am afraid wet rot is commencing in the joints of the ribs where they fit into the decking and siding of the ship. These small two-inch scuppers will allow water to run off freely and permit the jointing to dry out.

Myself to Samarai to cable Chow kai in Tulagi asking for a Chinese engineer assistant. This is to give Riddall more time with birds.

July 19 (Saturday). Bellesana. Carpenter aboard and began work on a new set of cabin doors. He informs me that he will have to take my jobs piecemeal as there is a great deal of other work ahead of him ashore.

All of the cabin doors are broken and must be replaced with new ones.

Ulava boatswain began his task of oiling masts, booms, and all blocks and tackles aboard ship. This will take his time for many days.

Eyerdam began painting the floors of the cabins. Mr. Able of the Quato Mission aboard to quote prices on a new dinghy. He asks 45 pounds sterling which is entirely too costly.

July 20 (Sunday). Bellesana. Worked about ship all day.

July 21 (Monday). Bellesana. Ripped out Beck's large bunk in my cabin and replaced it with a smaller one. Eyerdam washing clothes again. No carpenter work done.

July 22 (Tuesday). Bellesana. Carpenter aboard and put 3 new dead-eyes (Panels of glass) in the decks above the cabins. This will give us more light below, which we need badly. Eyerdam and I at a new chest of drawers with locks for the main cabin.

July 23 (Wednesday). Bellesana. Cable from Museum authorizing me to end Eyerdam's services. Carpenter at work on doors and panels. Ourselves as previously.

July 24 (Thursday). Bellesana. Rain most of the day. No shipwright aboard. Eyerdam and I engaged making a new medicine cabinet.

July 25 (Friday). Bellesana. Shipwright engaged with doors. Eyerdam at work on a new chart table to be set above the chest of drawers in the main cabin. Myself painting interior of the ship.

July 26 (Saturday). Bellesana. New mattresses for the bunks arrived and were installed.

To Samarai to meet Captain Thomas Royden Lang who joined the ship as master. We returned to the vessel and

went over the ship from stem to stern. The Captain pointed out a number of needed repairs, including a whole set of new rigging. These we will instigate as quickly as funds permit.

Drew up the following contract with Captain Lang:

Yacht France
Samarai Papua
July 26, 1930

This constitutes an agreement between the Field Representative of the Whitney South Sea Expedition of the American Museum of Natural History, New York City, N. Y. U. S. A. and Thomas Royden Lang, Master Mariner.

It is agreed that:

1. Thomas Royden Lang will act in the capacity of Master aboard the Yacht France, for the period of one year from date, and will accept the orders of the Field Representative.
2. The vessel and all of the crew of the Yacht France shall be under the direct supervision of the master.
3. The sum of thirty eight Pounds Sterling, per calendar month and found constitute the salary of the Master.
4. The sum of twenty Pounds Sterling per month or less, at the discretion of the Master, to be deposited from the salary of the said Master to the credit of Florence Ann Lang, wife of the said Master, in the Commonwealth Bank of Australia, Sydney N. S. W. Australia.
5. The date of employment shall be from July 26, 1930, the date of arrival aboard the Yacht France and shall continue for one calendar year from that date.
6. The First Class Passage of the Master from Sydney N. S. W. Australia to Samarai Papua, the port of joining the Yacht France shall be borne by the Whitney South Sea Expedition.
7. The Master, shall, upon the termination of his services, receive first class passage from his port of debarkation to Sydney N. S. W. Australia, his port of embarkation.

8. The Master shall be paid his wages during his passage from port of debarkation until his arrival at port of embarkation, or its equivalent in time.
9. The difference in sum between the Masters wages of thirty eight Pounds Sterling per calendar month and the amount deposited to the account of Florence Ann Lang shall be retained by the Expedition in its accounts and shall draw the customary Bank Rate of Interest of 4 1/2 percent per annum.
10. This agreement may terminate at any time by the mutual consent of both parties.
11. This agreement may be renewed upon its expiration, one year from date, by the mutual consent of both parties.

(Signed) William F. Coultas
Field Representative

(Signed) L. Royden Lang
Master Mariner

July 27 (Sunday). Bellesana. Lang and I to Henry Dexter's establishment across the bay to purchase a number of trade goods for the vessel. Dexter is going out of business and has reduced his prices considerably. We want a goodly number of commodities on board to trade with natives for vegetables and provender later on.

July 28 (Monday). Bellesana. Shipwrights at work on doors and new cleats for foresail and mainsail falls.

Eyerdam finished the chart table. He did a very neat piece of work on this. Now by suspending a 5-cell flash light from the beam overhead, the Captain will have a very workmanlike and serviceable chart table at his convenience any hour of the night or day while at sea.

Captain engaged replacing canvas roofing on galley and crew's quarters forward.

July 29 (Tuesday). Bellesana. Captain and I to Samarai to order a new billboard for the starboard anchor. The former one having worn through from chafing while ship was working the anchor at sea.

Carpenters and Eyerdam at work all day. Eyerdam is in his element with a kit of tools.

July 30 (Wednesday). Bellesana. To Samarai to obtain the new billboard. Carpenter finished the doors. Captain finished roofing and painted same. These will require several coats of paint before they are waterproof. Captain also began replacing canvas hatch coverings over the companionways.

July 31 (Thursday). Bellesana. Carpenter engaged fitting billboard around starboard hawse pipe opening. Eyerdam canvas coverings.

Captain Lang and Ulava repairing old foresail to have it ready as a spare in case of need.

August 1 (Friday). Bellesana. Carpenter and others engaged aboard ship.

August 2 (Saturday). Bellesana. Carpenters finished billboard, big boat and sundry other tasks; aboard ship: gave boat a coat of tar to waterproof it. Captain at foresail. Hamlin, Riddall and Charley returned from Missima. They reported a disagreeable trip with plenty of rain though they returned with nice selection of birds.

Interviewed Captain Jackson, of the S/S Elveric, now in port loading copra. He will take Eyerdam to Singa-

pore.

August 3 (Sunday). Bellesana. Hamlin engaged laying out specimens and drying same.

Went over all of my accounts preparatory to settling same.

August 4 (Monday). Samarai. Hove up at 9 A.M. and took ship to Samarai. Engaged with rigging and chain plates. A number of the latter must be renewed. Paid slip bill and a number of others. Hamlin has decided to leave the expedition for America.

August 5 (Tuesday). Samarai. Paid all outstanding bills including the old ones at Burns Philp and Co. so that I now have a clean slate to start with.

Eyerdam leaves the ship to take passage to Singapore. He sailed at midnight after a farewell dinner ashore.

Hamlin at work on the engine with Riddall.

Lang and local engineer engaged with chain plates and rigging lanyards.

August 6 (Wednesday). Samarai. Ashore to obtain prison labor to help about the deck of the ship. Hamlin cabled Port Moresby asking for an interview with the Governor relative to my signing on a native crew from this port.

In the P.M. hove up anchor and proceeded down China Straits to give engine trial run and fill up compressed air bottles. Anchored at Bellesana for the night.

August 7 (Thursday). Samarai. Returned to Samarai at 6 A.M. proceeded alongside Government wharf to

fill tanks with fresh water and also load 30 barrels of fuel oil for the engine.

4 prison labor engaged aboard ship. Lang engaged with rigging, engineer aboard putting drain around deck housing and running an extension into main water tank. We will now have a small catchment area for fresh rain water when the need arises.

Myself engaged with letters to Museum advising departure of Eyerdam and our future plans.

Hamlin cabled Museum advising his departure.

I cabled Museum as follows: "Eyerdam relinquished appointment 5th day of August. Paid in full--discontinue New York compensation. Have cancelled as per your letter of 9th day of April all debts. \$5000 all that I require this year to be deposited in Bank of New South Wales Sydney (N S W) October. Will proceed as instructed June 25th Sanford-. Saint Aignon 125 forms. Coultas.

August 8 (Friday). Samarai. Hamlin got away for Australia and the States at 11 A.M. per S/S Morinda. All of us to the ship to see him off. He agreed to purchase a number of things for us in Sydney.

Prison labor scrubbing decks with sand. Captain and Riddall engaged with rigging.

August 9 (Saturday). Samarai. Sealed the ship. Sprayed the interior with carbon tetrochloride and moved ashore for the night. We hope by this simple means of fumigation to rid the place of rats.

August 10 (Sunday). Samarai. Aboard a little

after noon and opened up the ship. We found no dead rodents so do not know whether our work was futile or not. To work cleaning up the ship.

August 11 (Monday). Samarai. A cable from Hamlin; he has had an interview with the Governor in Port Moresby and reports that there is no hope of obtaining a Papuan crew.

All of us engaged on board at various tasks.

Ashore with Lang and purchased a coil of heavy coir hemp rope which we will require in mooring the vessel.

August 12 (Tuesday). Samarai. Employed setting rigging and sails, taking aboard stores, setting chain plates. Prison labor engaged painting main cabin, etc.

August 13 (Wednesday). Samarai. Withdrew 475 Pounds ready cash for trip. Purchased small chain for the port anchor. Set all chain plates, etc. Paid all bills ashore. Purchased a new small boat for 20 pounds and a small outboard motor for 10 pounds. The latter we hope to use getting about harbors.

Obtained clearance for Tulagi where we will call to pick up stores forwarded from Sydney and attempt to engage additional natives as crew.

Harbor Master made out the clearance for Pago Pago not Tulagi which caused us some embarrassment.

A letter to Dr. Murphy just prior to leaving advising him of our plans and forwarding address at Kobe, Japan.

August 14 (Thursday). To Tulagi. Hove up an-

chor and proceeded under engine power through the east channel bound down the Louisade Archipelago to get to the windward of our objective which is Tulagi.

This begins the hardest passage, a 20-day trip, that I experienced on the 'France.' Most everything that could, did happen on the journey.

There were three whites, Lang, Riddall, and myself, and 3 natives, (a cook and two seamen) on board.

August 14 and 15 (Thursday and Friday). Inside the Group making southeasterly course, engine running continuously. Wind S/E with passing showers.

Passed through the Calvados chain just at dark second day, finding an exit between Deboyne Island and Tagula Island.

Set a course to pass to the south'ard to reach Pocklington Reef if possible. There we wish to collect sea birds.

Pocklington is a large reef of several miles in extent which is partly awash and partly above high water mark.

August 16 (Saturday)--August 29 (Friday). At sea steering a varied course of E x N and E in general direction of Tulagi in the Solomon Islands.

We were under sail when these were serviceable and under engine power intermittently.

Variable weather was experienced from flat calms to gales with driving rain squalls.

Gave up all hope of reaching Pocklington reef be-

cause of overcast weather which permitted limited observation.

We had no ship's chronometer with which to check sights as our old one had been taken to Sydney by Hamlin and was to be replaced by another which we would receive in Tulagi.

During this time at sea: the outer jib blew out of the ring bolts on two occasions, the inner jib three times, and the foot of the mainsail ripped out twice during sudden sharp squalls. It was necessary for us to unbend these and repair them each time as we had no spares aboard for replacement.

On two occasions native Charley caught the ship aback which forced the packing out of the stern gland and flooded the engine room before we noticed it.

Every man on board wore the skin off his hands raising and lowering sails.

August 29 (Friday). To Tulagi. 5 A. M. sighted land and altered course to pass inside a channel which turned out to Balfour Channel in the lee of Tetipari in the 'New Georgia.' Started engine.

We were miles to north'ard of our destination, having been blown in that direction by the strong winds and gales.

August 30 (Saturday)--September 1 (Monday). To Tulagi. Under sail and engine power punching S/Ely swells.

Saturday noon the after and one inner shroud of the Port main rigging carried away in a squall before we

could get the mainsail down. This was the climax of our passage.

From there on we used the engine continuously to reach Tulagi Monday night at 5 P.M.

Port Doctor Critchlow came off to the ship and extended us a pratique.

September 2 (Tuesday). Tulagi. Shifted the vessel down to a safe anchorage in Ellis Cove. Declared a holiday and all of us to bed to sleep.

September 2--17. Anchored Tulagi. During this time repairs were made to the vessel, preparations undertaken for Caroline trip. Stores purchased and placed aboard. 2 additional native crew engaged.

The following is a rough record of activities aboard the vessel during our stay in Tulagi:

Captain and Crew: Shrouds for new main rigging made and set in place. Foot ropes for the bowsprit replaced with new ones. New halyards rove. All blocks and gear send down--lubricated with graphite and replaced.

All sails repaired. 7 bolts of new canvas purchased with which the Captain will make new jibs when time is expedient. Mainsail will have to be nursed along until sufficient funds are accumulated to purchase a new one.

Engineer and Riddall: Engine taken down, cleaned; repairs made to the air line. New exhaust pipe made and fitted (the old one coughed soot all over the ship and occupants). Repairs to bilge pump.

Carpenter: Set new Port bill-board, made new

five rails, made and placed skylight protectors--replaced broken skylights, Munz metal strips over scuppers, additional bird drying racks in main hold; new cleats for rudder post and steering gear frame. That portion of the worn frame being replaced to eliminate excess play.

Myself: purchasing and stowing 6 months' supply of stores, paying bills. Signing on two natives Jimmie and Tommy both of Malaita Island.

Hau Sau, Chinese engineer, engaged at 8 pounds per month and dismissed as incompetent.

Ho Tack, Chinese, engaged as cook at 5 pounds per month.

New chronometer on board from Sydney.

Settled all accounts around Tulagi.

All Sydney stores were taken on board the last minute as ex-bonded stores free of import duty not to be opened or used before leaving the territory.

Put to sea at 5 P.M. Wednesday, September 17 with a well-loaded vessel enroute Ponape, Caroline Islands.

Received the following letter from Dr. Murphy just prior to departure.

June 20, 1930

Mr. William F. Coultas
Whitney South Sea Expedition
Sydney, New South Wales

Dear Coultas:

Delighted with the brief but excellent report of May 1st.

About 380 of the Malaita birds have come in and

there are doubtless one or two additional cases in transit. Could they possibly have been put on another steamer? As you infer, there seem to be a number of new forms among them.

You evidently handled the Malaita campaign in good fashion and used excellent judgment in dealing with the natives.

We have sent by draft to the Bank of New South Wales \$1570 which is the balance of the money due July 1st. According to schedule, you should have no more until the regular deposit of \$4000 on October 1st. Do your best to keep down expenses and stick to the regular regime. Nevertheless, if you should find it impossible to keep out of a hole, do not hesitate to cable for an additional stipend, keeping the amount as low as possible. We realize that you are making a fine effort to catch up on expenses. Among supplies recently shipped are six single barrel 20 gauge guns, each equipped with a 32 calibre aux barrel. I thought these would be excellent arms for native collectors to whom the double barrel hammerless guns might prove too complicated. You have not recently said anything about aux shells, but I have started work on five thousand which will go in the near future, as will also some further literature, etc. I hope that your stationery has already come through safely.

I do not get from your letter an exact idea of the next move. The disposition of the 'France' is naturally in your hands, but I should go slowly before exchanging her for another vessel. Be sure you are absolutely right before you go ahead. The 'France' may be clumsy, but it has

served us well during a great many thousand miles of traveling. You spoke of going to New Caledonia before proceeding northward. Doubtless, you have taken into consideration that the New Caledonia voyage would mean a long, hard beat to windward. Can you make this without relying entirely on your engine?

As to the New Hebrides project, it would be advisable to work the remaining islands if this can be done without much loss of time. Tanna is important as a type locality for many birds of the region.

We have absolutely no information as to how long the expedition will continue. Hamlin's guess that it will cease in 1932 is outside anything I know. You have every prospect of going on indefinitely, and of making a great place for yourselves in the annals of exploration.

With best wishes from all of us, I am

Yours sincerely,

(Signed) Robert Cushman Murphy

September 18 (Thursday). To Gower Island. Off Cape Astrolabe Malaita at daylight. Found the vessel down by the head and steering badly. Will be necessary to put into Gower Island to trim the vessel before proceeding.

Opened all stores from Sydney! and discovered that we had overlooked a bale of excelsior that I had ordered, a bag of coffee beans and some photo negatives. Thanks to carelessness of Mr. Riddall in my absence while these were being loaded.

Burns Philp also shorted us one case of white bait in tins. An old practice of theirs to get additional material for the bachelors mess.

Anchored at Gower Island at 1 P.M. Few natives off to sell vegetables. Ourselves engaged at stores and shifting cargo.

Natives agreed to snare birds for us.

September 19 (Friday). Gower Island. All hands engaged shifting stores and trimming ship. 4 natives engaged collecting specimens. They turned in good material. New cables and shackles were arranged. Ship rolling badly at anchor.

September 20 (Saturday). Gower Island. Crew employed at stores and rigging. Natives brought off quantities of large crabs and hundreds of pounds of sweet potatoes. I had the latter put in a large case and placed in layers with straw and excelsior as a packing to keep them from touching one another. I am pleased to say that by this arrangement we had sufficient potatoes for 3 weeks without their spoiling on us.

Hunters brought in good material which engaged most of my time.

September 21 (Sunday). Gower. At birds all day. 5 live rails were brought aboard at one time. Riddall had his first work-out with me. Does fairly well.

September 22 (Monday). Gower. Crew with locals engaged with firewood for ship. Hunters brought in excellent specimens at 4 P.M.

Anchor chain fouled on a large nigger head coral and parted due to heavy strain from ground swell. Was necessary to put to sea at once as we have no spare large anchor.

I should have liked another day on Gower to complete our series.

September 23 (Tuesday). At sea. Enroute Roncador Reef. Labelling specimens all day. 78 specimens representing 20 species were obtained on Gower.

September 24 (Wednesday). Roncador Reef. Sighted this reef at 6 A.M., proceeded inside the lagoon 2 1/2 miles to anchorage at 3 P.M. Only a few rocks are visible at low tide at other times the whole reef is awash.

A few noddy terns were observed flying about the reef. No petrels were sighted.

September 25 (Thursday). Roncador Reef. To the north end of the lagoon with small boat in the morning. Ashore on the reef but found walking very difficult because of gigantic clams embedded in the reef. Absolutely no birds except casual noddy terns which we believe are from nearby Ontong Java.

Put to sea again at noon for Ontong Java.

September 26 (Friday). Ontong Java. Sighted Ontong Java at daylight, entered the Kaveiko Passage at 8 A.M. and proceeded to anchorage off Leueneua Island at 11 A.M.

Engine running spasmodically with stern gland leaking badly.

Found the inter-island boat 'Meteora' anchored and loading copra. Aboard for a few supplies and stern gland packing. Concluded to wait until this vessel leaves before collecting specimens as we are supposedly here in distress.

September 27 (Saturday). Ongtong Java. 'Meteora' sailed at daylight. Crew to work scrubbing ship. Riddall employed taking down the engine.

Myself ashore to visit the two traders Tas Walton and McGinn. Found they were both down with fever.

This island abounds in malarial fever which disease is carrying off the native population rapidly.

The natives are Polynesian, fearfully lazy and not interested in hunting or trapping birds.

Visited the old chief and asked him to toll off some hunters for me. He reluctantly promised to do so but none put in an appearance.

Made a sortie into the bush. Only a few birds were sighted and heard. I did encounter mosquitoes in droves which breed in the soggy taro swamps (native made) that are located in the middle of the island.

September 28 (Sunday). Ongtong Java. Moved some collecting gear ashore to Mr. McGinn's house where I shall set up shop and begin collecting birds. The old chief gave me a small boy (a monkey) who will carry my shooting bag while I am collecting. Into the bush and obtained a few specimens.

September 29 (Monday). Ongtong Java. Deluge of rain all day. Riddall down with fever. Captain and crew employed about ship. Myself to a colony of lesser noddy terns which were nesting in the low trees at the opposite end of the island.

September 30 (Tuesday). Ongtong Java. Crew obtained white sand with which to scour decks which will be oiled later on. Riddall finished packing stern gland.

Myself collecting along the beach.

October 1 (Wednesday). Ongtong Java. With Mr. McGinn in a native canoe to a small island where we found man-o'-war birds and red-footed boobies which had just finished nesting. A number of specimens were collected.

October 2 (Thursday). Ongtong Java. Riddall down with fever again. I am afraid I put my money on a losing horse. As matters stand I doubt if I could have made a better choice than Riddall, for I have yet to find a young Australian who will work conscientiously.

Crew employed setting a new jib stay and painting outside of vessel. A few specimens were obtained.

October 3 (Friday). Ongtong Java. Collected a number of flying foxes, prepared these and hung the skulls outside the house to air and dry. A dirty yellow village dog was caught in the act of stealing skulls and was shot, much to the annoyance of the villagers.

October 4 (Saturday). Ongtong Java. Captain and crew watering ship. The present rains have made this task easy. Riddall and Chinese cook down with fever. My-

self around the island but not much good material. The humidity and oppressiveness of this low island is getting on my nerves terribly.

October 5 (Sunday). Ongtong Java. Captain availed himself of the sunshine and oiled all of the decks of the ship. They look very well indeed. Captain informs me that he will require two more days with rigging and sails before he is ready to leave. Worked on birds all day.

October 6 (Monday). Ongtong Java. Captain and crew at rigging. Myself combing the bush systematically. I have acquired a serious dose of Dabie itch which I am treating by painting my body with iodine. The treatment is most severe but is producing encouraging results.

Collected an example of the common fruit pigeon (Ducula pacifica). They are very rare here having been shot out by the local plantation overseers.

October 7 (Tuesday). Ongtong Java. A perfect pig of a day. Rained so hard I couldn't get out of the house. McGinn down with fever. Spent my time doctoring my dobie itch. No collecting.

October 8 (Wednesday). Ongtong Java. Riddall tried to start the engine this morning but without success. Upon examination he discovered several pieces of metal in the oil sump which means that part of the innards are broken. Riddall tried to convince us that the Chinese cook had been tampering with the machine, but I am inclined to believe that it was just engine and nothing more.

Captain Lang and I after some discussion decided

to sail the ship to Panape as we still have a good following breeze, which should carry us all of the way.

We discarded the idea of going to Rabaul in the Mandated Territory of New Guinea as being too costly and too extravagant in length of time.

There is a possibility that we may find engineers in the Caroline Islands.

We concluded to sail with the first favorable wind.

October 9 (Thursday). Ongtong Java. Over to the small islands in an outrigger with McGinn. The canoe broke up in the swell and we were forced to swim ashore. Continued on foot to the man-o'-war bird rookery and obtained a number of specimens.

Returning we were forced to wait until 11 P.M. for a low tide which would enable us to wade the reef between the islands. Reached home at midnight.

October 10 (Friday). To sea. Captain ashore at daylight announcing that he was ready to go. Hurried all duffle on board, hove up the anchor and sailed the whole day across the long lagoon. Passed through the northern reefs at 4 P.M. and set our course for the Carolines.

Myself engaged all day making up specimens.

October 11-25. (Enroute Panape. The whole time spent sailing due north along the 160th parallel.

We were favored by light but fair winds all of the time.

For 5 days I was incapacitated with a very severe

dose of malarial fever, accompanied by a high temperature (106°) and spasmodic delirious spells. My loss of weight during this illness was astounding being 30 pounds in 5 days.

A number of petrels (migrants), white-tailed tropic birds. Boobies and terns were collected enroute.

Captain Lang was able to accomplish a considerable number of needed adjustments aboard ship during fair weather.

Saturday, October 25 we sighted Penape Island, our destination.

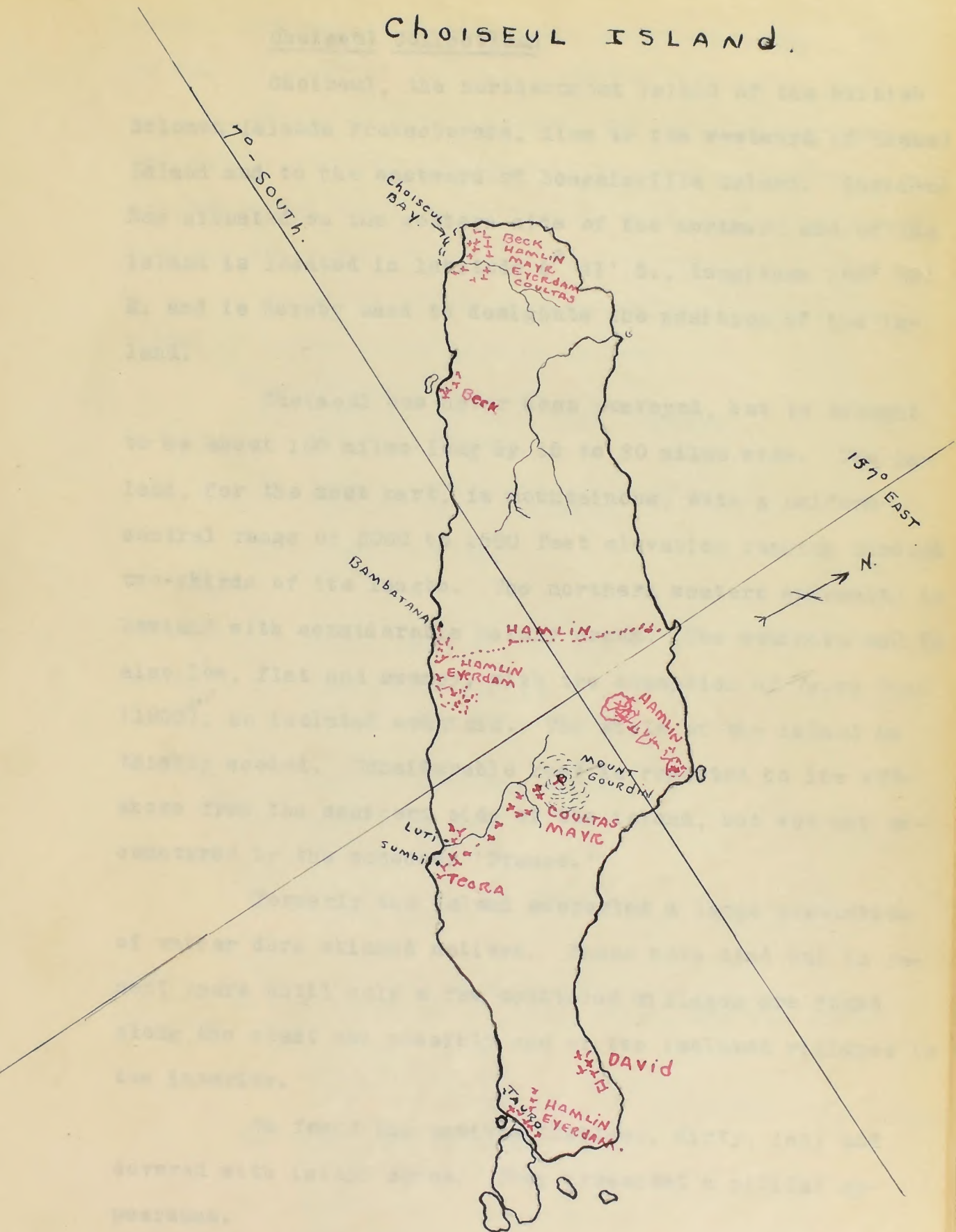
On September 4th and 5th, 1929, while enroute from Kieta, Bougainville Island to Faisi, Shortland Group, the following birds were taken at sea:

Sula leucogaster 1
Sterna dougalli 4
Sterna sumatrana 1
Sterna fuscata 1

During the days of September 11, 13, 1929, while 'France' was anchored at Faisi, Shortland Group, the following birds were collected.

Demi egretta sacra 1
Haliastur indus 1
Charadrius dominicus 2
Tringa hypoleuca 4
Sterna bergii 4
Sterna sumatrana 1
Sterna dougalli 11

CHOISEUL ISLAND.



Choiseul Collections

Choiseul, the northernmost island of the British Solomon Islands Protectorate, lies to the westward of Ysabel Island and to the eastward of Bougainville Island. Choiseul Bay situated on the western side of the northern end of the island is located in latitude $6^{\circ} 41'$ S., longitude $156^{\circ} 25'$ E. and is hereby used to designate the position of the island.

Choiseul has never been surveyed, but is thought to be about 100 miles long by 15 to 20 miles wide. The island, for the most part, is mountainous, with a uniform central range of 2000 to 2500 feet elevation running through two-thirds of its length. The northern western extremity is lowland with considerable marshy areas. The southern end is also low, flat and swampy, with the exception of Tauro Peak (1800^{FEET}), an isolated mountain. The whole of the island is thickly wooded. Considerable reef is reported to lie offshore from the southern side of the island, but was not encountered by the schooner 'France.'

Formerly the island supported a large population of rather dark skinned natives. These have died out in recent years until only a few scattered villages are found along the coast and possibly one or two isolated villages in the interior.

We found the natives listless, dirty, lazy and covered with island sores. They presented a pitiful appearance.

Their houses, for the most part, are built on the

ground, are huddled together, are dirty and unkept. The gardens we observed were small and not very clean.

During my time on board, the 'France' visited Choiseul Island from September 15 to November 5, 1929. This was the second visit to the islands by this expedition as Beck had spent some time there late in 1927.

A summary of the time and collecting areas as listed by Hamlin is included as follows:

- | | |
|---|----------|
| 1. Choiseul Bay--lowland.
Hamlin (one day) Mayr, Coultas,
Eyerdam, Teora. | 16 days. |
| 2. Senga--lowland and mountains.
Hamlin, David, Charley. | 9 days. |
| 3. Sumbi--lowland
Teora. | 14 days |
| 4. Wurulata River, Mount Gourdin (2500 ft.)
Mayr, Coultas, Charley | 12 days |
| 5. Bambatani--lowland
Hamlin, Eyerdam, David. | 6 days. |
| 6. Kulambangra River--lowland.
Hamlin, Eyerdam, David | 3 days. |
| 7. Tauro--lowland.
Hamlin, Eyerdam, David. | 5 days. |
| 8. Later--Tauro and Kumburu.
Native David. | 18 days. |

Summary of Choiseul Island Collections. The names are provisional as designated by Dr. Mayr at the time the collections were made.

1. Ardea (Butorides) 1 specimen.
Along the rivers inland. Apparently crab-eater.
2. Demi egretta sacra. None
Along seacoast and lower portion of rivers.
3. Nycticorax 2 specimens.
Along coast.
4. Dupetor 1 specimen.
Obtained in mangrove swamp.

5. *Anas superciliosa* 3 specimens.
Inhabits rivers inland.
6. *Aviceda subcristata* 7 specimens.
Lowland, especially old native gardens.
7. *Haliastur indus* 5 specimens.
Seacoast and along rivers inland.
8. *Accipiter novae hollandiae* 11 specimens.
Most common of the small hawks found everywhere, up to at least 1500 feet elevation.
Also coconut plantations.
9. *Haliastur spenurus* None.
Mayr's observation along seacoast. = *H. indus* juv.
10. *Accipiter (fasciatus) albogularis* ? 2 specimens
In the lowlands, rarely seen.
11. *Accipiter eichhorni* 4 specimens.
Rarely seen, Lowland and mountain forest.
12. *Haliaetus* (sea eagle) 4 specimens. *H. sanfordi*
Distributed all over the island--seacoast, lowland, and mountain forest.
13. *Milvis migrans* (?) 1 specimen.
Same as above. = *H. indus* juv.
14. *Pandion haliaetus* None.
Observed along the seacoast.
15. *Megapodius* 4 specimens.
Common in lowland forest and old native gardens. Rare in the hill forests up to 600 ft.
16. Forest Rail (*Gymnocrex*?) None. ? *Habropteryx*?
Hamlin observed one specimen in the cane brakes of a mountain creek. *woodfordi*
17. *Porphyrio* 2 specimens.
In native gardens and secondary bush. Considered by locals as a pest.
18. *Charadrius* 2 specimens.
Seacoast and cleared areas.
19. *Tringa hypoleuca* 1 specimen.
Seacoast.
20. *Tringa* species 1 specimen.
Same.
21. *Tringa flavipes* 1 specimen.
Same.

22. Numenius 1 specimen.
Same.
23. Turnstone arenaria None.
Observed by Mayr.
24. Sterna bergii 3 specimens.
Seacoast.
25. Sterna dougalli. 1 specimen.
Seacoast.
26. Ptilinopus superbus 7 specimens.
Common in the lowland forest and the high
mangrove trees, single specimens in the hill
forest up to a thousand feet.
27. Ptilinopus erythrothorax 14 specimens.
Red-breasted fruit dove. Lowland and moun-
tain forest, especially in fruit trees in
mountain forest. In flocks. *= vindiis*
28. Ducula rubricera 4 specimens.
Common in lowland and mountain forest.
29. Ducula pistrinaria None.
Lowland forest close to the coast and very
common on small islands.
30. Columba vitiensis 1 specimen.
True forest.
31. Macropygia rufa 2 specimens.
Lowland forest.
32. Turcoenas crassirostris 5 specimens.
Found in hill valleys.
33. Chalcophaps stephani 4 specimens.
Common in the true forest and undergrowth as
well.
34. Caloenas nicob~~y~~arica none.
Irregular distribution, lowland and hill
forest. Sometimes in colonies on small out-
lying islands.
35. Microgoura meeki None.
According to natives, has been destroyed or
driven into the interior by domestic cats
gone wild. Natives of the Tauro district re-
port having seen the bird in the fall of 1928.

36. *Eas cardinalis* 4 specimens.
Lowlands especially coconut plantations and mangroves. Scattered bands sometimes found in the mountain forests.
37. *Trichoglossus* 5 specimens.
Lowlands, almost restricted to coconut plantations.
38. *Cacatua* 2 specimens.
Common everywhere. Very noisy.
39. *Micropsitta* 7 specimens.
Lowlands and highlands, especially secondary growth. Mostly in small flocks searching for white ants' nests.
40. *Eclectus* 4 specimens.
Common, especially in native gardens and secondary growth. Found up to 2500 ft. Very troublesome to native crops.
41. *Geoffroyus*. 6 specimens.
High trees in lowland and mountain forest. They have a remarkable song.
42. *Chalcites lucidus* 1 specimen.
One specimen found in a native garden near the coast.
43. *Eudynamis scolopacia* 4 specimens.
Lowland forest.
44. *Pseudotynx solomonensis* 1 specimen.
One specimen taken by Hamlin in lowland forest.
45. *Spiloglaux* 2 specimens.
Lowland and mountain forest.
46. *Collocalia* None.
Two species observed along rivers, open spaces and native gardens.
47. *Hemiprocne mystacea* 7 specimens.
Open spaces, especially dead trees. Plantations, mangrove forests and native gardens.
48. *Alcedo althis* 1 specimen.
"all rivers which have steep banks above them."
Mayr.
49. *Alcyone pusilla* 4 specimens.
Found in the mangroves and lowland rivers.
50. *Ceyx lepidus* 3 specimens.

In this dense growth of the lowland and hill forest, especially in old native gardens and river flats.

51. Halcyon (^{*Leucopygia*} kolopraktos?) 12 specimens.
Lowland forest.
52. Halcyon sancta 11 specimens.
Everywhere in open spaces, especially near the coast and native gardens. Mostly in lower trees and shrubs.
53. Halcyon chloris 6 specimens.
On very high trees, high mangroves, single trees in native gardens, lowland and highland forest.
54. Halcyon saurophaga 5 specimens.
Everywhere along the beach and the back water of rivers.
55. Eurystomas orientalis. 5 specimens.
Open country, native gardens, occasionally seen in the bush near open spaces and never in the highlands.
56. Rhyticeras plicatus 4 specimens.
Found everywhere, all elevations, sometimes in the tops of fruit trees gathering in flocks.
57. Pitta 3 specimens.
Found in the mountain valleys heard calling in the early morning, late evening and during rainy weather.
58. Hirundo talaitica 1 specimen.
Common in the open country, especially near the coast.
59. Coracina papuensis. 19 specimens.
Common everywhere near salt water, i.e. coconut plantations, mangrove, native gardens, small island bush. Much rarer in the true lowland forest--rarely, if ever, found at higher elevations.
60. Graucalus lineatus 3 specimens.
Seldom in the hill forest.
61. Edolisoma schisticeps 12 specimens.
Possibly same as 62. Lowland and lower elevations.
62. Edolisoma (pseudomontanum ?) 3 specimens.
Lowland and hill forest up to 500 ft. Apparently rare.

63. *Turdus*. Thrush. None.
Not observed.
64. *Pachycephala*. 50 specimens.
Everywhere. Most common bird of the true forest, preferring undergrowth to high trees. Can easily be attracted by imitating its call.
65. *Rhipidura leucophrys* 2 specimens.
Common about native gardens, open spaces, up rivers, along the beach. Likes to build nest over open water, not found in dense forest or even dark mangrove. Nesting in October.
66. *Rhipidura* ^{cockerelli} (*albopuncta*) 12 specimens.
In true forest, mangrove and edge of native gardens.
67. *Rhipidura rufifrons* 9 specimens.
True bush and mangrove forest, also edge of native gardens.
68. *Monarcha cinerascens*. 3 specimens.
Always on small islands, never on the mainland.
69. *Monarcha castaneiventris* 12 specimens.
Everywhere in lowland true forest, rarer at higher elevations.
70. *Monarcha* ^{barbatus} ~~arres~~ 17 specimens.
Only found in the hill and mountain forest.
71. *Monarcha* ^{Myiagra} ~~menadensis~~ 17 specimens.
Everywhere, mangrove, old native gardens, lowland, and mountain forest.
72. *Mino dumontii* 5 specimens.
Everywhere, but more common around plantations and in the lowland. Not social. Very noisy.
73. *Aplonis metallica* 6 specimens.
Lowlands and especially open places, around cultivated areas, apparently not in the mountains. Nests in colonies in high trees.
74. *Aplonis cantaroides* 3 specimens.
Lowlands, rare in the hills, common in coconut plantations, nests singly in coconut trees and dead timber.
75. *Aplonis grandis* 11 specimens.
More common around plantations and in the lowlands.

76. *Corvus* 19 specimens.
Much more common in the hill forest, not in the open land. Social, easily attracted by imitation of their call. Fruit eater.
77. *Cinnyris jugularis* 8 specimens.
In all secondary growth such as coconut plantations and native gardens, mangrove swamps. Never in the true forest.
78. *Myzomela lafargei* 21 specimens.
Everywhere, perhaps more common in the highlands.
79. *Dicaeum* 14 specimens.
Everywhere, especially in the open country and in the secondary growth.
80. *Zosterops* 21 specimens.
Everywhere in high and low altitudes, more common in old native gardens and at the edge of the forest. Almost always in flocks.

Making a total of 70 species, represented by 462 individuals.

Choiseul Island (David)

Between November 3-24, 1929, while the 'France' was enroute Tulagi from Choiseul Island, Native David remained at the S/E end of Choiseul and brought together a collection of highly desirable species represented by 42 specimens. His collecting was done around the villages of Tauro and Kumboro. The collections made by David are not listed with the Choiseul Island report.

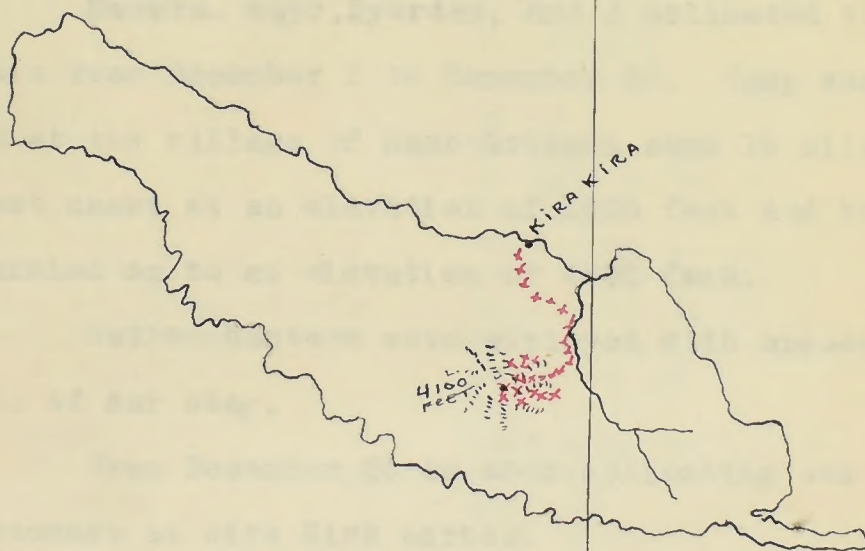
San Cristoval Collections

San Cristoval (Bauro) (Makira) Island is the largest island at the southeastern end of the Solomon Group. It is 78 miles in length by 22 to 25 miles in width. The

SAN CRISTOVAL ISLAND.

X. COULTAS
MAYR
EYERDAM

10° SOUTH.



SANTA
ANNA
SANTA
CATALINA

162° EAST.

position of the southern end is given as latitude $10^{\circ} 48' S.$, longitude $162^{\circ} 17' E.$

The island is mountainous with peaks reaching 4000 feet elevation toward the southeastern end. The whole of the island is well wooded.

The natives are among the light skinned Melane-sians of the group. They are well behaved, peaceful and good agriculturalists. The population in 1925 was estimated at 7000. These people live in orderly villages and keep moderately clean gardens. Food shortages are rare among them.

Messrs. Mayr, Eyerdam, and I collected in the mountain from December 1 to December 23. Camp was established at the village of Huno Goldaha some 15 miles from the east coast at an elevation of 1900 feet and hunting was carried on to an elevation of 4000 feet.

Native hunters were employed with success throughout all of our stay.

From December 26-28 some collecting was done on the seacoast at Kira Kira harbor.

As practically all of our time during this trip was spent in camp preparing specimens, no notes on birds were undertaken.

Rollo Beck collected lowland material from this island early in 1927.

Birds Collected in the mountains of San Cristoval Island, December 1929.

The list is provisional and in alphabetical order as made in the field. Names were given by Dr. Mayr at the time of collecting material.

<u>Name</u>	<u>Native Name</u>	<u>Amount</u>
Accipiter (black)	De heh	2
Alcedo atthis	Gao go te ' pek	1
Aplonis	Wan'u eh	19
Ardea	Go	2
Aviceda subcristata	hi'tu	1
Cacomantis	bar rao ri'geh	4
Ceyx lepidus	su su wai'	11
Charmosyna	gi gi gi	1
Columba vitiensis	ba ba hoa'	4
Dicrurus (dronga)	vwa vwa ki'ki	13
Domicella	Ce'vi	32
Ducula pacifica	La hau'	3
Edolisoma	An ng'e ah	23
Eurystomas orientalis	Bara bara ga sin' a ha	2
Gallicolumba	Ru mo go	3
Geoffroyus	Ge nai	13
Geo pitta	Wai su'li	5
Graucalus lineatus	An ng'e ah	6
Halcyon chloris	Ah si'go	4
Hemiprocne mystacea	Rah pacha pau' a shu	2
Hypotinidia phillipensis	Ba'li shu	3
Lalage	Wa la hi'u	6
Lorius pectoralis	Ah ga'ra	4
Macropygia	Ha gu	2
Megapodius	Ma lau'	2
Meliarchus	An ngi wa'ke	18
Microecornis	Pua pua	29
Micropsitta	Puss puss si'ah	6
Monarcha arses	Manu woru woru'tah	5
Monarcha castaneoventris	Gara gara si'ah	3
Monarcha menadensis	Bera'bera mor'utah	10
Myzomela nigrita	Si'ki to ah	4
Pachycephala	Tou'tou	5
Phylloscopus	Wanu wanu su'ru vah	15
Porphyrio	Bah rah'reh	1
Porzana fusca	Goa goa	1
Pseudo sitta	Misi misi	26
Pseudo porphyrio	Ki'ah	1
Ptilinopus	Go hui'	5
Ptilinopus rivolii	Ro ko ma'ki	31
Rhipidura	To ki	11
Rhipidura tufifrons	Hilu'hilu	3
Rhipidura rufiventris	Go goi'ah'teh	4
Sericornis	Hoh hoh i' li geh	6
Spiloglaux	Go hi'go	2
Turcoenas crassi	Manu baru su'rah	6
Zosterops	Man tah bu ra'u	20

There are four additional species known to the natives of which we did not obtain specimens:

Large owl
Eagle

Small hawk
Small swift collochia

Birds Collected on Seacoast, San Cristobal, Dec. 1929.

<i>Aplonis metallica</i>	2
<i>Chalcophaps stephani</i>	4
<i>Ducula pacifica</i>	2
<i>Geoffroyus</i>	1
<i>Halcyon chloris</i>	4
<i>Macropygia</i>	2
<i>Meliarchus</i>	1
<i>Micropsitta</i>	3
<i>Monarcha arses</i> = <i>barbata</i>	1
<i>Monarcha menadensis</i> = <i>Myiagra</i>	1
<i>Myzomela nigrita</i>	3
<i>Myzomela rubra</i> = <i>pulcherrima</i>	5
<i>Porzana</i>	1
<i>Ptilinopus (rivolii) solomonensis</i>	1
<i>Rhipidura rufifrons</i>	1
<i>Trichoglossus</i>	3

From December 29, 1929 to January 2, 1930.

Total species collected San Cristobal 51

Total individuals collected San Cristobal 416

Santa Anna Collections

Santa Anna or Awa Raha in latitude $10^{\circ} 50' S.$, longitude $162^{\circ} 27' E.$ lies about 6 miles southeastward of Cape Surville, the eastern extremity of San Cristoval Island. It is an example of a raised atoll, nearly circular in length about $2 \frac{1}{2}$ miles by 2 miles in width. There are two fresh or brackish water lakes in the interior and the whole surface of the island with the exception of cultivated patches is well wooded. The highest point on the island is about 520 feet. Some mangrove swamp is encountered on the island as well.

There are about 200 natives living in two very orderly villages situated at opposite sides of the island. These people are quiet, peaceful and a mixture of Polynesian and Melanesian. They are poor agriculturalists but good fishermen. Coconuts grow in profusion around the coastline.

From December 29, 1929 to January 9, 1930 Messrs. Mayr, Eyerda^a~~m~~^x visited this island while awaiting Hamlin and the schooner 'France.' A small collection of 19 species represented by 63 individuals was brought together during this time. Inclement weather and lack of ^{SKINNING} materials hampered the work.

Rollo Beck had collected on this island early in 1927.

An alphabetical list of specimens obtained is given as follows.

Birds Collected Santa Ana Island, Solomons, Jan. 1930

<i>Accipiter albogularis</i>	3
<i>Ptilinopus roseo? richardsi</i>	7
<i>Halcyon chloris</i>	4
<i>Monarcha nigroventris ? = cast-ugiensis</i>	8
<i>Monarcha arses barbat</i>	4
<i>Myzomela nigrita</i>	9
<i>Rhipidura</i>	1
<i>Pachycephala</i>	7
<i>Eurystomas</i>	1
<i>Ducula pacifica</i>	7
<i>Chalcophaps</i>	1
<i>Macropygia</i>	1
<i>Gallicolumba</i>	3
<i>Porzana</i>	4
<i>Nicobar pigeon</i>	2
<i>Megapodius</i>	1
<i>Demi egretta sacra</i>	2
<i>Tringa</i>	1
<i>Strix alba</i>	1

Makes 19 species and 63 individuals.

During the time Mayr, Eyerdam and I were collecting on San Cristoval Island, Mr. Hamlin managed to bring together a few specimens on islands near Tulagi. His collecting areas are listed as follows:

Beuna Vista Island--north of N'gela or Florida

Island. January 6-7, 1930. Hamlin, David, Charley, 22 specimens.

Florida Island. January 8, 1930. Same party. 7 specimens.

Tulagi. January 11, 1930, One native. 6 specimens.

Malaita Collections

Malaita (Mala) Island, latitude $9^{\circ} 05' S.$, longitude $161^{\circ} 05' E.$, is described in H. O. 165 as follows:

"One of the Solomon Islands main group, lies about 25 miles northward of the western end of Bauro Island, and is mountainous and thickly wooded. Its shore in places is low and lined with mangroves; in others it consists of dark coral and, a few feet above the sea, wooded to the waters edge. The land rises gradually from the shore to the ranges in the middle of the Island, which vary in height from 600 feet to about 4000 feet. Mount Kolovrat, its summit, is 4275 feet above high water. Malaita is 135 miles long northwestward and southeastward and 19 miles in breadth."

The natives of Malaita, along with those of Tanna in the New Hebrides have always been considered the most warlike in the Pacific.

They are sturdy, aggressive, independent and such good workmen that these boys have always been eagerly sought after by black birders and later recruiters.

Up to within the past few years very little was

MALAITA ISLAND

CENTRAL PORTION.

AUKI
HARBOR

X AUKI

161° EAST

9° South

PLATEAU

MOUNT
TORAMBUSU
WANGA
FUFU

X AROLA

X Ulimburi

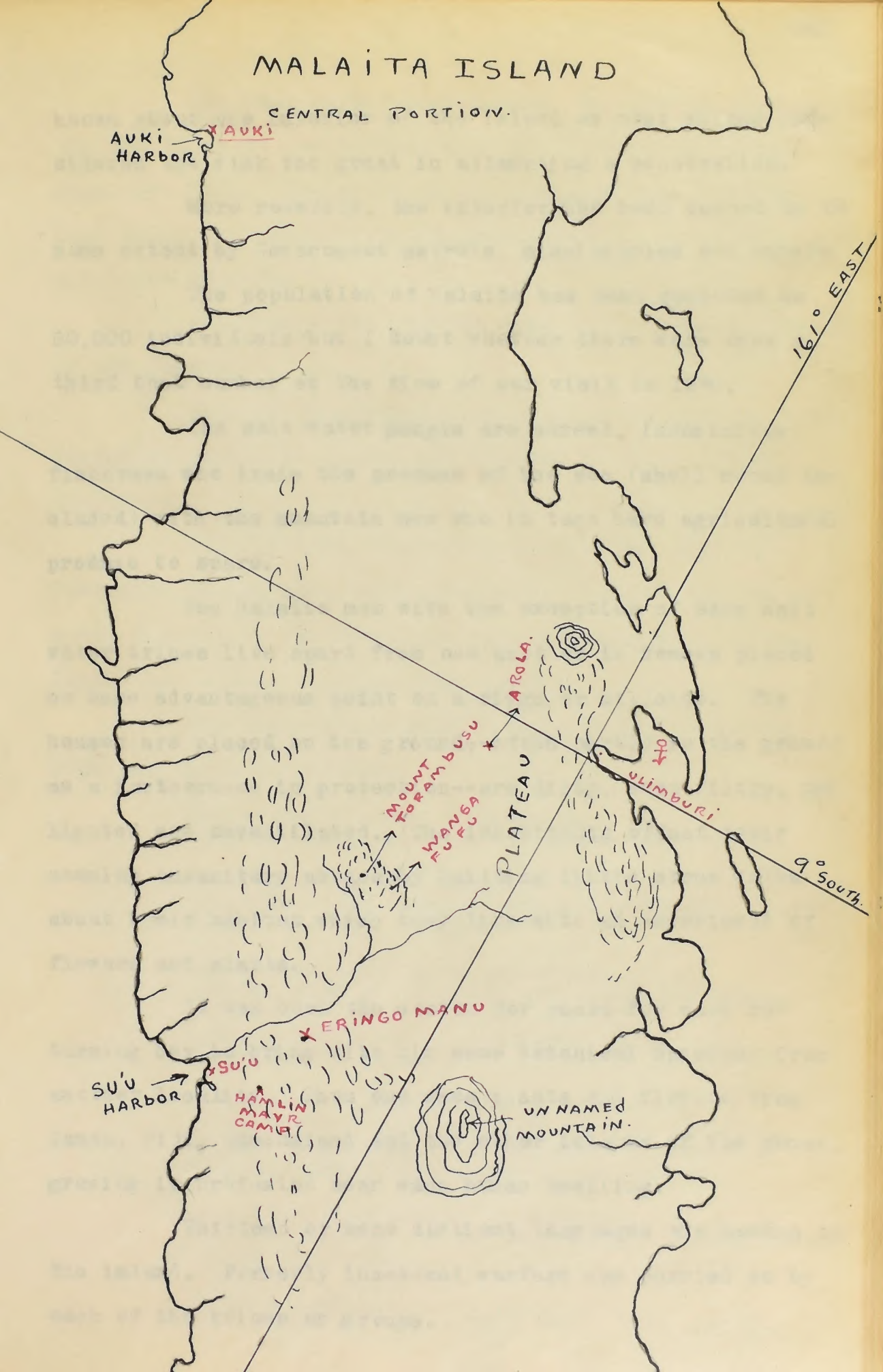
X ERINGO MANU

SU'U
HARBOR

X SU'U

X HAMILIN
MAYR
CAMIA

UN NAMED
MOUNTAIN.



known about the interior of the island as most whites considered the risk too great in attempting a penetration.

More recently, the interior has been opened up to some extent by Government patrols, missionaries and others.

The population of Malaita has been recorded as 60,000 individuals but I doubt whether there were over a third that number at the time of our visit in 1930.

The salt water people are shrewd, industrious, fishermen who trade the produce of the sea (shell money included) with the mountain men who in turn have agricultural produce to spare.

The Malaita men with the exception of some salt water tribes live apart from one another in houses placed on some advantageous point on a ridge or hillside. The houses are placed on the ground;--often partly in the ground as a furtherance in protection--are dirty, even filthy, not lighted and unventilated. The inhabitants offset their seeming unsanitary abodes by building little stone walks about their habitat which they line with an assortment of flowers and plants.

It has been the custom for years for each returning boy to bring with him some botanical specimen from another locality. Thus one sees plants and flowers from Samoa, Fiji, Queensland and the other islands of the group, growing in profusion near each human dwelling.

Thirteen or more distinct languages are spoken on the island. Formerly incessant warfare was carried on by each of the tribes or groups.

The expedition reached Auki, Malaita on Saturday January 25, 1930 and collected with interruptions until April 18, 1930. The whole of the campaign with results has been admirably reported by Dr. Ernst Mayr in American Museum Novitates No. 504.

Two exceptions must be made to the running account of the report.

(1) On the sketch plan of Malaita, page 3. Mount Torambusu should be marked and located as lying N/W of Erigomano.

(2) In bird collecting localities, page 2. Wangafufu is not near Aurola but very close to the top of Mount Torambusu. It is on the same mountain side of the latter and a good 10 miles from Aurola.

The collections made on Malaita were recorded from the field as follows:

Demigretta sacra 1 specimen.

Common. Only the blue phase was observed on

Nycticorax 1 specimen.

Lowlands. Not common, especially around mangrove swamps and flat country.

Butorides striatus 2 specimens.

Lowland bird river flats and along the coast.

Anas superciliosa 1 specimen.

Inhabits the rivers.

Accipiter novaehollandia 1 specimen.

Taken between 2000 and 3000 feet on mountain slope. Collected in true forest by native. The only one observed, apparently not common.

Accipiter albogularis 1 specimen.

Taken on mountain slope 1500 feet. Usually found in the highlands.

Aviceda subcristata 1 specimen.

Not found much above 1000 feet. Has a charac-

teristic call. Very uncommon, one seen and taken.
Often in low trees at the edge of native gardens.

Pandion haliaetus 1 specimen.
Fairly common along the seacoast.

Megapodius 1 specimen.
Lowland bird, feeds mostly on mollusca. Common,
found along river bottoms.

Porphyrio 3 specimens.
Everywhere around native gardens to which they do
much damage.

Actitus hypoleucos 1 specimen.
Along shore. Usually individuals, not flocks.

Pluvialis dominicus
Cleared areas, native gardens, sometimes foreshore
and reefs.

Ptilinopus superbus 21 specimens.
Has a wide range. Taken up to 3000 feet. Common.

Ptilinopus solomonensis 39 specimens.
Common in the highest altitudes. In trees of
medium height. Nest observed, a few twigs loosely
thrown together in branch of a limb at 15 feet
above the ground.

Ptilinopus lewisi 14 specimens.
Found up to 2000 feet. This is the most common
dove. Lowland mountain forest. Feeds in small
flocks.

Ducula pistrinaria None.
Common along the coast and on the small islands.

Ducula brenchleyi 1 specimen.
One specimen taken on the coast at Su'u.

Ducula rubricera 14 specimens.
Common throughout the whole island, especially in
the lowlands where they congregate at night. In
high trees where they feed. Their characteristic
call betrays their presence.

Columba vitiensis 2 specimens.
Highland bird. Mountain forest.

Gymnophaps 22 specimens.
Highland bird, true mountain forest not below 3000
feet. Quite common. Very often found in small
flocks of 5 to 8.

Turcoenas crassirostris 9 specimens.
Found everywhere. Usually in high trees along river bottoms, as well as true mountain forest.

Macropygia rufa 25 specimens.
More common in the highlands. Found up to highest elevations 4000 feet. True forest.

Chalcophaps 9 specimens
Lowland bird to about 2000 feet. Inhabits secondary growth, true forest and seacoast. On the ground and low shrubs. Common.

Eas cardinalis 6 specimens.
Lowland bird, common coconut plantations, lowland forest. Feeds in big flocks.

Lorius chlorocercus 48 specimens.
Lowland bird up to 3000 feet. More common near the salt water. Flies and feeds in flocks in the true lowland forest. Rarely found in coconut plantations.

Trichoglossus 3 specimens.
Common everywhere to 3000 feet. Usually in small flocks. They keep up a continuous chatter while on the wing.

Charmosyna margarethae 21 specimens.
Highland bird as we observed it not below 3000 feet. Feeding and traveling in flocks. In high trees more common than the following species.

Charmosynopsis palmarum 14 specimens.
Highland bird also, moves about very quickly in the tops of high trees; hard to shoot. Not observed below 3000 feet. Found singly.

Cacatua 9 specimens.
Common. Everywhere but more common in the lowlands. Congregates in high trees, very noisy. Frequently calls while on the wing.

Micrositta 8 specimens.
Fairly common up to 3000 feet, seem to be more common in the higher elevations than in the lowlands. No mountain species. In high trees in the true forest; feeds on tree trunks, more often heard than seen.

Eclectus pectoralis 12 specimens.
Up to 3000 feet but not often found in the mountain forest. Around secondary growth, native gardens. Very noisy. More common in the lowlands.

Geoffreyus 27 specimens.
Common. Found everywhere to the highest elevations but more common in the lowlands. Usually in pairs.

Cuculus optatus 1 specimen.
Secondary bush in the lowlands.

Cacomantis variolatus 6 specimens.
Found everywhere, to the top of the highest range. Calls both night and day. Fairly common. Feeding parents not known.

Eudynamis scolopacea 2 specimens.
More common along the coast in the true forest, very high trees. One taken by a native at 2000 feet. Very difficult to find. They are ventriloquists and hide themselves securely.

Urodynamis taitensis 1 specimen.
Taken by a native in the true forest at 2000 feet. Usually found in the lowland forest.

Ninox 2 specimens.
One additional in alcohol. All three were taken by natives in the mountain plateaus 3000 feet. Were heard in the mountains to 4000 feet. Not frequently heard at night. Natives were hesitant about obtaining specimens, probably because the bird is wrapped up in their culture.

Tyto alba 1 specimen.
One taken at 2000 feet by a native who hit it with a stone. This species is evidently a casual visitor to Malaita as most of the natives had never seen a specimen before this one was brought in.

Hemiprocyne mystacea 7 specimens.
Lowlands to 2000 feet. In dead branches of trees around and in native gardens and along rivers.

Ceyx lepidus 1 specimen.
One taken by a native along a mountain stream. Not common and difficult for natives to obtain. Several were heard. Not as numerous as in the western Solomons.

Halcyon chloris 12 specimens.
Common, native gardens, along rivers to their source. Dead limbs or twigs in the tops of trees. Nests in holes in trees.

Eurystomas orientalis 10 specimens.
Lowland to 2000 feet. Around native gardens

secondary bush. Common.

Rhyticeros plicatus 5 specimens.

Eyerdam's specialty. Found everywhere but prefers to nest in the warmer lowlands. Common in patches according to his food supply, has a high range of flight.

Coracina papuensis 32 specimens.

Found to the highest elevations which is unusual. More common along the coast. Frequents native gardens, secondary growth and true forest. Common. Mixed up in native culture.

Coracina lineata 21 specimens.

Found to the highest elevation but more common between 1000 and 3000 feet. Frequents high trees rarely in secondary growth. Common.

Edolisoma holopolium 47 specimens.

Throughout the island but most common in the highlands. Common at 3000 feet and above. Few were taken in the lowlands. Secondary growth and true forest.

Edolisoma tenuirostre 34 specimens.

Found to the highest elevation but decidedly more common below 2000 feet, secondary bush and true forest, common.

Mino dumontii 38 specimens.

Common up to 3000 feet. Secondary growth and true forest.

Aplonis metallica 3 specimens.

Very common lowland bird; found around coconut plantations and native gardens, nests in colonies in isolated trees.

Aplonis grandis 42 specimens.

More common below 2000 feet is found on the edge of native plantations, in secondary growth and lowland forest nests in fairly high trees.

Pachycephala sanfordi 46 specimens.

Common everywhere to the highest elevations, in secondary growth and true forest.

Monarcha castaneiventris 43 specimens.

Found to the highest elevations. Common everywhere

Monarcha barbata 53 specimens.

Found to the highest elevations, but more common below 3000 feet. Secondary growth and true forest.

Myiagra ferrocyanea 51 specimens.
Below 3000 feet. Around native gardens and secondary bush.

Rhipidura leucophrys 2 specimens.
Common in the lowlands, especially along rivers and found to about 1500 feet. Nests are built over the water on branches of trees, usually from two to three feet above the water.

Rhipidura cockerelli 36 specimens.
Up to 3000 feet, fairly common in its habitat. Largest number taken between 2000 and 3000 feet elevation. Feeds in low bushes and medium-sized trees.

Rhipidura rufifrons 24 specimens.
Found everywhere, even distribution up to 3000 feet and not uncommon above. It is found close to the ground and in small trees.

Rhipidura malaitae 36 specimens.
Above 3000 feet, quite common in its habitat. Feeds alone in low bushes and medium-sized trees. Displays intermittently.

Phylloscopus trivirgatus 10 specimens.
Highland bird above 2000 feet. In high trees in true forest.

Cinnyris jugularis 11 specimens.
Lowlands, in flowering bushes, native gardens, secondary growth.

Myzomela cardinalis 65 specimens.
Common everywhere up to the highest elevations.

Dicaeum aeneum 42 specimens.
Found everywhere to the highest altitude but more common in the lowlands. Especially in secondary growth and rarely in the true forests.

Zosterops stresemanni 54 specimens.
Found everywhere. Feeds in secondary bush. Not so common above 3000 feet.

Flying fox 15 specimens.
Everywhere on the island. Usually spend the daylight hours hanging from the tops of high trees.

O'Possum 5 specimens.
In the true forest.

Birds known to occur on Malaita through observation and report:

1. *Haliaeetus leucogaster* Observed.
2. *Amaurornis* (Rail) Common Solomon Island rail recognized by natives from specimens shown them. Reported by native hunters but not taken. Probably mixed up in their culture.
3. *Hirundo tahitica* Observed.
4. *Collocaba* 2 species observed.
5. *Aplonis cantoroides* Observed.
6. *Halcyon saurophaga* Observed.
7. *Ducula pacifica* Observed.
8. *Haliastur indus* Observed.
9. Small hawk, possibly falcon seen by Hamlin.
10. *Alcedo atthis* Heard.
11. Ground bird. Possibly thrush or *Gallicolumba*. Natives, though they saw the bird, would not obtain examples. It is a taboo bird in their culture.
12. *Centropus*. Reported by older natives as having occurred on the island many years ago.

Birds of which there is no record.

1. *Pitta*
2. Crow
3. Large owl
4. Mountain *Micropsitta*

Native names of Malaita birds from the Ari Ari district.

- | | |
|------------------------------------|---------------|
| 1. <i>Demigretta sacra</i> | Ah'u |
| 2. <i>Nycticorax</i> | Ho'u |
| 3. <i>Butorides</i> | Suau're--ah'u |
| 4. <i>Anas superciliosa</i> | Ah lung'u |
| 5. <i>Accipiter novaehollandia</i> | Ki o'ah |

6.	<i>Accipiter albogularis</i>	Hi'tu
7.	<i>Aviceda subcristata</i>	(No name)
8.	<i>Pandion haliaetus</i>	Kwa gi'u
9.	<i>Megapodius</i>	Kia kah'u
10.	<i>Porphyrio</i>	Que'ii -Huahu'
11.	<i>Actitus hypoleucos</i>	Tsi si foi'
12.	<i>Pluvialis dominicus</i>	Ko ko rah'
13.	<i>Ptilinopus superbus</i>	Fau ah long'ah
14.	<i>Ptilinopus solomonensis</i>	Fau bu'eh
15.	<i>Ptilinopus viridus</i>	Fau killa killa'
16.	<i>Ducula brenchleyi</i>	Bo rah'
17.	<i>Ducula rubricera</i>	Bo rah'
18.	<i>Columba vitiensis</i>	E an' no
19.	<i>Gymnophaps</i>	Bor lo whaw'
20.	<i>Coryphoenas crassirostris</i>	Gou' su su ah'
21.	<i>Macropygia rufa</i>	Go gu' leh
22.	<i>Chalcophaps stephani</i>	Lah mo'ah
23.	<i>Eas cardinalis</i>	Su' leh
24.	<i>Lorius chlorocercus</i>	Tah ri' ko
25.	<i>Trichoglossus</i>	Su gi' geh
26.	<i>Charmosyna</i>	Su li kay'
27.	<i>Charmosynopsis</i>	An ti i'
28.	<i>Cacatua</i>	Kah' kah
29.	<i>Micropsitta</i>	Su su bu na're
30.	<i>Eclectus</i> ♂ Aka'la	♀ O fo'u fwo
31.	<i>Geoffroyus</i>	Kida kida
32.	<i>Cuculus</i>	Bi li u'
33.	<i>Cacomantis</i>	Kuru kuru

34. Eudynamis	To lo fa'
35. Urodynamis	Ng gi'
36. Ninox	Goa goa'
37. Tyto alba	Nah ii'
38. Hemiprogne	Gah kam pa'i
39. Ceyx	T u u'
40. Halcyon chloris	I i'
41. Eurystomas	Khe khe leto' ah
42. Rhyticeros	Bi nah'
43. Coracina papuensis	Key di ah'
44. Coracina lineata	Koe ee' si
45. Edolisoma holopolium	Go go so foi eh
46. Edolisoma tenuirostris	Foa to la guh'
47. Mino dumontii	Sing i lo'
48. Aplonis metallica	(Wan du?)
49. Aplonis grandis	Wan du
50. Pachycephala	Go ah ti'o
51. Monarcha castaneiventris	Ni tu mah lam'bu
52. Monarcha barbata	Fes mah gau'
53. Myiagra	La he hu huge'leh
54. Rhipidura leucophrys	Want'tu
55. Rhipidura cockerelli	Man bu lu fu'u
56. Rhipidura rufifrons	Lai beda y'
57. Rhipidura malaitae	La eh u vu as' se
58. Phylloscopus	Lora neu'wa
59. Cinnerys jugularis	Ti do o'rau
60. Myzomela cardinalis	Sum'bah
61. Dicaeum	Kah kah min'deh

62. Zosterops	Di di o'ro
Flying Fox	Sah kwong gwo
O'Possum	Quoi as se'na
Haliaetus	Fan tah
Amaurornis	Dah'ah

Ulava Island British Solomons

Birds taken and observed by Hannibal Hamlin, March 23-25, 1930, during his visit.

- ✓ Nino dumonti krefti---few taken.
- ✓ Trichoglossus haemotodus--none taken.
- ✓ Rhipidura tricolor--none taken.
- ✓ Bush heron (Dupetor)--one taken.
- ✓ Halcyon albicilla--Observed.
- Cinnyris jug.---Observed.
- ✓ Demigretta sacra---observed.
- ✓ Edolisoma schisticeps---observed.
- ✓ Graucalus papuensis---observed.
- ✓ Aplonis metallicus---observed.
- ✓ Aplonis cantoroides---observed.
- ✓ Aquila---observed.
- ✓ Haliastur indus---observed.

These were all that were seen--Hamlin showed the natives birds of Malaita; Flycatchers, Fantails etc. but the natives of Ulava could not recognize any of them.

Tulagi, Solomon Islands

During the last days of April and first part of May 1930, while the ship was anchored in Tulagi Harbor, spasmodic collecting was carried on by Eyerdam who brought in among other species a Centropus and a Brown heron (Butorides), neither of which had been taken previously by the expedition at this locality.

Rennell Island, latitude $11^{\circ} 50'$ S., longitude $160^{\circ} 40'$ E., is situated about 90 miles south-southwestward from San Cristoval Island. It is some 50 miles long by 12 or so miles through its widest part. The island is of uniform height 400-500 feet is densely wooded and of a very rough coral formation, which makes walking in the bush a very difficult matter. Geologists refer to Rennell as the finest example in the world of a raised atoll.

Further description of this island will be found in the text of this report.

The expedition during its second visit collected on Rennell from May 17-29, 1930, during which time Hamlin and Eyerdam visited the lake region from May 20-26, 1930. One day, May 30, was spent on Bellona Island, the small adjoining sister island to the westward.

Bellona Island is some $3\frac{1}{2}$ miles long by better than half a mile in width. It is of a different geological formation to Rennell, less coralline and more reddish clayish composition. Neither does it attain a height of more than 150 feet above sea level. No safe anchorage is to be found except a 10-fathom patch of reef at the northwest corner of the island (Ahanga). A vessel is only able to cling to this reef in very calm weather.

Bellona is less densely wooded than Rennell, but supports more large trees and an abundance of native gardens. The island supports a population of 4 or 5 hundred inhabitants who are aggressive, quarrelsome, and easily frustrated.

Our party was the first to ever penetrate the interior of the island. We found orderly, well-constructed houses and excellent well-kept gardens.

Although Rennell Island has been reported in Novitates Nos. 486 and 488 by Messrs. Mayr and Hamlin, the following notes are included from those made in the field.

Birds Collected Rennell and Bellona, May 1930.

1. *Colymbus ruficollis* 2 specimens.
Common at the lake; nest is placed in the water close to the small islands.
2. *Phalacrocorax* None.
Observed at the lake but not taken as Hamlin had brought together a large series on his previous visit.
3. *Demi egretta sacra* 2 specimens.
Common along seacoast. Not at the lake; only dark phase observed.
4. *Dupetor* 1 specimen.
Not common, seen only at the inland lake.
5. *Platalea* 1 specimen.
A few representatives at the lake. The natives at the lake appear to know nothing about the bird. They report the bird as a permanent resident, but do not know anything about nest or nests of this species.
6. *Treskiornis* 2 specimens.
Very common. Colonies are found in high trees, in many parts of the island.
7. *Anas superciliosa* None.
This common duck was found in abundance at the lake but was not taken as Hamlin had obtained a series formerly.
9. *Accipiter fasciatus* 1 specimen.
One specimen was taken on Bellona Island but was not taken or observed on Rennell this time. Hamlin obtained a specimen previously on Rennell.
10. *Porphyrio* None.
This common species, having been taken in series previously, was not collected. It was observed on both Rennell and Bellona. The natives of the latter island fence in their gardens to keep out this pest.

11. *Sterna sumatrana* 1 specimen.
Found along the seacoast and at the inland lake.
14. *Ptilinopus rhodostictus* 2 specimens.
Very common everywhere in the forest. The natives make pets of these birds.
15. *Ducula pacifica* 4 specimens.
Common, was feeding in tops of trees and occasionally near the ground throughout the island.
16. *Gallicolumba beccarii* 9 specimens.
Not uncommon, apparently more to be found near the seacoast than farther inland. Difficult to obtain because of its uncanny habit of rising from the ground and flying through the underbrush.
17. *Caloenas nicobarica* 1 specimen.
Found on the ground everywhere in the bush.
18. *Lorius chlorocercus* 1 specimen.
Uncommon, always in the tops of trees, more nervous and excitable than on other islands where they have been encountered.
19. *Geoffrayus* 5 specimens.
Fairly common, equally distributed throughout the island.
20. *Micropsitta* 1 specimen.
I should call it uncommon, several were heard but only one specimen was obtained. This species keeps to the higher trees inland.
21. *Cacomantis* 1 specimen.
One specimen taken on Bellona Island near the beach.
- 22a. *Chalcites lucidus lucidus* 3 specimens.
Common, in fact, abundant in the interior of the island.
- 22b. *Chalcites lucidus plagosus* 2 specimens.
One taken on Bellona and one on Rennell. Same as former species.
23. *Collocalia esculenta* 13 specimens.
We were fortunate enough to locate a roosting site in a limestone cave and thereby obtain a series of this species. Common.
25. *Halcyon chloris* 5 specimens.
Not common. Found in the interior, usually around cleared areas.
27. *Coracina lineata* 4 specimens.
Common everywhere in the bush. High and low trees as well.

29. *Aplonis insularis* 5 specimens.
More common in the interior than seacoast. Found around gardens, cleared areas in low trees. The only member of this species we have encountered with a yellow iris.
30. *Turdus* 22 specimens.
Not uncommon, about the same status as *Gallicolumba*. Found on the ground, in underbrush. Never gets more than 4 or 5 feet off the ground. Is very tame, even stupid in that it is not easily frightened. Will stand and look at the intruder for a matter of minutes before it will walk away.
31. *Gergoyne* 2 specimens.
Very common, found everywhere. Very tame and unassuming. Often difficult to keep them from sitting on the end of the gun barrel.
32. *Pinarolestes* 5 specimens.
Very common, more often feeding and flying in small flocks. Very tame, will allow one to approach within a few feet of them when they are feeding or resting in bushes and small trees.
34. *Rhipidura rennelliana* 3 specimens.
Very common everywhere in the bush.
35. *Pachycephala* 2 specimens.
Common everywhere in the bush.
36. *Myzomela* 9 specimens.
Very common, found everywhere in the forest bush and around cleared areas.
37. *Zosterops* 15 specimens.
Common everywhere, usually in secondary growth, but also found in high trees.
38. *Woodfordia* 15 specimens.
Common everywhere in the underbrush and low trees.

There is apparently no rail or megapode on the island as natives could not recognize these species from pictures shown to them.

The osprey Pandion was observed along the coast.

One species of Monarcha is reported from the island besides the Myiagra taken by Hamlin on his previous visit. Two species of Flying foxes were obtained also.

The Birds of Bellona Island

Dupetor: Reported.

Treskiornis: The most abundant bird on the island. 4 distinct rookeries were observed.

Accipiter: One taken.

Porphyrio: Observed.

Ptilinopus: Observed.

Ducula: Observed.

Cacomantis: One taken.

Chalcites plagosus: One taken.

Callocalia: Observed.

Halcyon chloris: Observed.

Coracina lineata: Observed.

Aplonis: Observed.

Ninox: Reported by natives.

A number of Rennell skins were shown to the Bellona natives, but none of the following species were recognized as being inhabitants of Bellona:

Lorius	Geoffroyus	Micropsitta
Turdus	Gergoyne	Pinarolestes
Rhipidura	Pachycephala	Myzomela
Zosterops	Woodfordia	

The Flying fox is also reported from Bellona Island though none were observed.

Native Names: Rennell Birds

Colymbus
Demiegretta sacra
Dupetor
Platalea
Treskiornis

Manu sin'gi
Kungau
Teg go'u
Ti manu ou gah'u
Ta go'a

Anas superciliosa
Sterna sumatrana
Accipiter
Ptilinopus
Ducula pacifica
Gallicolumba
Caloenas nicobarica
Lorius chlorocercus
Geoffroyus
Micropsitta
Chalcites malayanus
Ninox
Collocalia
Halcyon chloris
Coracina lineata
Aplonis insularis
Turdus
Gerygone
Pinarolestes
Rhipidura
Pachycephala
Myzomela
Zosterops
Woodfordia
 Flying fox (large)
 Flying fox (small)

Deh kam i na'gi
 Deng u pi'ti
 Tege su'ah
 Dah hen'ge
 Deng u' pe
 Te tu'u

Ta sa ven'ge
 Tege su'ah
 Tege nai'
 Dange ong'i
 Teng goong'gu
 Peka peka
 Tah de'ko
 Ngo vai'i
 Da ga pi'du
 Teng ng ng'o
 Llakeh llakeh'
 Da ga'ga
 Me gi ga'pe
 Teh tu
 Ta va gi'go
 Su su vang'gu
 O gu vi'u
 Tep'e ka
 "

Missima Island--Papua

During the period in which the 'France' visited Samarai, Papua, in July and August 1930, Messrs. Hamlin and Riddall and native Charley were able to make a short trip to Missima Island. They were badly handicapped by inclement weather and lack of time. Their collecting areas were as follows:

Panesesa Island. Conflict Group.
July 18, 1930. 13 specimens.

Missima Island. Louisade Group.
July 20-29 inc. 97 specimens.

Pani Pom Pom Island. Deboyne Group.
July 30-31. 16 specimens.

Gower Collections

Gower (Inattendue) Island, native name Day'eh, in latitude $07^{\circ} 55' S.$, longitude $160^{\circ} 37' E.$, lies some 24 miles northeastward of Cape Astrolabe, the northernmost point on Malaita. It is a low lying, well-wooded, even outlined, coral island of some 4 miles in length by two miles in width. Two large lakes are to be found in the interior, both of which are of a brackish, saline composition. The soil of the interior must be of very good quality as the native population raise an abundance of foodstuffs.

There are something over 50 inhabitants on the island who live in very primitive small leaf houses, which are scattered indiscriminately all over the island. There

is, apparently, no organized system of communal living.

The natives are Malaita men, cunning, thievish, dirty and covered with island sores (yaws), who are runaways from the mainland.

They are good agriculturalists and excellent fishermen, who carry on an extensive trade in these commodities with the natives of the mainland. The latter supply them with tobacco, calicos, and materials from the bush which are not obtainable on their small island.

The 'France' enroute from Tulagi, Solomon Islands, to Penape, Carolines, found it necessary to put in at the only sheltered anchorage, which is near the southeastern end, to shift stores in the main hold.

Three and one half days, from Thursday night, September 18 to noon Monday, September 22, were spent trimming the vessel, filling water tanks, obtaining firewood and native vegetables.

Although Mr. Hamlin had spent a few days on the island previously, I thought it advisable to add to his series and engaged boys who spent every available minute collecting. The natives, primed by Hamlin, did very good work averaging 75 o/o of their shots. Stick tobacco was the media of exchange used.

Monday September 22, the anchor chain fouled on a coral head and parted under the strain of a heavy ground swell. It was necessary to leave the island immediately as our second anchor was not strong enough to stand the strain. This was very regrettable as another day or two would have

given me a complete series of the ornithology of the island.

The 'France' proceeded on to Roncador Reef.

Birds of Gower Island

<u>Name</u>	<u>Native Name</u>	<u>Amount Collected</u>
Demigretta sacra	Ma ma di'o	1
Haliastur indus	Ah sung'ah	1
Pandion haliaetus	Kwa kee'o	1
Amaurornis	Kong ay'o	15
Porphyrio	Geh'o	3
Ptilinopus ^{greyi} roseoventris	Fau	15
Ptilinopus erythrothorax	Fau etu'	1
Ducula pacifica	Rung wo'	5
Columba vitiensis	Mo mo go	1
Macropygia	Bu hiae'	1
Chalcophaps stephani	La moa'	1
Gallicolumba	Ru ru	1
Trichoglossus	Ki ke'ro	13
Cacatua	Fah fuh'ta	1
Eudynamis tatensis	Kwe'see	1
Halcyon sancta	Ee ee	1
Halcyon saurophaga	Keo keo	1
Monarcha inornatus	See see'u	3
Cinnyris jugularis	Qua du'	2
Anlonis metallica	Ge re'ah	4
Flying fox	Huh qua'lo	6
Small bats in alcohol	Si si'ro	3

20 species birds 2 mammals 78 specimens.

Birds known to occur on the island, but not obtained through lack of time:

<u>Name</u>	<u>Native Name</u>
Nycticorax	To
Shore birds	
Noddys and terns	
Brown ground dove	La mo'ah
Caloenas nicobarica	Ge wan'o
Cacomantis	Koa'ro--Koa'ro
Collocalia (esculenta?)	Ha rona ta'veh
Halcyon chloris	Ee'ee
Eurystomas orientalis	Keh keh o' rah
Another species Flying fox	

No Megapodes, ducks or nesting sea birds are known on the island.

Since practically all of my time at the island was spent on board ship preparing specimens, I have very few personal observations or notes to record.

Amaurornis (rail) and Porphyrio are common in native gardens, underbrush and swampy areas. They are both considered a pest by the natives. Columba vitiensis, Ducula pacifica, Trichoglossus and both species of Ptilinopus are reported to migrate back and forth to Malaita Island in search of food.

Aplonis, Monarcha inornatus cinnyris are common species. The other species are not common.

Roncador or Candelaria Reef situated in latitude $6^{\circ} 13' S.$ and $159^{\circ} 22' E.$ is described in H. O. No. 165 Pacific Islands Pilot, Vol. 1, as follows:

"This reef is charted about 43 miles southward of Lord Howe Islands: it was seen by the Pilot Maurelle in 1781, who passed it in the night, and from the noise made by the breakers called it Roncador (Snorer). In 1567 Mendana discovered some reefs, which he named Baxos de Candelaria, and these are taken to be identical with the reef seen by Maurelle.

The reef is about 18 miles in circumference, having two openings in the southwestern part.---on the western side of the reef there are several rocks above water, the northern one being 10 feet high. Between this rock and another, 6 feet above high water lying nearly 3 miles southward of it the reef is dry. The sea breaks heavily on the

weather reef. The lagoon affords anchorage in depths from 15 to 20 fathoms on broken coral bottom. The patches are easily seen from the masthead when the sun is favorably situated.

Fish are plentiful in the lagoon."

The 'France' anchored in the lagoon Wednesday evening, September 24, 1930, and sailed again for Ongtong, Java, Thursday noon, September 25, 1930.

During the stay at Roncador Reef, the only birds observed were the smaller noddy terns which I have every reason to believe are casual feeders from Ongtong, Java.

Landing parties skirted the western and northern sides of the atoll where rocks are exposed above high water but no traces of roosting sites were found.

Ongtong, Java Collections

Ongtong, Java or Lord Howe's Group, situated in latitude $5^{\circ} 24' S.$, and longitude $159^{\circ} 30' E.$, is an atoll group containing a chain of islands, in the vicinity of 100 in circular formation, the lagoon being from 35 to 40 miles long in an east and west direction by 20 miles across at its widest part. The group lies some 160 miles to the northward of Ysabel Island, the nearest of the Solomons.

The islands of this group are small, low and sandy and are situated within and around the edge of an atoll reef. Leueneua, the largest, the principal settlement, the home of the chief and two white traders, is at the southern end, is an island about 4 miles long and about

one half a mile wide.

All of the islands are densely covered with coconut trees with an abundance of bush or scrub intermingled. A few large trees are scattered about the islands. The centers of each includes a swampy area which is used by the natives for agricultural purposes. These latter areas abound in mosquitoes of Arctic tundra region density.

The natives, who are Polynesian in origin, are quiet, lazy and peaceful. They live collectively in large villages. Their houses, which are thatched with coconut fronds, are roomy, well made and orderly. The villages as a whole are clean and well kept, carefully laid out with rows of houses fronting communal streets. In the past 20 years the population of these people has decreased from over 5000 to approximately 1000. The principal reasons for this reduction are malarial fever and the practice of abortion.

These people engage in a prolonged burial ceremony with their deceased. The body is placed in a large coral slab coffin, an elaborately carved head stone is erected and a constant vigil kept at the grave by relations for many months after the interment. Large hats are woven from coconut fronds and are worn by each mourner while sitting beside the grave.

Because of the increasing number of deaths, at the time of our visit, a large percentage of the population was engaged in mourning; much to the detriment of their general health and the corresponding neglect to their gardens

The 'France' reached this group from Gower Island,

Saturday, September 27, 1930, and sailed for Ponape, Caroline Islands, Friday, October 10, 1930.

During this time Coultas spent 10 days at collecting; the other members of the ship's complement were engaged variously. Collecting was hampered by inclement weather, lack of native cooperation and the myriads of mosquitoes on the islands.

22 species represented by 73 individuals were taken during our stay and constituted all of the known birds of the island except petrels and transient sea and shore birds not present at this time of year.

Birds of Ongtong, Java

(Names provisional as recorded from field)

<u>Name</u>	<u>Native Name</u>	<u>Amount Collected</u>
Phaeton lepturus	Kah vai'eh	5
Sula piscatrix	Moh ng'ah	1
Fregata ariel	He ah gah'hah	12
✓Demiegretta sacra	Heh he re	1
Porphyrio	Hem a gau	3
Limosa	Heh ah po??	2
Numenius	Keh ro ah	2
Lesser ringed plover	(No name)	1
Charadrius	Mang u pu'la	1
Tringa hypoleuca	Mung kau ng'ah	1
Tringa	Mong geu hak'ah	2
Arenaria	He ong a pau'u	4
Black naped tern	Hem ah pah'u	1
White tern	Ke hong'ah	3
Anous stolidus	He ng'oah	6
Anous minutus	Hah la ee'yah	9
Ducula pacifica	Hah lu'peh	1
Caloenas nicobarica	Hah gah ee yah	1
<i>Acridynamis</i> Cuckoo cuculus	Har eh yah	1
Monarcha inornatus	See see'ee	2
Aplonis metallica <i>feadeni</i>	Hu yah	5
Flying fox	Hip ay'uh	9

Total 22 species 73 individuals

1. Phaeton--white-tailed tropic-bird.

Not too common. This species nests in holes in trees but roosts in tops of tall trees when not occupied with the former. It journeys out to sea before daylight in the morning in company with flocks of terns to search for food. One often sees them skirting the reefs engaged in the same pursuit.

Both male and female assist in rearing and feeding the young. When one of the parents returns from hunting they are replaced by the other who proceeds to sea for more food. These individuals change places in the nesting hole many times each day. Natives pester this species continuously.

Small boys, especially, are adept in climbing trees at night to capture specimens. These are occasionally eaten, but more often than not only the long tail feathers are removed and the bird later released.

The tail feathers or plumes have been adapted into the culture of this tribe and are used extensively. When a young girl or married woman has finished her menstrual period and wishes to attract attention she removes her clothing, bedecks her hair with several of these plumes and parades through the village.

2. *Sula piscatrix*--Red-footed booby.

Three pair were found nesting in the same colony with frigate birds. Their nests had been placed in the tops of high trees (60 to 80 feet elevation). Only one specimen could be obtained as they were very wary and took off at the slightest provocation.

3. *Fregata ariel*

The colony of frigate birds was not a large one. I should say that it did not number over 25 individuals. These had just finished nesting in October 1930.

The colony was located on a small island 4 miles west of Leueneua. Nests of this species had been built roughly of stick and twigs and placed in the tops of high trees.

Juveniles were all able to fly though they were still being fed by adults.

I found them difficult to obtain as they resorted to flight at our approach and remained at a good altitude while circling overhead. They seemed to be at home in the air either during the night or in the daytime.

Several instances were observed when individuals carried a small red fruit about the size of a golf ball high into the air and dropped it, only to swoop down and catch the fruit in their beaks before it touched the water. Other times several individuals would engage in this pastime together.

I many times wondered if this game wasn't instigated as a training course for juveniles against the time when they would dive upon gannets and other birds to make these unfortunates disgorge the contents of their crops.

4. *Demi egretta sacra*

This heron was observed to be quite common along the reefs and sand beaches.

5. *Porphyrio*

This bird was found to be common in this group. It inhabits the swamps and underbrush and is considered a pest by the natives. One rarely if ever hears its wailing cry and seldom witnesses the bird in flight.

6. *Limosa*

The godwit is, apparently, not a common visitor. Only one old man could advance a name for the bird. The two encountered on the sand beach were taken.

7. *Numenius*

Common. Several small flocks were observed along the sea beaches.

8. Lesser ringed plover.

Apparently a straggler. The only specimen observed was taken out of a flock of turnstones, that were working along the edge of the reefs. I could not find a native who recognized the bird or could give me a name for it.

9. *Charadrius* and two species of sandpipers were found to be common along the sand beaches.

10. *Arenaria*

Flocks of turnstones of 6 to 15 individuals were found to be quite common along the beaches.

11. Black naped tern

I cannot give the status; the only one observed was taken. Natives say that the bird nests on some of the sand spits in the atoll.

12. White tern

I only observed a few flying about the reefs and succeeded in obtaining three.

13. *Anous stolidus*

Common. Several large colonies were observed about the islands. These were nesting at the time of our visit. Nests were placed in the tops of She'oak

trees at an elevation of 40 to 50 feet above ground. Nests were made of small twigs and pine needles stuck together with saliva.

14. *Anous minutus*.

More common than the larger representative. A number of colonies were noted. This species was just beginning to nest at the time of our visit. They kept apart from the other species of noddy and placed their nests on the outer limbs of the she-oak trees. Nests were never over 20 to 30 feet above the ground, were shallow affairs made of a few twigs and stringers of moss piled together. There was considerable evidence of eggs tumbling out of the nests either through carelessness on the part of the bird or through the force of the wind which blows the nests about considerably.

15. *Ducula pacifica*.

Only one example of this widely distributed species was observed and obtained in the bush. According to native information this species was formerly quite common but such numbers were taken by the white traders for food, that they are now practically extinct.

16. *Caloenas nicobarica*

Not common. Isolated individuals were taken in the true bush where they rise from the ground and hide in foliage in the tops of trees. Reported to be disappearing from the atoll.

17. *Cuckoo cuculus*

Only one was obtained. I am presuming that this is a New Zealand migrant.

18. *Monarcha inornatus*

Very common in the bush and shrubs.

19. *Aplonis metallica*

Not common by any means. Observed in flocks in the coconut trees.

20. Flying fox.

Tolerably common, found hanging from the coconut trees and flying about in the daytime. This species seems to feed in the daytime.

While aboard the 'France' enroute from Ongtong, Java, to Panape, Carolines, the following birds were obtained at sea:

Petrel	6
White tailed tropic-bird	1
Red " "	1

Blue-faced booby	1
Noddy tern	1
Sooty tern	1
Spectacled tern	1

These were taken purely as records. No large series was attempted.

Solomon Island Stores List

A partial stores list with prices paid for commodities is well worth recording. In many instances the amount demanded by the local firms was preposterous.

The assessment has been worked out in American currency.

Meats:

Sausages one pound tins, per doz.	\$5.25
Assorted meats, 12 oz. tins, per doz.	4.12
Hash " " " " "	3.00
Lard, per pound	.37
Salmon, one pound tins, per doz.	2.25
Bacon, per pound	.50

Vegetables--in 12 oz. tins

Carrots, per doz. tins	3.80
Turnips " " "	2.00
Beans " " "	2.50
Tomatoes " " "	3.00
Sweet corn " " "	3.00
Chili sauce " " "	7.50
Raisins " " "	4.50
Potatoes, per pound	.09
Onions " " "	.12
Spaghetti per doz. tins	2.50
Campbell's soups per doz. tins	2.50
Milk, 5 cent tins (per doz)	3.00
Grape nuts, per box	.37 1/2
Fish cakes, 12 oz. tin	.37 1/2
Lime juice, per bottle	.75
Cocoa, per pound	.56
Table salt, 2 lb. jars	.32

Other commodities

Assorted fruits, 12 oz. tins	\$.37 1/2
Coffee, Australian, per pound	.87 1/2
Rice, per 100 pounds	5.25
Sugar, " " "	7.00
Ships biscuits, 50 lb. tins	7.50
Gasoline, per case 8 gallons	6.25
Kerosene, " " " "	5.25
Batteries for flash light, each	.37 1/2

60 gallon drum of crude oil for Diesel, each 15.25
 (In 1934 these same drums sold wholesale in
 America for 25cents each, which shows a fair
 profit).

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