FIELD NOTES ON THE BIRDS OF NEW CALEDONIA
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By Lindsay Macmillan
Bay des Pirogues, s.e. part of island
COASTAL CAMP, BAY DES PIROGUES

19th October 1938

Weather - Dull, cloudy, overcast, after rain; clouds 60-80 percent. Wind light SE airs.

Bush - Barren red soil hills growing a stunted scrub, tussocks, cane grass, bracken fern, etc. Type of open heather and with many flowering shrubs, (Bottlebrush, BANKSIA?) and a type of cane with wide corrugated leaf. In valleys and along water courses a few taller shrubs are present and some lantana, but never above 15 feet in height and small in area. On larger flats along rivers a few Nowli trees (native Euclypt) are found growing widely spaced and reaching 20 & 30 feet.

BIRDS. LICHMERIA is very common, the commonest bird. ♀ appear to be only slightly below ♂ in numbers. A few larger birds with softer, more liquid notes are present and believed to be GUADALCANARIA. PACHYCEPHALA RUFIVENTRIS is present in scrubs and appears fairly common. ZOSTEROPS FLAVIFRONS is present but only common near lantana or fruit trees. Appears the same as Mare Island.

LALAGE - Two were seen and appeared larger and heavier in the tail than Loyalties or New Hebrides. APLONIS - Two seen on wing ♂ dark ♂ probably and one brownish, possibly ♀. ERYTHRURA PSITTACEA fairly numerous where grasses are in seed but is shy. 3 HALCYON seen, 3 white unders and a reddish under. 1 CHALCITES heard calling at a distance. 1 HYPOTAENIDEA seen. ARTAMUS fairly common. COLLOCALIA
ESCULENTA UROP, a few seen. COLLOCALIA SPOD. LEUC., present and fairly common. Pigeons appear entirely absent.

SKIN 1 ZOSTEROPS FLAV. Appears similar to Mare Island/♂; Testes very large, white. Iris, hazel. Bill, black horn, white horn base lower mandible with dark streaks. Eyes and feet pale greyish slate. NB This species has a conspicuous white side stripe which shows very much in the field against the darker wing edge. (like A. MINUTA). Shot 7 A.M. Weight 12 grams.

SKIN 1 (cont.) MOULT - Left wing-odd feathers; Nape & neck-odd feathers. Crown shows large amount of moult. WEAR - very slight on wing and tail. Stomach empty. Skull completely ossified.

SKIN 2 ZOSTEROPS FLAV. ♂. Testes almost full breeding; white. Iris, hazel. Bill horn, base lower mandible bluish-white horn. Legs & feet gray slate. Shot 7:05 A.M. Weight 12 grams. Moult- Odd feathers on crown, neck and chin; a good deal on nape. Tail - 5th & 6th feathers out from center on left side. Some (which?) wing feathers.) Skull completely ossified. Stomach half full of guava seeds.

SKIN 3a LICHMER A. ♂ Testes three-fourths enlarged, white. Iris - narrow brown inner rim; pale greyish outer rlm. Bill black. Legs & feet bluish slate, lightish. Shot 10:45 A.M. Weight 15.1 Grams. MOULT - Left wing 7-9 primaries. Tail - 3rd to 6th feathers out from center on left side, and 5th from center on right side in moult. Much moult on nape, complete on crown. Wear - on wing considerable, on tail - much. Stomach one-fourth full of insects and nectar. Skull completely ossified.

SE New Caledonia - Baie des Pirogues Coastal Camp
Thursday, October 20th, 1938
WEATHER - Variable, sun, cloud and showers. Light south wind. Clouds 80 percent.

BUSH - Swampy areas with swamp grasses very dense and widely spaced "Nossle"? trees up to 30 feet. Heatherland hills with much bare ground, tussocks and flowering and non-flowering shrubs mostly 2-3 feet in height and odd ones up to 6 feet. Many Bottle Brush (BANKSIA) types in flower. Patches of thin? bracken fern with denser ferns along the foot of hills.

BIRDS - NOTE - Many birds commenced a dawn song of considerable volume. This morning, some ten to fifteen minutes before the first dawn showed. A full and complete volume of sound was in full swing by the time the first grey light began to appear, though no birds seemed to be on the move until daylight was well established.

Saw two CORACINA, a number of ERYTHRURA, all in parties of two or three. LICHMERA as usual the commonest bird, being fully 70 percent of the total bird life of the area. GUADALCANARIA fairly numerous but shy. Calls are more liquid and distinct from LICHMERA. LICHMERA is bold, GUADALCANARIA shy and retiring. HALCYON seen by (But?) extremely shy and not allowing approach closer than 60 or 70 yards. Probably because it attacks domestic poultry it is shot with 22 calibre rifles a lot & it has become very shy near dwellings. A few GERYGONE
were seen hunting through the low heath lands, but it also was shy and extremely active. NOTE: PACHYCEPHALA RUFIVENTRIS appears to spend a great deal of its time in the low shrubs of the heathlands and even feeds on the bare red ground. To date only two $\varphi$s have been seen and both were in the heathlands. $\delta$ also are seen and heard there but by calls appear more numerous in low shrubs on river margins, etc. LALAGE is not common & appears to be more in areas where some trees are found. ERYTHRURA is shy and wary but no more so than others of the same species. MYIAGRA heard but not seen in scrubs (or shrubs?) on river banks. Saw one solitary unidentified hawk flying very high and playing and calling. Appeared like ACCIPITER in behavior but, unlike ACCIPITER VIGILAX, which is a very silent bird, this one whistled a great deal, possibly it was ACCIPITER HAPLOCHROUS but the whistle was somewhat reminiscent of the "Whistling Eagle" of Australia, may have been HALIASTUR but appeared small for that, though the distance was great; appeared to have considerable tail movement and to fan the tail more like ACCIPITER. Hawk collecting will be hard in this country. A very few ZOSTEROPS were seen or heard and all appeared to be FLAVIFRONS. ARTAMUS - a few were seen on the wing. Truly insectivorous birds such as RHIPIDURA seem rare in the area and none were seen. Pigeons also entirely absent as were any water birds or waders along the river and no parrots seen so far in the area. COLLOCALIA UROP. & SPOD. LEUC. both seen, but not common.

SKIN 4  PACHYCEPHALA RUFIVENTRIS - $\varphi$ Ovaries three-fourths enlarged. Iris- reddish brown. BILL-black. LEGS & FEET-black with suggestion brownish or very dark nigger brown. Shot 7:30 A.M. Weight- 21.9 grams. Slight abrasion on wing & tail; considerable on body especially on tail coverts. Stomach full of beetles and caterpillars. Skull completely ossified.


CORACINA (CALEDONICA CALEDONICA) - ♂ testes half enlarged. Left testis greyish white with black spot; right t. stone grey. IRIS-greenish-yellow BILL - black. LEGS & FEET - black. SHOT 6 A.M. Weight 146.7 grams. Few feathers in right wing molting. No wear on wing, slight on tail. Stomach half full of beetles. Two small un-ossified spots in skull (Drawing).


LICHMERA ♂ Testes three-fourths enlarged. Sub-adult bird. Testes white. Shot 9 A.M. Weight - 16.3 grams. Odd feathers molting on left wing and left half of tail. Very slight wear on wing; fair amount on tail. Stomach one-fourth full of insects and ants. Skull nine-tenths ossified. (Two small spots - see drawing)

SKIN 8  LALAGE ♂ testes one-half enlarged; stone grey in color. Iris - dark brown. Bill, legs, feet - black. Worm parasite in corners of eyes;
white, tapering one-fourth inch in length; thread thickness. Shot 9:30 A.M. Weight 21 grams. Odd feathers moulting in right wing, left half of tail, nape, vent region, belly, flanks and chin. Considerable moult on crown, breast and neck; much moult on rump. Fair amount of abrasion on wing and tail. Stomach three-fourths full of green stick insects. Skull completely ossified.


Baie des Piroques - Coastal Camp
Friday October 21st, 1938

(In camp most of day on camp jobs). WEATHER - Fine sun & clouds, clouds 60-80 percent; gusty SE wind.
BUSH - Heath land and river margin scrubs.

BIRDS - Usual run seen. Two CORACINA heard. One ACCIPITER seen on wing, probably an adult. Flying high. One HYPOTAENIDEA seen.


Saturday October 22nd, 1938

Weather - Fine, sun & clouds. Fresh SE breeze, gusty. Clouds 60 percent. Sun very hot, but pleasant in shade, possibly near approach of rain.

BUSH - River scrubs & heathlands and odd hillside scrubs of few 20 Ft. trees with a dense lower 6-8 foot scrub.

BIRDS - In common areas the usual run of birds seen and one new species in hillside forest scrub, probably EOPSALTRIA - white throat pale yellowish unders, darker uppers, PETROICA type beak; loud, long, rapid song (shot and too damaged for skin by large shot.) One hawk seen flying high in same place as previously (possibly ACCIPITER?). Two APLONIS seen near larger tree river scrub, both black. One HALCYON shot. A few ERYTHRURA seen and heard. NB - It is noticeable today that birds have been active and feeding all day and more species and numbers of each species are about. Even at mid-day calls and feeding continue.

SKIN 13 HALCYON - ♀ One ovary fully enlarged, other only slightly. Usual long, white parasitic worms between skin and flesh. No winged
parasites. Iris-dark brown. Bill - upper mandible black; lower with black tip and edge and white horn base. Legs and feet - dark greyish flesh. Shot 10 A.M. Weight - 44 grams. Specimen very thin. No moult; Very slight wear on wing, slight on left half tail, considerable on body (colour). Stomach full of river sand and water beetle larvae. Skull nine-tenths ossified.


SECTION MISSING - October 22nd, 1938 to March 6th, 1939

Skins 16 to 31A
FRAGMENT - Probably the end of entry for Sunday, March 5th, 1939.
Went from camp at mouth of Pirogues River where have been in retirement awaiting cartridge supplies, by small narrow 9uage tram, (log hauling line), to the head of the Pirogues River. This tram line follows the river roughly for a distance of 25 miles to the original forests where the Kauri Pine forests are situated in the valleys of the Chaine Central.
Making arrangements with the timber cutters for transport, camp sites, food, etc. for recommencement of field work.

Monday, 6th, March, 1939
From camp at mill in Bie des Pirogues (coastal) to forests in South Centre of Island.
WEATHER - Very variable, sun and rain, clouds 60-100 percent. Light northerly airs. Very steamy and close after torrential rains and floods previous week.

River Valley: The habitat along the river valley is somewhat scanty as regards trees, most of the country being low, three to five foot shrubs with wide intervals between them covered by a varying density of, but mostly scanty, growth of bracken fern. In odd pockets on the hillsides and in small valley pockets, there are a few patches of hard wood and Noulie forests, seldom more than a few acres in extent.

As regards bird life, little was seen as the birds were very frightened of the train and only occasional LICHMEA or GUADALCANARIA were seen diving headlong into the scrub in great haste at a distance from the line. Numbers of HALCYON were seen at a distance from the line perched in dry trees. ARTAMUS was seen at a distance and seemed plentiful. Both species of swifts, COLLOCALIA (C.urog, escul. & C. spod leuc.) were fairly numerous, the latter being about three to one of the former species. It was very noticeable that these swifts would
not come above the train except at considerable altitudes, and if
the train came into a place where a number were congregated feeding
they would become very upset and begin to disperse.

Plain du Lacs.
This plain is really a plateau or wide valley which, owing to a
land slide or volcanically moved rock - bar has formed in the valley
from the denudation of the surrounding hills. It is irregular in
shape having long arms running up the valleys of the mountain ranges
which surround it on all sides except in the place where the land
slide occurred and the Pirogues River which drains it flows out and
the Yate (?) River which drains it also. It is at an altitude of
about 600 ft. above sea level. It is subject to inundation and much
of it is often under water, in places as much as six feet deep, which
quickly drains away. There are always ponds or holes called lakes
in it as for much of the year it is more or less water-logged. The
vegetation is very stunted and scanty and is 90% swamp grasses, a
foot or two in height. As the soil is very minerally and is mostly
composed of sub-soil (?) it is not at all fertile. The fertile
surface soil is probably at great depth below the present surface.
There seems to be little bird life in the area apart from a fair number
of COLLACALIA SPOD. LEUC. which seem to find it a suitable area for
feeding. There is probably some bird life in the area but till I can
examine it without the noise of the train I cannot say what will be
found here. I doubt there is at any time much bird life there as it
is a rather bleak and desolate area and few species would find it a
congenial habitat.

Original Forests:
These forests are in the valleys running back from the plain into
the ranges of the Chain Central, or main mountain backbone of the
Island. They are not continuous but occur in patches in different valleys where denudation has not been excessive. Along with kauri pine and some hardwoods, such as are native to N.C., a great number of accacia and soft woods, and other smaller types of shrubs and trees common to tropical forests. In these forests are many types of vegetation not found elsewhere which give a certain distinctive appearance to these forests, though there is a good deal of similarity to the forests of Aneityum (N.H.) Bird life in these forests is plentiful and is in amazing contrast to the other parts of N.C. I have seen so far. (Altered opinion now is a typical area of original forest)

**Birds:**
The following species were seen between about 10:30 A.M. and 12 Noon.

**PHAENORHINA goliath:** A number of these were heard calling and one was seen when it flew away from the place where a smaller bird was shot, the report of the gun scaring the bird. The call is a deep not unlike the sound made by natives blowing on a conch shell. This species is wild and shy as it suffers a great deal of persecution from French shooters.

**NYMPHICUS:** *N. cornutus cornutus.* A pair of these were seen when a shot frightened them from their midday perch in the forests. They were seen within 300 yds. of the timber getters camp and very close to the railway, an exceedingly promising sign for collecting, a good omen. One bird was shot but was not an outright kill and was lost in the scrub. Both appeared to be imm. The call is very similar to that of the race on Uvea but is somewhat softer and not quite so human in intonation. The alarm was the same "Kokot" call.
The following passage was not legible due to the nature of the handwriting.

A number of these were found calling and

As most people live in New York and the place where a summer house

The house or the house where an outdoor gathering is often held.

A walk of these were seen among

Autumn always is

A beautiful experience where

The first days of the summer season come and warm waves to the

We can say with 300 years of the church becomes more and more close to the

Religious in accordance with the major religious beliefs, a sound community.

And players now start to put on anticlimactic fillings and lose the

These are very similar to that

As the days of having a somewhat softer, but not quite as calm.

It's time to learn all the same, only call.
COLLOCALIA. *C. esculenta uropyglalis*: Very common in the forest. Flys below the tree line and is very plentiful along the tram tracks and where the tracks have been cut for hauling the logs out of the forest.

*C. spodiopygia leucopygia*: Does not appear very numerous in the forest area, though it is right up to the forest margin. Any that were seen in the forest area were well above the tree-tops.

HALCYON: *H. chloris canacorum*: Seems to be fairly plentiful along the tram tracks, though none were seen away from them.

LALAGE *L. leuc. montros*: Did not appear common, only one was seen.

EDOLISOMA: *E. anale*: Birds which were thought to be this species were seen high in trees near the tram track in one or two parts.

CORACINA: *D. caled. caled.* A few of this species were seen but they did not appear very plentiful at all.

GERYGONE. *G. flav. flav.* This species seemed to be evenly distributed in the forest but was not nearly as plentiful as it well might be. The song appears to be rather more robust than the most of the race in the Loyalties. About on a par or slightly stronger than the song of the Uvea birds.

RHIPIDURA. *R. Spilodera verreauxi*: This species is exeedingly common in the forest and as well as could be seen during the short time available for investigation is the only species in the forest. It is not at all shy and is easily lured to the observer. It appears to have not long finished breeding as there numbers of family parties to be
seen everywhere, the young beyond the stage of having to be fed.

MYIAGRA. M. caled. caled. Seemed to be very plentiful but is somewhat shy and difficult to attract.

CLYTORHYNCHUS. C. pachy-lod pachy-lod A few were heard and one was shot and lost. It does not appear very common, but searches in the early morning may reveal their presence in greater numbers.

EOPSALTRIA. E. flav. This species seems fairly common and a number of young still being fed were seen and one shot. A nest well decorated with moss but no strips of bark as usual for this species was seen and is believed to belong to this species. Strangely the birds of this species seen in the forest appear to this observer at a casual glance to be smaller than those at the sea coast. Also the birds in the forest feed at great heights as well as low down, one being shot at fully 35 ft. from the ground. There is only 600 ft. difference in the altitude of the places but from these valleys the mountains rise very steeply to over 2000 ft. almost all round and in places to 300 ft. within half a mile or so of the valley floor. It will be worth noting to see if there are size differences. These narrow valleys though only 600 ft. ASL. really come in a zone of something above 1500 ft. probably because of the high surrounding mounts.

PACHYCEPHALA. P. pectoralias caledonicus. This appeared to be the only species of Pachy present in the forests. It appears to be a very small race, but is in very bad moult condition. Though somewhat paler and I think smaller it appears a little like the Aneityum race at a casual glance.
It is not true that 

A hypothesis based on 

many years of 

research with 

little evidence of 

success is 

accepted. It is 

not true that 

a hypothesis with 

little evidence of 

success is 

rejected. It is 

not true that 

a hypothesis is 

accepted or rejected 

based on how long it 

has been around.

One important factor in 

the acceptance or 

rejection of a hypothesis 

is the amount of data 

supporting it. If there is 

a large amount of data 

that supports a hypothesis, 

it is more likely to be 

accepted. If there is 

little data or conflicting 

data, it is more likely to 

be rejected. However, 

the length of time a 

hypothesis has been 

around is not a reliable 

indicator of its validity 

or usefulness.

For example, the 

theory of 

relativity was 

proposed by Albert 

Einstein in 1905. It 

was based on 

limited data, 

but it has been 

verified by numerous 

experiments and 

observations. 

Similarly, the 

theory of 

evolution by 

natural selection 

was proposed by 

Charles Darwin 

in 1859. It was 

based on 

limited data, 

but it has been 

verified by numerous 

observations and 

empirical evidence.
ARTAMUS: A. leuc. melal. None were seen in the forest area.

APLONIS: A. straita striata Seems fairly common in the forests and as far as could be seen was the same as the Loyalty race.

CORVUS: C. moned. There seemed to be a few of these in the forest, though only one small party was seen or heard. This species gets socks from the timber cutters as it attacks and kills the young and eggs of the domestic poultry which they keep.

PHILEMON: P. lessoni. Appears to be one of the commonest and is the noisiest bird in the forest. It is exceedingly numerous though somewhat shy at times though some of them are very cheeky and inquisitive. Its calls are not the same as the bird in the Loyalties.

GUADALCANARIA: G. undulata This species does not appear common in the forest though some were seen to be feeding very high in the forest a thing they don't do very much at the coast. Also these birds in the forest appeared much more active and silent than at the coast.

MYZOMELA: M. card. cal. Exceedingly plentiful and appears like the bird at the coast. The song and the whole appearance of the bird and behavior are strongly reminiscent of the bird in Australia. (M.sang.)

ZOSTEROPS: A. xanthochroa. This species did not appear very abundant in the forest and was the only species of Z. seen in that habitat. It appeared to feed at all levels as only three parties were seen and these were one each at the top, middle and near the ground in the forest.
COLLECTED SPECIMENS DATA - NEW CALEDONIA

March 6th, 1939
Tall Original Forests Habitat
Head waters Pirole River, South centre of island, chain central
600 ft. above sea level in narrow valleys with mountains
rising to three thousand feet very close about.

No. 31.A. RHIPIDURA SPILODERA VERREAUXI. Female 1/2 plus O.S.E.
Bill. Black horn, white horn base.
Legs & Feet. Dark nigger brown.
SHOT 10:45 AM WGT 9.2 gm.
WING. 72 Tail. 86.
MOULT: W.R.: 1,2,3f, 14, 15)-Covs. C. ABR. W%T. N.
L. Ditto
TL.: L.6f
BODY Back C. Chin 0.

Soft parts. Iris. Brown, Bill
Bill. Black & white horn.
Legs & Feet. Lightish grey. (?)
SHOT 10:45 A.M. WGT. 40.1 gm.
WING. 89.
TAIL. 57.
STOMACH. 3/4 crickets.
SKULL. Comp. ossif. but still thin, .9 ossif. evidently one of
a brood hatched about six months ago.

MOULT. Nil. W.r. shot damaged. Abr. W/T. N.

No. 31.C. PHILEMON. P.lessoni. Male, 1/2 minus, yellowish
white. AD. Skull. C.O.
SOFT PARTS. Iris. Red
Bill. Black horn.
Legs & Feet. Smokey black.
SHOT. 12:00 A.M. (Noon).
WGT. 80.2 gm.
MOULT. WINGS: R 1,2,14,15. ABR. W&T. N
L: Ditto.
TAIL. R:5,6.
L:5,6f.

BODY.
Very plentiful and noisy in these tall original forests.
March 14th, 1939.

Weather. Almost constant heavy rain all day. Clouds 100%. In the sheltered valleys of this area no wind was noticable, but the cloud carry was from the NE.

Area. This area of original forest which I thought was at the head waters of a branch of the Pirogues River I am told is actually on the Blue River which is the main tributary of the Yate River, or rather this river joining with the White River forms the Yate River which flows to the sea at the port and village of Yate on the SE coast near its southern end not far from the entrance of the Havannah Pass. Thus this actually belongs to the northern river systems or water shed. We have thus actually crossed the Chain Central of the island at one of its low parts. This must be somewhere in the Plain du Lacs area. There is another river basin system which we must have crossed the head of to reach here as the Plain du Lacs River flows out at a point on the coast not far from the entrance of the Havannah Pass at the extreme SE end of the island. We saw no signs of that river system and all three systems must rise within a few miles of each other and with only a matter of feet in altitude dividing them in the Plain du Lacs area.

Bush. All the forest of this area where the camp is is tall original forest which has Kauri Pine forests with trees several thousands of years old in them to show their age. The forests are very dense carrying a great deal of underbrush and are almost rain forests though only 600 ft. above sea level. The forests are not extensive and are really only pockets in certain valleys which have avoided the erosion which has occurred in all the surrounding territory. The line of demarcation is very abrupt and distinct. Rainfall is from 80 to 100 inches per year generally about 84 inches. This is said to be the heaviest rainfall in the whole island.

Birds. The usual run were seen but it was noticable all objected to the bad weather. A few were shot close to camp but no real work could be done. The only thing of note was that the two species of \textit{Rhipidura} were found in the forest.


\textbf{SOFT PARTS.} Iris, golden; eyelid edge, yellow; Bill: Blue & Black horn; Cere, yellow; Legs & feet: orange yellow; Claws, black.
SHOT. 6:30 A.M. WGHTE 251.1 gm.
SKULL. Shot damaged, Poss. Adult or .9 ossif.
MOULT. Odd body. ABR. W/T n


SHOT: 10:00 A.M. WGHTE. 86.05 gm.
SKULL: .9 ossif. STM. 3/4 blue berries
MOULT. Wings: R:A, 1,2,10-12 covs o.
L:A, 1,2, 12-14. covs. o.
Tail: R:3f,4f,5,6.
L:3f,4f,5,6
Body: nape m.
      belly, breast, m.

SK. 32b. RHIPIDURA. R. flab. bulgeri. Female 1/2 minus. (repose)
SOFT PARTS. Iris: dark brown; Bill: black & white horn base; Legs & Feet: black; Tail-shafts: white
SHOT. 8:00 A.M. WGHTE: 7.25 gm. W. 71 TL. 80
SKL. C.0. STM. 1/1 insects.
MOULT. crown o. ABR. W/T n

SK. NO. 32d. EOPSALTRIA. EOPSALTRIA FLAVIVENTRIS. female imm. 1/4 minus
SOFT PARTS. Iris; dark brown; Bill: Orange horn & dusky black horn; Legs & Feet: pale flesh brown.
SHOT. 8:00 A.M. WGHTE. 13.55 gm. W. 72 TL.54
SKL. .1 ossif.
STM. 1/2 insects
March 15th, 1939

WEATHER: Ten and fifteen minute showers till late. Slowly clearing till 5 P.M. but always subject to sudden showers. Clouds 100% till 2 P.M. then 80 or 100%. Cloud carry, from NE.

BIRDS: Went out shooting about two p.m. but birds were not at all active & rather silent. Noted considerably more movement when any bright patches occurred.

SK. NO. 33a NYMPHICUS. (Bad moult, shot damaged)

*Nymphicus cornutus cornutus*: male 1/2 minus, white, (very small).

SOFT PARTS: Iris: orange; Bill black horn & blue horn base; Legs & Feet. black

SHOT: 3:00 P.M. WGHT. 130.3 gm. W: 165 TL: R. 171

SKL: C.O. STM: 1/4 seed residue

CROP: 1/1, large milky seed kernals, astringent, smelly, pungent odour.

MOULT:

W:R; 2,7 covs, sec, o.
L: 2,7. covs, sec. o.

TL: L.1. covs. m.

Body: all uppers c exc. crown v.m.
all unders m. except. neck, chin, o.

SK. NO. 33B. PACHYCEPHALA.

*Pachycephala pectoralis caledonica*: male imm. 1/4 minus, colorless.

SOFT PARTS: Iris: reddish brown; Bill: black; Leg & Ft., smoky grey.

SHOT: 3:30 P.M. WGHT: 24.6 gm. W. 82, TL. 69

SKL. 1/4 ossif. STM. 1/2 insects, rotting wood.

MOULT:

W: covs m.

Body: back, m.

all unders, o. ABR. W/T. nil.
March 16th, 1939

WEATHER: Showery, odd brief glimpses of the sun. Clouds mostly 100%, brief intervals of 80%. Cloud carry SE. (?)

BIRDS: The birds were not active on this dull morning till fully two hours after sunrise.

SK. NO. 34a RHIPIDURA S.V.
R. spilodera verreauxi: male ad. 1/2 white, (repose).  
SOFT PARTS: Iris, dark brown: Bill, black & white horn base: Leg & Ft: very dark nigger
SHOT: 5.45 A.M. WGHT. 12 gm. W. 78 TL: 91
SKL: C.O. STM. 1/4 insects.
MOULT: Nil. ABR: w/t. Nil.

SK. No. 34b. RHIPIDURS (s.v.)
R. spil. verreauxi: male imm. 1/4 plus, white.
SOFT PARTS: Iris, dark brown: Bill, black & white horn base; Lg & ft: very dark nigger brown
SHOT: 9:00 A.M. WGHT. 11.4 gm.
SKL: .33 ossif. STM: 3/4 insects
MOULT: nil. ABR: W/t: nil

SK. NO 34c. APLONIS: L. T. V.
A. straita straita: Male 1/4 plus. (probably AD.)
SOFT PARTS: Iris, crimson: Bill, black: L&E: Black:
SHOT: 8:00 AM. WGHT. 53.1 gm.
SKL: comp. shot dam. prob. C.O. STM: 1/2 chile peppers
MOULT:
W: R: A, 1.
L: A, 1.
Body: uppers & unders v.m.
SK. NO. 34d. RHIPIDURA (f. b.)
R. Flabellifera bulgeri: female ad., 1/2 minus, (repose)
SOFT PARTS: Iris, dark brown; Bill, black & white horn base;
   Legs, black: Tail shafts, white with the two central ones with black bases.
SHOT: 7:00 A.M. WGT: 6.65 gm. W: 65 TL: 73
SKL: C.O. (sht, dam.?). STM: 1/2 insects
MOULT:
   W: R: 13,14 Body: nape, crown, 0. ABR: w/t. nil
   L: 13,14 vent, 0.

SK. NO. 34e PACHYCEPHALA: (p.c.)
P. pect. caled.: male ad. 1/2 minus, (repose), yellowish white.
SOFT PARTS: Iris, chocolate brown; Bill, smokey black:
   L&F, pale pinkish grey.
SHOT: 6:00 A.M. WGT: 21 gm. W: 81 TL: 65
SKL. C.O. STM: o/o residue
MOULT:
   W: R. A, 1, 2, 13,14. covs, m.
   L. A, 1,14, covs, m.
   Body: back, nape, m, crown o.
   vent, belly, breast, m; neck, chin o.
   ABR. w/t nil. Slight body abrasion.

SK. NO. 34f. Pachycephala (p.c.)
SKL: .25 ossif. STM: 0/0 few insects.
MOULT:
   TL: covs M.
   ABR: w/t nil.
   Body: all uppers 0 exc. upper back M.
   breast M.
March 17th, 1939

WEATHER: Almost constant rain all day till 5 P.M. Clouds 100% for the greater part of the day, only odd glimpses of the sun seen. Cloud carry from the N.W.

BIRDS: The birds were early astir and feeding before sun up. Within a very short time of dawn the rain commenced and though birds were active during the first half hour of rain they soon became subdued and retired to sheltered perches. If the rain ceased for ten minutes they immediately became active again but left off as soon as the rain recommenced.

SK. NO. 35a. APLONIS L.T.V.

SOFT PARTS: Iris, light scarlet: Bill, black: L&F, smoky black.

SHOT: 10:00AM  WGHT: 49.25 gm  W:96  TL:61
SKL: .1 ossif. STM: 1/4 fruit seeds.

MOULT: ABR:w/t:nil.

W::R. 2-3, 13. covs, M.
L. 2-3, covs, M.

TL:: R.1f,2,3
L. ditto

Body:: all uppers M.
all unders M.

SK. NO. 35b. RHIPIDURA (s.v.)
R. spilodera verreauxi: male ad., 1/2 minus (repose), white.

SHOT: 5:45 A.M.  WGHT: 11.85 gm.

SKL: C.O.  STM: 0/0 insects

MOULT: NIL ABR: w/t: nil
SK. NO. 35c. MYIAGRA L.T.V.
M. Caledonica caledonica.: female ad., 1/2 minus (repose).

SOFT PARTS: Iris, dark brown; Bill, blue horn dark edged:
L & F, dark slate.


SKL: C.O.  STM. 1/2 insects.
MOULT: W::R.1,2,3f,11,12, covs M.
L. Ditto
TL::R.3-6
L. ditto

Body: back 0, nape M, crown 0.
vent, belly, flanks, breast M, Neck 0.

ABR::w/t: nil

Saturday, March 18th, 1939

WEATHER: Rain, almost constant sharp showers at few minute
intervals all day, and always a light drizzle. Clouds 100%.
Cloud carry from N. and N.W.

BIRDS: Little or no observation possible. All birds very
subdued and inactive. Saw and shot one Edolisoma, in very bad
moult condition. This species seems to be in small parties
generally high in the forests.

Sunday, March 19th, 1939

WEATHER: Almost constant rain all day. Clouds 100%. Cloud
carry from N.W.

BIRDS: No observation possible. All species very subdued and
not calling much. In the lighter drizzles most species seemed
to have fed in desperation but did not seem to be very
enthusiastic about things. Edolisoma again seen about camp
and it was to be seen even in distant observation that they
were in very bad moult.
Monday, March 20th, 1939

WEATHER: Dull and showery till 8 a.m. then fining a little with odd watery gleams of sun. Clouds almost 100%. Cloud carry from the S.E. Odd glimpses of sun at 10 a.m. but the rest of the day few intervals of a matter of minutes without rain occurred. Clouds 100%. Cloud carry from E.

BIRDS: Not very active and seem to mistrust the weather. Nothing unusual seen. Note Aplonis generally in small flocks high in trees. Corvus in small parties up to 4 or 5, generally in middle layers of forest. Edolisoma in family parties up to four, generally high up but do come to middle layers of the forest occasionally. All the usual smaller species seen. Zosterops flav. is certainly at present rare in the forest. It is noticeable that the flower pecking species such as Myzomela & Philemon are more noisy in the wet weather and quieter in the fine intervals. Though it is worthy of note that very few Guadalcanaria have been seen or heard in the wet weather.

It was very noticeable that most species were feeding higher in the forest than usual this morning. Eopsaltria was this morning feeding mostly from 20 to 30 ft. up in the forest. More Myiagra than usual were heard and 2 females and a male were seen in a very short interval.

SK.NO. 36a Rhipidura (s.v.)
R. spil. verr: Male ad., 1/2 minus, (repose), White.
SHOT: 6 to 7 a.m. WGHT. 12.65gm W: 78 TL:90
SKL: C.0. STM: 1/4 insects.. MOULT: nil ABR: w/t: nil
MARCH 17, 1912

PERMISSION TO AMEND

(Provisional Amendment No. 3)

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SK. NO. 36B. PACHYCEPHALA (p.c.)
P. pect. cal.: male, yellowish white
SOFT PARTS: Iris, chocolate brown; Bill, black; F & L, greyish flesh.
SHOT: 6:00 a.m. WGHIT: 23.55 gm. W: 83 TL: 67
SKL: C.O. STM: 1/4 seeds, residue.
MOULT:
   W:: R. 7, 1, 2, 12f, 13, 14
   L: L. 1, 2, 13, 14
Body: back, nape, crown V.M.: all unders V.M.

SK. NO. 36c. RHIPIDURA (s.v.)
R. spil. verr.: Male imm. 1/4, (not flat), yellowish white.
SHOT: 6 to 7 a.m. WGHIT: 10.8 gm.
SKL. .25 ossif. STM. 1/4 insects
MOULT: Body: chin 0 ABR: w/t: nil

SK. No. 36d. RHIPIDURA (s.v.)
R. Spil. Verr.: Female ad. 1/2 minus (Repose.)
SHOT: 6 to 7 a.m. WGHIT: 9.85 gm.
SKL. C.O. STM.: 1/2 insects
MOULT:
Body, chin M. ABR: w/t: NIL.

SK. NO. 36e Pacycephala (p.c.)
P. pect. cal.: Female, 1/4
SOFT PARTS: Iris, chocolate brown; Bill, black; F & L greyish flesh.
SHOT: 6 to 8 a.m. WGHIT: 24.25 gm. W: 83 TL: 66
SKL: .1 ossified STM: 3/4 insects, beetles
MOULT: Nil. ABR: Nil.

SK. NO. 36f. RHIPIDURA (s.v.)
R. spil verr.: Female juv. o/o plus.
SHOT: 6 to 7 a.m. WGHIT: 10.2 gm.
SKL: .10 ossified STM: 3/4 insects
MOULT: W: sec 0.
TL: L: 6f., covs M.
Body: all uppers & unders much, increasing from head to tail
ABR: w/t: nil.
SK. No. 36q. EOP SALTRIA

E. flaviventris. : Female ad. 1/2 plus. (repose).

SHOT: 6 to 8 a.m. WGH: 13.9 gm. W: 73 TL: 54
SKL: C.O. STM: 1/2 insects.
MOUTL:

W: R A f,lf,lf. 1f. 13f.
L. ditto

ABR: Nil
Upper covs. M
All tail covs. M.
Body: all uppers M: all unders M.

SK. No. 36h. EDOLISOMA. (L. T. V.)

Edolisoma anale.: Male 1/4 plus, black. (L.T. 1/2 minus
(Prob. IMM.) R.T. 1/4 minus)

SOFT PARTS: Iris; ?; Bill, black: L. & F. black:
SHOT: 8 a.m. WGH: 90.3gm. W: 144 TL: 135
SKL: ??, (Poss. not ossif.) STM: 1/4 fruit.
MOUTL:

W: R 1 2 3 f 12 f, 9 f. SD
TL: R 3-5, L 3-5, covs. VM.

Body: all uppers and unders M. (Increasing head to tail)
ABR: w/t. mixed, average slight.

SK. No. 36i. GERY GONE.

Gerygone flavolateralis flavolateralis: Male IMM., 1/4. colorless.

SOFT PARTS: Iris, light brown: Bill, black & dark horn:
L. & G., black:
SHOT: 6:30 a.m. WGH: 6.65 gm. W: 53 TL: 41
SKL: 2 ossif. STM: 1/4 insects.

TL: R.5. covs M.

Body: Back M, nape, crown, C, cheeks 0.
all unders much exc. chin 0.
ABR: w: nil. t: slight.

SK. No. 36k. PACYCEPHALA (p.c.)
P. pect. cal.: Female imm. 1/4 plus.

SHOT: 6 to 8 a.m. WGH: 24.8 gm. W: 80 TL: 66
MOUTL: W: L.13, 14

TL: covs 0.
Body: back 0, nape M, crown 0: belly, breast, neck,
chin 0.
Tuesday, 21st, March, 1939

WEATHER: Heavy rain during the morning, slowly clearing and some sun during midday hours and up till three p.m. rain again at five p.m. Clouds from 100% to 80%. Cloud carry from SE.

BIRDS: Birds not very active till about three p.m. in afternoon. From 3 to 5 p.m. the birds were exceedingly active feeding mostly near the ground except such species as only feed high in the trees. The first Leptomyza was seen and shot. It gave only one harsh call something like a man clearing his throat with a guttural intonation. This specimen was feeding within 15 ft. of the ground and did not seem very shy and remained about till shot. The large pidgeons were not calling at all though one was seen and shot but lost in the underbrush (Phaenorhina).

SK. No. 37a. LEPTOMYZA.

LEPTOMYZA AUBRYANA: Female, 1/2 minus, (repose)

Soft Parts; Iris, brown; Bill, upper m., dark horn, blackish:
lower m., base, pale yellowish horn, pale horn with dark markings in s streaks; Wattles, bright red in life, faded to orange in death: L & F, pale livid flesh, Claws, horn:

SHOT: 4 p.m. WGHIT: 159.3 gm. W: 162. TL: 163.

SKL: Belive C.O. (s.d.), peculiar ossif. in lines
STM: 1/2 chewed flowers and small insects.
MOULT: Nil. ABR: w/t. slight

SK. No. 37b. EOPSALTRIA.

E. flav.: Male: ad: 1/2 minus, (repose), white.

Shot: 4:30 p.m. WGHIT: 18.3 gm. W: 80 TL: 60


MOULT:

W: R.1,2f,14,15.
L: 1,2f,14,15.

Body: all uppers and unders, V.M. ABR: w/t: nil.
Wednesday, 22nd, March, 1939.

WEATHER: Showers off and on all day, odd glimpses of sun with a slight tendency to become finer but subject to sudden complete overcast and a sharp downpour. Clouds 80 to 100%. Cloud carry from the ESE.

BIRDS: The birds were very irregular in behaviour, at times being very active and at other times very subdued, and behaviour seemed to be irrespective of the weather. At times almost all species were seen feeding very high and within a few minutes all were feeding near the ground. At times calls were frequent and others the forest was completely silent.

Leptomyza seems to be a solitary species, three were seen and all were single birds on their own. It has a call something like Philemon but is more of a whistle and not so harsh and grating. It will come to lure calls. Saw one party of Erythrura, two adults and two imm., the young were still being fed. This was in the densest forest.

Several other single specimens were seen; ad. AND imm at other points. It is a very early feeding species, commences to feed before it is daylight. Clytorhynchus: two were seen and one shot but lost in underbrush. This species seems much shyer and smaller than the New Heb. race, and it's calls are much weaker. It appeared to stay about 10 to 15 ft. from the ground. Only one large pidgeon was heard to call today. For the first time definately Guadalcanaria was clearly seen. In these tall original forests it is entirely a bird of the tree tops. It is not common and seems to have different calls to the bird at the coast.

SK. No. 38a. RHIPIDURA (f,b.)

R. flavb. bulgerl: Male IMM., 1/4 plus, whitish.

SHOT: 8 a.m. WGHT: 6.8 gm.

SKL: 1/2 ossif. STM: 1/2 insects

MOULT:

TL: covs M.

Body: vent, belly, flanks, M: neck, Q.
SK. No. 38b. GERYGONE.

Gerygone flavolateralis flavolateralis: Male AD. 1/2 minus, (repose), white.

- **Soft Parts:** Iris, crimson; Bill, black: L & F., black
- **Shot:** 9 a.m. **WGHT:** 6.45 gm. **W:** 53 **TL:** 43
- **SKL:** C.O. **STM:** 1/4 insects
- **Moult:** All unders odd.

SK. No. 38c. LEPTOMYZA

Leptomyza aubryana :: Male AD. 1/2 minus, white (repose, small)

- **Soft parts:** Iris, brown; Bill, black and yellowish horn: L & F, livid flesh: Wattle, yellow in death, faintly red in life.
- **Shot:** 8:30 a.m. **WGHT:** 211 gm. **W:** 184 **TL:** 182
- **SKL:** C.O. **STM:** 1/4 mistletoe flowers and berries.
- **MOULT:** Nil. **ABR:** W/T Slight.
- **Native Name:** Tui.

SK. No. 38d. GERYGONE.

G. flav. flav. :: Female Imm. 1/4.

- **Native Name for all New Cal.:** PWEE.
- **Shot:** 8:30 a.m. **WGHT:** 6.6 gm.
- **SKL:** 1/4 ossif. **STM:** 3/4 insects
- **MOULT:** T.L. Shot damaged **ABR:** W: nil
- **Body:** neck, chin, C.

Sk. No. 38e. RHIPIDURA (s.v.)

R. spil. verr. :: Female A.D., 1/2 minus, (repose).

- **Shot:** 9:30 a.m. **WGHT:** 9.7 gm.
- **SKL:** C.O. **STM:** 1/4 insects.
- **Moult:** Back C. **ABR:** W/T: Nil.
- **Breast, neck, chin, O.

Thursday, 23rd, March, 1939.

**WEATHER:** Dull cloudy overcast, showers off and on all day. Clouds 100%. Cloud carry from the ESE, fast.

**IN CAMP REARRANGING SKINS ETC.**
Friday, 24th March, 1939.

WEATHER: Dull cloudy, overcast, nearly raining and a great deal of moisture about. Clouds 100%. Cloud carry very slow from the NE.

BIRDS: The birds were very active this morning after about one hour after sunrise (approx. 6 a.m.). Before that time there was little movement but from then on all species became very active.

Guadelcanaria: Was seen and shot and appeared identical with the birds from the coastal areas. MYzomela: Were seen and shot, all imm. or females., these were in great numbers high in the forest in a flowering tree. Some males were seen elsewhere but not with the large party, seems possible the males at non-breeding season are solitary. Coracina: One was seen and shot. They do not appear very common in the forests though a few are about always. Edolisoma: Numbers of these were seen and heard. They appear to frequent lower levels than the other shrikes and are often seen within 20 ft. of the ground, though they generally seem to feed above that height. They are an inquisitive bird. Leptomyza: Two or three were seen at a little distance but were not shot. RHYNCHETOS: The timber cutters, (Japanese), capture another of these today and placed in a cage to be later transported to Noumea bird fanciers who are emporting them overseas to exchange for other species for cage birds. Phaenorhina: A few were calling at a distance but none were seen. Nymphicus: A number of these shy birds were seen in flight, and one of these was entirely without a tail. The birds appear to be a fine weather species and once the weather improves I should be able to collect a series though just at present they are in bad moult. Another species of parrot a little smaller than Nymphicus but a little larger Thichoglossus, it has a faster wing beat than Nymphicus and is not such a clumsy flier. Its calls are different to the other two species. There were only two seen in flight and no description of them was obtainable.
Trichoglossus: Seems fairly plentiful and is as usual a noisy species, but is exceedingly alert. Several were heard or seen in flight. It also appears to be a fair weather species. Charmosyna: Locals speak of a bird which may be this species being present in the Bourail district. Halcyon: Two were heard calling this morning. It appears to be a rare bird in the forests. Lalage: One was seen and shot. Appears to inhabit the upper leaf canopy almost exclusively. Eopsaltria: This species must breed for a long season as a family party, adults still feeding young not long out of the nest were seen and shot. Artamus: This species does visit the real forest to a certain extent but prefers the clearings in the forests and places where the trees are lower. Erythrura: A party of six or eight of these were seen, all were imm. and there were no adults with them. They were feeding in absolute forest on the ground and appeared to be self-reliant as regards food and were not as wide awake and shy as is usual in these species.

SK. No. 39a: MYZOMELA
Myzomela cardinalis caledonicus: Male IMM. 1/4 plus, yellowish white.
SKL: No ossification. STM: 1/4 small, nectar-feeding insects.
Moult: W: R, 1, 2, 15, 17.
L & F: s. d., 1, 2, 15, 17f.
TL: L. 4, 5.
Body: All uppers 0.
Belly 0, breast M, nape, chin 0.

SK. No. 39b. GUADALCANARIA:
Guadalcanaria undulata: Male AD. 1/2 minus. white.
(Lt. 1/2 plus: RT. 1/4).
Shot: 6.15 a.m. Wght: 33.35 gm. W: 92 TL: 82
SKL: C. O. STM: empty, tastes of nectar.
Moult: TL: L.1. covs. 0. ABR: w/t. slight.
Body: all uppers 0.
X crown C.
All unders 0.
SK. No. 39c. **MYZOMELA**

*Myzomela c.c.*: Male IMM. 1/4 plus, yellowish white.

- **Shot:** 6:15 a.m.
- **WGHT:** 8.55gm. Very fat.
- **SKL:** .1 ossif.
- **STM:** 1/4 small black insects.
- **Moult:** W:R./,1,2.
  - L. Ditto
  - **TL:** R.6.
  - **Body:** Back, nape, crown O.
  - Belly, breast O.

SK. No. 39d.

*Coracina caledonica caledonica*: Male AD: 1/2 minus (repose)

(LT: black. RT. yellowish white)

- **Soft Parts:** Iris, pale yellow: Bill, black: L&S, black.
- **NATIVE NAME:** TEIO
- **Shot:** 8 a.m.
- **WGHT:** 159 gm.
- **W. 201**
- **TL:** 170
- **SKL:** C. 0.
- **STM:** 1/2 grit, beetles, insect eggs.
- **Moult:** W:: R. 1-3,11f, 12, 16f. { covs. C Sec.0
  - L. 1-3, 12.
  - **TL:** R. 3,5,6, { covs. A
  - L. 3f,4,5,6,
- **Rump, lower back A,**
  - **Back nape, crown M.** All under C to M.
Friday, 24th, March, 1931

SPECIAL NOTES BIRDS: During the afternoon some Nymphicus were shot. A flock of about 20 or even 30 were reported close to where the Japanese were working and an attempt to collect resulted in three being shot, one lost in the dense ground scrub and two being found. One was a very large bird the other was small and with a different coloured bill. It is possibly the imm. phase though the skull was C.O. It is possible this species has a first year plumage phase. A good series which should be possibly obtainable should throw some light on the matter. The smaller swifter winged parrot mentioned elsewhere may be this smaller bird.

SK. No. 39e. Nymphicus.

N. corn. corn. Male AD. 1/2 minus, (repose), Black.

BADLY SHOT DAMAGED: POSSIBLY LITTLE VALUE AS SKIN.

Soft Parts: Iris, redish orange: Bill, black horn, blue horn base: L&F., Black

Shot: 2 p.m. Wght: 174.2 gm. W: 175 TL: 180

SKL: C.O. STM: gizzard, ground up seeds, long stm., a smelly yellow fruit, soft, with white seeds like small pumpkin seeds. neck crop, the same but more pulp than seeds.

Moult: ABR: W: mixed avr. slight

W: R. 1f, 5 sec M. 0
L. 1f, 5 cobs. 0

TL: cobs. 0.

Body: all uppers 0 X rump, lower-back M.
all unders considerable.

Clotted blood formed while looking for bird etc. was too much and far dry to clean up properly/

SK. NO. 39f. Nymphicus (Correction to CHARMOSYNA) N. corn. corn. Female (? imm. or AD) 1/2 , discoloured.

Has a trace of a right ovary, fairly large. May have bred.

Soft Parts: Iris, pale orange (?). Bill: redish yellow like corn (maize). L&F. greyish black.


SKL: C.O. but appears thinish.

STM: gizzard, ground up seeds; Long stm. soft yellow smelly fruit with white seeds like small pumpkin seeds, neck crop - the same but greater per cent of pulp to seeds.

Moult: Body: all uppers-0 X Rump M. ABR: w/t. nil
all unders 0.
(Note in reference to Skin NO. 39f)
N.B. Later, 28th, March. This specimen has a bar under the wing, White, and I have little doubt this is not a Nymphicus at all but is the female adult of Charmosyna. It is very like a minature edition of Nymphicus of Uvea. As yet I am not sure of the exact significance of the two specimens collected, but think the Paris Museum ones may be imm. or wrongly sexed females or the bird has the crest from 2nd or 3rd year.

Sk. No. 39q. ERYTHRURA.
Erythura psittacea. Male juv. 1/4 yellowish white.
Soft parts: Iris, dark brown; Bill, black and yellow horn:
           Two blue balls on each side of gape.
           L & F, greyish flesh.
SHOT:  8 a.m.            WGHT: 11.5 gm. approx.
SKL: No ossification
STM: 1/4 tiny seeds.        CROP: grass seeds
MOULT: Nil            ABR: Nil.

SK. No. 39h. LALAGE.
Lalage leucopygia montrosieri: Female imm. 1/4 minus.
SOFT PARTS: Iris, brown: Bill, black, pale yellowish
           horn base: L&F., black.
SHOT: 8a.m.             WGHT: 23gm.(approximately) W:87 TL:82
SKL: 1 ossif.           STM: 3/4 insects, small green caterpillars
MOULT:                ABR: w:nil
TL:R. 2,3, covs. M.     ti: VS.
           Body:  rump, back, M. nape crown C.
           all unders C.

SK. No. 39i. MYZOMELA.
Myzomela c.c.: Female AD. 3/4 minus O.V.SE.
SOFT PARTS: Iris, dark brown: Bill, black: L&F, brownish slate:
           Back of tarsus, yellowish streak: Pads, yellow.
SHOT: 6:15 a.m.
MOULT: (?) W::R.5.       ABR: w/t. considerable.
           L.8.
           TL: R.1,2.
           L. ditto.
           Body: Lower back 0.
SK. No. 39K. **RHIPIDURA** (s.v.)

*R. spil. verr.*: Male AD. 1/2 minus (repose), white.

SHOT: 7:30 a.m.  
WGHT: 11gm. (approx.)  
SKL: C.O.  
STM: 1/2 insects  
MOULT:  
   W: R:15  
   L:15  
Body: nape M.

SK. No. 39L. **MYZOMELA**

*Myzomela c. c.*: Female AD. 1/2 plus, O.V.SE.

SHOT: 6:20 a.m.  
SKL: C.O.  
STM: 1/4 insects, nectar  
MOULT: W: R.5  
ABR: Nil.

Saturday, 25th, March, 1939

WEATHER: Constant heavy rain all day, rivers all in flood.  
Hurricane approaching from the NE. (Southern New Hebrides).  
Strong wind from the SSE. Clouds 100%. At night very strong  
winds from the SE first then backing to the S and SW and at daylight  
W, showed hurricane centre passing somewhere to the east, possibly  
somewhere near Walpole Is. Night spent holding on to tent and  
watching water rise in case of flooding out of camp.

Sunday, 26th, March, 1939

WEATHER: Showers off and on during morning slowly becoming finer  
till about 5 P.M. when a watery sun showed briefly. Clouds mostly  
100% but later a few small breaks appeared. Strong west wind.

IN CAMP CLEARING UP THE MESS.
Monday, 27th, March, 1939.

WEATHER: Sun and cloud slowly clearing. Clouds 60 to 80%. Strong west wind.

BIRDS: The birds were active very early and quickly filled their stomachs. By 6:30 a.m. they were very inactive evidently being full to repletion, possibly the first time for many days that they have been so. About 8 a.m. they again commenced feeding the first fullness having worn off.

Accipiter: A male adult of this species was seen feeding on the ground near the side of the tram track and shot. Am uncertain whether it was A. vigilax or A. haplochrous, (Specimen collected).

Nymphicus: Several parties of these were heard and they were very active and evidently revelling in the better weather. Trichoglossus: One party of these were heard and one single one seen in flight. The usual run of common species were seen, the only thing of note was that Eopsaltria was not as common as usual though numbers were heard calling earlier.

SK. No. 40a. MYZOMELA.

Myzomela c. c. Male AD, 3/4 minus, yellowish white.

**SOFT PARTS:** Iris, dark brown: Bill, black, yellow gape: L & F, brownish slate, yellow pads, back of tarsus yellowish streak.

**SHOT:** 6:10 a.m. **WGHT:** 8.3 gm. **W:** 56 **TL:** 36

**SKL:** C.O. **STM:** 1/4 small insects, nectar.

**MOULT:** Back 0, nape, crown M. **ABR:** w/t:nil.

Belly M, breast C, neck, chin 0.

SK. No. 40b. RHIPIDURA (f.b.)

R. Flab. bulgeri. Female SUB. AD. 1/4.

**SHOT:** 8:15 a.m. **WGHT:** 6.2 gm.

**SKL:** 0.8 ossif. **STM:** 3/4 insects

**MOULT::**

**TL:** R. 2,4 covs C. **ABR:** w/t Nil.
SK. No. 40c. ACCIPITER haplc.

Accipiter haplochrous: Male IMM., 1/4 plus, white.

SOFT PARTS: Iris, yellow: Bill, black horn, blue horn base: Cere, greenish yellow: L&F, bright yellow:

SHOT: 8:30 a.m.                  WGHT: 149 gm.      W:195.      TL: 145
SKL: 0.8 ossif.     thin and weakish.
STM: 1/2 insects, (cockroaches, scorpion)
MOULT: nil.       ABR: w/t:nil

SK. No. 40d. GUADALCANARIA

G. undulata: Female AD.  3/4 plus, discoloured oocites 

O.M.E.

SOFT PARTS: Iris, light brown: Bill, black: L&F, slate.

SHOT: 6:45 a.m.                  WGHT: 24 gm.      W: 87       TL: 80
SKL: C.O.        STM: 1/4 small insects, nectar
MOULT: Upper back C, nape, crown O.
All unders O. (few).       ABR: Nil

SK. No. 40e. RHIPIDURA (f.b.)


SHOT: 9 a.m.                       WGHT: 6.65 gm.
SKL: 0.8 ossif.      STM: 1/1 insects.
MOULT: nil       ABR: w/t. Nil.

SK. No. 40f. GERYGONE.

G. flav. flav. Male AD.  1/2 minus (repose), white.

SHOT: 8 a.m.                       WGHT: 6.05 gm.
SKL: C.O.        STM: 3/4 insects (ants?).
MOULT:TL. covs M.      ABR: w/t. Nil
Body: rump O, back M, nape, crown M.
all unders M.

SK. No. 40g. ACCIPITER hapl.

A. haplochrous. Male ad. 1/2 minus (L.T.:1/2, R.T. 1/2 minus white).

SKL: C.O.        STM: 1/1 lizards, grasshoppers.
MOULT: Nil.       ABR: w/t. Nil.
Tuesday, 28th, March, 1939.

WEATHER: Fine clear sunny, beautiful day after cold clear night. Clouds 10%. Cloud carry slow from SSW.

BIRDS: The birds this morning did not commence feeding till late. There was little or no feeding or movement till the sun was above the horizon, about 6 a.m. Even the early feeding species did not move till the air had warmed up a little. The temp. must have been in the low sixties or top fifties. Once the sun was up the birds simply reveled in the delightful day, numbers were seen sunning themselves on the highest branches of the tallest trees.

Nymphicus: Two of this species were seen sunning and playing on the topmost branches of a kauri. They bowed to each other and called in low chuckles, then one would move towards the other and at close range they would bow again to each other, they would then move apart again and go through the same performance again. It was evident they were enjoying the sunlight. One was shot but lost in the underbrush. Nearby in an old dead tree a hollow in the main trunk with beak marks about it was found but no definite proof of it being a Nymphicus nest were found. Several other parties of birds were seen elsewhere.

Charmosyna: One of these species was seen and shot. Strangely the bird seemed to be attracted by lure calls for Pachycephala. The bird was in the lower second growth of the tall forest and did not seem afraid of observer. It was far too close for shooting and I was tempted to use the .32 cal. Morris Tube on it, but seeing it was the first definite record of the species I waited till it moved to about 20 ft. away and shot it. Later in a dead tree near by I found a nesting hollow with beak marks about it but no proof of the species, beyond the strangely quiet behaviour of the bird, which seemed hard to account for unless it was a nesting hollow of the bird.
Trichoglossus: Several parties were heard in flight. It does not seem as common a species as the Nymphicus in the area. Cuckoos: None have been seen or heard in the forest. Considering the numbers of Gerygone it seems strange Chalcities is absent. Clytorhynchus: One specimen in shocking moult collected. Calls are very different to the New Hebrides race. It is one of the earliest feeders and is very shy. Appearances may be the same in the two races but behaviour and calls are entirely different. Eopsaltria: Late feeding, but very common and busy. Singing much, beautiful notes, different to the song of birds on the coast. Feeding at all levels. One shot 70 ft. up in a tree and others seen on the ground at the same spot. Pachycephala: (pect. cal.) Very common one female seen copulating, though most are in heavy moult. Commenced feeding later than usual. Aplonis: Two birds of this species were seen feeding low down near the ground in the forest, a thing I have never seen them do in the forest before. Maybe the heavy rain and wet weather has been responsible for the high feeding of the species in the forest to date. Corvus: Very active and noisy seems much more common than in rainy weather. Philomachus: Common and active but not nearly so noisy as in wet weather. Guadalcanaria: Many more than usual seen. Is very evidently a fair weather bird.

SK. No. 41 a. CLYTORYNCHUS. L.T.V.  
C. pachycephaloides pachycephaloides: Male AD. 1/2 minus, black.  
SOFT PARTS: Iris, dark brown: Bill, pale bluish horn: L&F, pale bluish slate.  
SHOT: 6:15 a.m. WGHRT: 29.8gm. W: 89 T.L: 77(?moult)  
MOULT: W: R.5,6,10,11 All covers M.  
L. ditto  
TL: R. 1-4 All covers M.  
L. 1-3 ABR: Nil.  
Body: All uppers and unders VM.  
SK. No. 41b. PACYCEPHALA.
P. pect. cal: Male AD. 1/2 minus (repose), L.T. white
        R.T. black

SHOT: 7:30 a.m.        WGHT: 24.2 gm.
SKL: C.O.        STM: 1/2 small Insects, ants.
MOULT: W: R.7,1,11,12
        L. ditto
        All covs. M.        ABR: Nil

Body: All uppers V., M.
        Belly, breast M., nape, chin 0.

SK. No. 41c. CHARMOSYNA  L. T. V. BAD MOULT AND BADLY SHOT DAMAGED.
Charmosyna diademata: Male AD.: 1/2.
(L.T. 3/4 minus, Anterior one fifth black, rest white.
R.T. 1/4, anterior two thirds black, rest white.)
SOFT PARTS: Iris, ?: redish orange. Bill, black horn, blue
        horn base. L&F, greyish black.
SHOT: 7:30 a.m.        WGHT: 79.5 gm.        W: 130        TL: 145.
SKL: C.O.        STM: ground up seeds. Crop: Yellow fruit pulp
        and white seeds.

MOULT:
W: R.2,14,15.
        L.2,6,14,15
        Covs. Sec. M.
TL: R.1,2.        L.1,2.        Covs. 0.
Body: rump back M., nape crown C.
        all unders much.        ABR: w/t. nil

SK. No. 41d. EOPSALTRIA.
E. Flav.: Female, AD., O.S.E.
SHOT: 7:30 a.m.        WGHT: 15.9 gm.
MOULT:
W: R. 15,16.
L. 15,16.
Body: all uppers and unders V., M.
Wednesday, 29th, March, 1939.
WEATHER: Dull and cloudy, showers off and on. Clouds 80 to 100%. Cloud carry from SE.
BIRDS: Little or no observations. Nymphicus: not very active in dull weather. One male ad shot in too bad moult for skinning.
LETTER TO MAYR re Cornforth letter and Aust. movements, also confusin of parrots.
Native worker killed by falling tree and general upset.

Thursday, 30th, March, 1939.
WEATHER: Sun and cloudy, mostly cloudy and dull. Clouds 80 to 100%. Cloud carry from ESE.
BIRDS: Noted birds were moving little when it was overcast. As soon as sun came out all were exceedingly active. Nymphicus: A family party of four seen, two ad, and 2 imm. 21mm. shot and one adult in bad moult shot. Believe the male ad was wounded. Noticed though they were present they did no calling while the sun was obscured but as soon as the sun came out they were exceedingly active and calling much. Became silent when the sun disappeared and active again when it reappeared. They feed on fruit and seeds and berries in the lower and middle layers of the forest, mostly on trees of the secondary growth up to 20ft. On alarm they fly to the tall tree tops and to travel about they fly high, often above the highest tree tops. Zosterops flav: More than usual seen this morning. Is active at all times but more so in the sunlight. Feeds at all levels. This day mostly in the lower and middle levels. Appears identical with the coast race. Eopsaltria: Exceedingly numerous this morning irrespective of sun or cloud. Feeding almost exclusively below 15 ft. and mostly below 8 ft. Myiagra: Much more plentiful than usual today. Feeds mostly in middle and upper layers of forest. More active in sun. Pidgeons: None heard calling though was in first class territory. Note that all the pidgeons seem to call less in fine weather than in the rain.
SK. No. 42a. *Zosterops* (flav.)

*Z. xanthochroa*: Female IMM. 1/4 minus.

**SHOT**: 8:45 a.m.  **WGHT**: 13.55 gm.  **W**: 58  **TL**: 46

**SKL**: .2 ossif.  **STM**: o/o residue.

**MOULT**: **W**: R.7. - secs., covs M.  
L.ditto.  

**TL**: covs. M.  

**ABR**: Nil.  

**Body**: All uppers and unders V.M.

SK. No. 42b. *Nymphicus*

*N. corn. corn*: Male Sub. AD., 0/0 plus, white.

**SOFT PARTS**: Iris, brownish ring with greyish outer ring, (?):
Bill, Indian corn yellow.  L & F, greyish black.

**SHOT**: 8:25 a.m.  **WGHT**: 140 gm.  **W**: 165  **TL**: 180

**SKL**: C.O.  This species evidently ossif. very early.  
Probably breeds in Oct. or even earlier.

**STM**: 1/2 ground up seeds.  **CROP**: o/o, almost empty, a few seeded fruits and a few flower cusps, the nob like bulb at the back from which the flower petals grow.

**MOULT**:  

**Body**: nape odd, crown M.  
unders odd few  

SK. No. 42c. *Pachycephala*

*P. pec. cal*.  Male AD., 1/2 minus (repose), yellowish white.

**SHOT**: 7:30 a.m.  **WGHT**: 22.55 gm.

**SKL**: C.O.  **STM**: 1/2 insects, ants.

**MOULT**: **W**: R, 1,2,13f,14f,15,16.  
L, 1,2,13f,15.  All covs V,M.

**Body**: All uppers M.  
All unders V,M.  

**ABR**: w/t, nil.

SK. No. 42 d. *Nymphicus*

*N. corn. corn*: Male Sub. AD, o/o plus, white (not flat)

**SOFT PARTS**: Iris, narrow gold ring, wide dirty greyish outer ring:  
Bill, Indian corn yellow: L & F, greyish black.

**SHOT**: 8 a.m.  **WGHT**: 135gm.  **W**: 169.  **TL**: 174.

**STM**: 1/2 ground up seeds.  **CROP**: 1/4 yellow fruit pulp, no seeds.

**SKL**: .9 ossif.  (two small crescents above eye not oss.)

**MOULT**: **W**: L.8,14-17 (shot or moult?) Wing shot damaged.  
**TL**: L.2, Covs. M.  

**Body**: Back M, nape, cheeks 0.  
Vent, flanks C, breast, neck, chin 0.
Owing to arrival of Javanese and other things it was necessary to
close the forest camp and go to the coast the following day. As
things in the forest were far from satisfactory it was just as well
so proceeded to Noumea at the first date possible. Owing to cyclone
and other causes it was impossible to get to the next area as
transport was not available for nearly two weeks. Then I had to
return to Noumea to keep in with the upper twenty by giving a short
lecture. Commenced work in the Wailu area (Lower River Valley) some
four weeks later.

Moult was still not very good in many species.
Owing to arrival of ravine and other things it was necessary to close the forest camp and go to the coast the following day. As things in the forest were far from satisfactory it was just as well so proceeded to move at the first date possible. Owing to cycling and other causes it was impossible to get to the next area as transport was not available for nearly two weeks. Then I had to return to homestead to keep in with the upper twenty six giving a short leave. Continued work in the valley area (lower river valley) some four weeks later.

Mount was still not very good in many species.
WAILU AREA: (French Spelling: HOUAILOU)

SITUATION: Wailu is about half way along the North-east coast of New Caledonia.

TYPE OF COUNTRY: Wailu area is a deep narrow river valley running far back into the centre of the island, possibly a distance of 20 miles. The mountains on either side are from 600 to 2000 ft. in height and are very steep. In the lower reaches the mountains are inclined to be rather bare or covered with a low three ft. heath scrub with much bracken fern and long grasses with odd scattered shrubs of five or six ft. here and there; and in odd valleys and pockets there are small patches of scrub running to 10 or 15 ft. in height, but these patches are not numerous or extensive. In the valley bottoms grass flats with grass for grasing of cattle and coffee plantations and native gardens are common and fairly extensive.

In the upper reaches of the river there is more forest which here and there becomes fairly extensive in area. There are two types of forest, dark green tropical with trees of 40 ft. and more and very dense, and an open type of Nowlie forest with scattered trees, nowhere very tall, with grass and scattered low shrubs in between. Lantana and guava both introduced pests are common everywhere in the area. The soil especially in the river flats is fertile though generally highly mineralised. On the mountains it is not so fertile but is not so water eroded as in the Baie des Pirogues area.

BIRDS: Notophoyx: Exceedingly common all along the river valley, even far up towards the head waters, 15 to 20 miles inland, and towards the mouth in the tidal section. Generally speaking they feed on the river margin and about the sand banks but when the water is discoloured or the river in flood they come out and feed on the grass flats. Accipiter haplochrous: Does not seem common in the area, from
local reports an odd female is seen in more open country in the lower reaches and a number of males are seen in the forest towards the head of the river. Only one female seen by me so far.

**Accipiter fas. vig.:** Seems to be the more common species here abouts especially in the more open country but is very shy and alert as it suffers from the small white property owners in the valley because of its attacks on their poultry. Only females so far seen by me in the more open type of habitat of the lower valley.

**Circus:** There seem to be a number of this species about and they seem very large for this species. **Hypotaenidia:** Seems common and shy but is often heard about the river flats, in long grass and about native gardens and small dry storm water channels. **Porphyrio:** Heard calling about the river flats but does not seem very common as there is little damage shows in native gardens. **Columba:** A few rare individuals are seen now and then but it is shy and wary as it is persecuted by whites and natives alike. Only one seen by me.

**Chalcophaps:** A limited number seem to cooupy each small area under cultivation, especially about coffee cultivations. **Trichoglossus:** Small parties of three or four have been seen and heard, generally flying high and fast to other areas. **Chalcities:** Two heard calling but does not seem common at all in the area. **Tyto:** Several heard calling at night, mostly down towards the sea. Seems to hunt across the river flats and delta scrubs in that area. **Collocalia esc. uropy.:** Seems fairly common in the area where shade trees for coffee and longer trees about water courses are present. **Collocalia spod. leuc.:** Very common about the open areas, is much the commonest species of Collocalia in the area. **Halcyon:** Is very common all along the river valley. Perches much on telephone wires. Seems to show a great deal of individual variation in the colours of the back and degree of buff on the unders and even in the color on the neck. **Lalage:** Fairly abundant in all types of country and seems
and of emotions may vary all day or almost the same rangr though comments might be added or omitted a few minutes would

not produce or even disturb one glad. 10s may be how the small socials around work with others. 10s may be how the small socials around work

So one may and should question and even add of emotions which are not made exact in action. There are many ways to use the

social social role to produce a lot of small groups. There are many ways to use the

social social role to produce a lot of small groups.
regularly and evenly distributed. **Coracina:** Not very abundant but not uncommon, a few to be seen and heard about. Does not seem to favour the heath-lands or more open areas but one is generally to be found about the taller trees of coffee cultivation. **Megalurulus:** Exceedingly abundant. Is very common in the heath lands and in the long grass areas and brackern fern country. This at sea level or up the surrounding mountains. Is exceedingly shy and wary and keeps mostly under cover from the sky. Seldom more than three feet from the ground and I doubt if ever goes above ten feet. In heath lands or bracken-fern country it goes two or more birds to the acre and though often heard is seldom seen. Any shot are more or less accidental appearances which one has to snap up as the opportunity occurs. It hops along like a wren with the tail generally erect. The conspicuous white eye brow gives the bird away very quickly when in movement. The flight is distinctive as the after part of the bird seems to be weighted down by the tail and the flight is more like a flutter as if the bird had difficulty in keeping altitude, wing beats are rapid, direction is a series of wide bottomed U with bottoms and tops level but close together somewhat thus, \( \underbrace{\text{um}}_{\text{um}} \). Calls are two one being hard to describe but the other, an alarm call and the most frequently uttered is very reminisent of the call of *Turdus* when alarmed but is not so long sustained or as loud. So far the best way of collecting has been to work up dry storm channels and thus be able to see under the underbrush cover and see the bird moving, this entails close shooting and some damage but the species is so common that an odd one shot damaged too badly for skinning is of little consequence. Should be able to get a fine large series with any luck and use surplus for exchange purposes. **Gerygone:** Seems
abundant in area especially about the shade trees of coffee cultivations and about the river side trees. **Rhipidura flab. bulgeri:** Exceedingly abundant in all types of country in the area except open grass flats. Is more common towards the coastal end of the area. Is evidently more of a lowland species in New Cal. **Mylagra:** Does not seem very common though a few are to be seen about. Seems to increase more towards the coastal area probably because the scrubs are taller and denser in that direction. Is more common about the shade trees of coffee cultivations and the taller river side trees. **Eopsaltria:** A few have been heard calling but it does not seem at all common in the area. **Pachycephala rufiventris xanth.** Is exceedingly abundant in all types in the area except open grass paddocks and even odd ones may be seen there. Is evidently the lowland species of New Cal. Its calls in this area are a little different to the Pirogues area. The birds in this area use a call much more like the call of **Eopsaltria** frequently when alarmed. **Pachycephala pect.** Is present in the lower part of the valley in limited numbers but is not very common anywhere. Observer thinks it will be found more common towards the upper waters of the river or where more definite forest areas are to be found. So far only one male ad. and one imm. or female have been observed in the lower valley. **Artamus:** Is very common all over the lower valley. Perches much on telephone wires. **Aplonis:** Seems fairly common about areas where there are any trees and is often found far out in the heathland areas. Appears larger than at Pirogues and uses much more melodious calls. Common about coffee cultivations and native gardens. **Corvus:** Fairly common in the area anywhere where larger trees are found. Common about native gardens and coffee cult. but is shy and wary. Suffers somewhat from persecution because of its egg stealing
habits. **Philemon:** By no means plentiful but some are to be seen about coffee cult. and native gardens and occasionally in the heathlands if there are a few small trees scattered about such places or in the small patches of scrub found in pockets in the hills. **Leptomyza:** No definite proof of the presence of this species has been yet obtained but two somewhat uncertain sight records believed to be this bird have been seen. Further up the valley there should be more of them present. **Guadalcanaria:** Is present and fairly numerous, common in heathlands and about coffee cultivations. Seems the same as elsewhere. **Lichmera:** Is present but not very plentiful. More are found nearer the sea where there are more coconut palms present. Generally speaking their numbers are controlled by the presence or absence of coconuts. **Zosterops xanthrochroa:** Fairly numerous especially where denser forms of scrub are found. Possibly not as numerous as the grey backed species in this area, certainly not so in the more open areas. **Zosterops later.:** Common about lantana gant and native gardens and cultivations. **Erythrura:** Common throughout the area. The blue headed species is also found wild in New Cal. but I believe these are escapees from cages as they are only present in certain limited areas and some locals say they are only recent arrivals.

There are at least two species and possibly more species of Finches in this area which are escapees and which have now definitely established themselves widely over New Cal.
WAILU RIVER VALLEY (Lower)
Wednesday, 3rd May, 1939

Weather: Fine, sun and cloud. Gusty strong ESE wind, clouds 80 to 100%.

TYPE OF HABITAT: Narrow river valley with mountains, very steep, rising to from 600 to 1,000 ft. A.S.L. on either side. Hills mostly covered with a low heath scrub about 3 to 4 ft. in height with much bracken fern and odd scattered shrubs a little higher amongst it, and here or there in small pockets, nowhere extensive, a short ten foot scrub dense and close. In valley bottom which varies in width from a few hundred yards to half a mile, there are grass flats given over to grazing cattle, some trees along the river banks fairly tall. Coffee cultivations with their taller shade trees, mostly Eritreenes or other legumenous trees. Native garden lands and village cultivation. In some places the grass because of not being grazed by stock because of the proximity to cultivation is very long, 3 to 4 ft., and forms a harbour for certain species. Guavas and lantana are common in all types of this area.

BIRDS: Melagurulus: found to be common in the area at almost sea level. Very shy and will not be lured by calls. Extremely difficult to shoot. Only because of commonness can one get them more or less by accident. This species is more common in the heathlands than elsewhere.

SK. No. 43A MEGALURULUS:
Megalurus mariei: Male AD. 1/2 white.

SOFT PARTS: Iris, light warm brown; Bill, black, lower mand. slightly lighter in colour; Legs and feet, pale pinkish flesh; Claws, pale horn.

SHOT: 8:15 a.m. WHT: 26.8 gms.
SKL: C.0. STM: 1/2 2 earth worms and small insects.
MOULT: ABR: W/T: Nil

TL: R, 2
Body: unders 0.

MEASUREMENTS: W: 75; TL: 93; Culmen to base, 18.8.
TR: 23.5; Mid. Toe & cl: 20; Hnd.T. & cl.: 18.2
Sk. No. 43 B. *Pachycephala rufiventris*:
*Pachycephala rufiventris*: Male IMM. 1/4 minus, White.

**SOFT PARTS:** Iris, dark brown; bill, horn, black tip; Legs and feet, dark slate.

**SHOT:** 9:30 a.m.  **WGHT:** 18.3 gms.  **W:** 79  **TL:** 64
**SKL:** .5 ossif.  **STM:** 1/2 ants, insects, insect's eggs (green)

**MOULT:**

**TL:** covs. 0.

Body: All unders 0.

Sk. No. 43C. *Megalurulus*:
*Megalurulus*: Female IMM. 1/2 minus. Possibly breeds young.

**SOFT PARTS:** As previous specimen. Legs slightly paler.

**SHOT:** 9:30 a.m.  **WGHT:** 22.3 gms.  **W:** 67  **TL:** 81  **C:** 20  **TR:** 23
**SKL:** Shot Dm. believe .66 ossif.  **STM:** 1/4, small insects.

**MOULT:**

**W:**R.5,6,17,18,19.  **L.5,6,17,18,19.**

**Sec. & covs. M.**

**TL:**R.1. L.1. covs. M.

Body: all uppers M exc. crown 0.

all unders M increasing head to tail.

Good skin but bad moult and abrasion.

Sk. No. 43D. *Erythrura pscit*.
*Erythrura*: Female Ad: 1/2 minus, O.S.E.

**SOFT PARTS:** As usual

**SHOT:** 8 a.m.  **WGHT:** 10.35 gms.  **W:** 53  **TL:** 36
**SKL:** C.0.  **STM:** 1/4, grass seeds: **CROP:** empty

**MOULT:**

**ABR:**  **W:**slight  **TL:** very slight

Body: crown, cheeks, 0.

neck, chin, 0.

Sk. No. 43E. *Pachycephala rufiventris*:
*Pachycephala rufiventris*: Female Sub. Ad. 1/4

**SHOT:** 8:30 a.m.  **WGHT:** 18.45 gms.  **W:** 76  **TL:** 60
**SKL:** .9 ossif.  **STM:** 1/2, ants, small caterpillars.

**MOULT:**

Body: upper back very much.

**ABR:**  **W/T:**very slight, some body abrasion
Sk. No. 43F. APLONIS
Aplonis: Female AD. (repose). 1/2 minus.
SOFT PARTS: Iris, redish orange; bill, black; L&F, black.
SHOT: 8 a.m. WGH: 53.6 gms. W:106 TL:69
SKL: C.0. STM: 1/4 guava pulp
MOULT: nil ABR: W/T: nil

SPIRIT SPECIMEN
Under this same date a specimen of Megalurulus which had its tail shot away was put into alcohol.

WAILU AREA: Lower river valley. From Sea Level to 500 ft. A.S.L.
Thursday, 4th May, 1939
WEATHER: Showery, sun & cloud, very variable. Strong S.E. wind.
Clouds 80%.
HABITAT: Same as previous day.
BIRDS: Birds in general were very inactive this morning. Many especially finches seemed to have left the habitat they were in the previous day and to have gone to the more open and dryer heathlands. Birds did not seem to commence feeding till late in the day, not until the sun and wind had dried up the vegetation to some extent, at about 8 a.m. They did not appear to continue feeding for very long, most being on resting perch by nine o'clock.
An unidentified hawk flew over which was probably Circus. Accipiter Fasc. viq.: One was seen perched on a limb in a tall tree at the side of a native garden and shot but flew for some distance before falling and was lost. Megalurulus: This species is much more of a grass bird than a scrub bird and is not unlike the somewhat similar species of grass-bird in Australia (Megalurus galactotes: Temminck) both in behavior and looks. Trichoglossus: A party of three were seen flying high over head down the valley towards the sea and returned a few minutes later, probably without settling.
Sk. No. 44A. LALAGE:
Lalage leu. Male Ad. 1/2 minus, black.
SOFT PARTS: Iris, dark brown; bill, black; L&F, black.
SHOT: 9:15 a.m. WGH: 20.4 gms. W:87 TL:82
SKL: C.O. STM: 1/2, caterpillars.
MOULT:
ABR: W/TL. nil
Body: rump M. back, nape, crown, C.
all unders, C.

Sk. No. 44B. PACHYCEPHALA RUFIVENTRIS.
Pachycephala rufiventris: Male AD. 1/2 minus,
(L.T. 3/4 minus, white; R.T. 1/4 plus, black)
SOFT PARTS: Iris, reddish brown; bill, black; L&F, warm black,
bare suggestion of brownish.
SHOT: 8:00 a.m. WGH: 20 gms. W:84 TL:66
SKL: C.O. STM: 1/2, large green beetle, stinker.
MOULT:
Body: nape 0.
chum 0.

Sk. No. 44C. HALCYON:
Halcyon: Female SUB-AD., 1/2 minus.
SOFT PARTS: As usual but L&G greyer than usual.
SHOT: 9:30 a.m. WGH: 45.25 gms. W:86 TL:52
SKL: .9 ossif. STM: 3/4, small crabs (river), Mud.
MOULT:
Body; upper back, nape, M.
All unders M. ABR: W/T. nil

Sk. No. 44D. PACHYCEPHALA rufiventris:
Pachycephala rufiventris: Male AD., 1/2 white.
SHOT: 9:15 a.m. WGH: 19.7 gms. W:83 TL:64
SKL: C.O. STM: 1/4, beetles.
MOULT:
ABR: W/T: nil
Body: chin 0.
SK. No. 44E. GUADALCANARIA:

*Guadalcanaria udul*: Female AD., 1/2 minus, increasing.

**SOFT PARTS**: Usual

**SHOT**: 8 a.m.  **WGHT**: 21.4 gms.  **W**:82  **TL**:73.

**SKL**: C.O.  **STM**: 1/4, beetles.

**MOULT**:  

**ABR**: W/T. nil.

**Body**: nape, crown, 0.

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SK. No. 44F. PACHYCEPHALA rufiventris:

*Pachycephala rufiv.*: Female AD., 1/2 minus, repose.

**SHOT**: 8:15 a.m.  **WGHT**: 18.35 gms.

**SKL**: C.O.  **STM**: 1/2, caterpillars.

**MOULT**:  

**ABR**: W/T. nil.

**Body**: neck, chin, 0.

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Sk. No. 44G. Pachycephala rufiventris:

*Pachycephala rufiv.*: Male SUB.-AD., 1/4 minus, colourless.

**SHOT**: 8:30 a.m.  **WGHT**: 17.5 gms.

**SKL**: .8 oscill.  **STM**: 3/4, smelly beetles.

**MOULT**:  

**ABR**: W/T: slight

**W**:L. 16

**TL**: sht.  **Dm.**<sup>covs.</sup> 0.

**Body**: rump, 0.

**Neck**, chin, C.

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Sk. No. 44H. LICHMERA.

*Lichmera incana incana*: Male AD., 1/2, yellowish white.

**SHOT**: 8 a.m.  **WGHT**: 15.15 gms.  **W**:71.  **TL**:61

**SKL**: C.O.  **STM**: 1/4, small insects, nectar.

**MOULT**:  

**ABR**: W/T. nil.

**Body**: upper back, nape, crown, 0.

**neck**, 0.

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**SPIRIT MATERIAL**: On this date a specimen of *Megalurulus* was shot but the moult was in too bad a condition to make a worthwhile skin so the specimen was put in alcohol. The following is the data of the specimen:

**MEGALURULUS**: Sex ?

**SOFT PARTS**: Iris, warm light brown; bill, black: L&F, dull flesh.

**SHOT**: 6:45 a.m.  **WGHT**: 23 gms.  **W**:67  **TL**:79  **ABR**: W:N.  **TL**:C

**MOULT**: W:R.6, L:6,7, covs, sec. 0.  **TL**: L:1, covs, M.

rump, back, M; nape, crown, C; all unders, M.
Wailu Area: Lower river valley from sea level to 500 ft., A.S.L. Friday, 5th May, 1939.

WEATHER: Fine sunny after very heavy rain the previous night. Wind, W.S.W. and South. Clouds, 40%.

HABITAT: Heathlands, low shrubs up to 3 ft. with odd ones up to 5 ft. widely scattered. In between a dense ground scrub of brackern-fern and long grass with many low shrubs, lantana, etc. Also open river flats well grassed and used for grazing cattle.

ALL BUSH WAS VERY WET TILL ABOUT MIDDAY.

BIRDS: Birds were inactive till most of the water was dried off the bush. Some movement about half an hour after sunrise (6:40 a.m.) but did not feed for long, quickly returning to perches. They hardly moved at all till about 8:30 a.m. or 9:00 when they had a short period of feeding but by 9:15 a.m. all had again become more or less quiet. During the afternoon from 2 p.m. onwards there was much feeding and activity going on.

Megalurulus: This species must average at least 2 birds, and probably more per acre in heathlands and brackern-fern country. Numbers are somewhat less in long grass paddocks (grazing being spelled), but increase to the above figure along the edges of scrubby watercourses or storm water channels in such country. Is shy and hard to collect though very often heard.

Sk. No. 45A. Megalurulus:

Megalurulus: Male AD., 1/2 plus, white.

SOFT PARTS: Iris, warm light brown; bill, black; L&F, dull flesh.

SHOT: 7 a.m. WGHIT: 26.7 gms. W: 73. IL: 90

SKL: C.0. STM: 1/1, molluscs, cricket, spider.

MOULT: ABR: W/T. slight.

Wing; L. 14
Sk. No. 45B. NOTOPHOYX:  
Notophoyx novaehollandiae (Latham): Female IMM., 1/4 minus.  
SOFT PARTS: Iris, pale mustard yellow; bill, light and dark horn; L & F, greenish yellow.  
SHOT: 9:30 a.m. WGHIT: 472.3 gms. W:285 TL: 114  
SKL: .9 ossif. STM: 3/4, crickets, caterpillars.  
MOULT: BODY: back, C. nape, crown, M; all unders C.

SK. No. 45C. CIRCUS  
Circus approx. (?large). Female AD., 1/2 minus, repose, trace right ovary.  
SOFT PARTS: Iris, lemon yellow; bill, black horn, blue horn base; cere yellowish; L&F., greenish yellow.  
BROWN PHASE? VERY LARGE  
SHOT: 9:40 a.m. WGHIT: 798 gms. W:416 TL:245  
SKL: C.O. thick. STM: 0/0 empty.  
MOULT: ABR: W/T slight.  
WING: R.2,3,16 } Covs. M, sec. Q.  
L.2,3,16,18  
TAIL: R.2,5 } Covs. M.  
L.3,5  
BODY: rump, M; back, C; nape, Q. crown, C. all unders 0 to C, varying.

SK. No. 45D. NOTOPHOYX:  
Notophoyx n: Female AD., 3/4 minus.  
SHOT: 9:15 a.m. WGHIT: 465.7 gms. W:286 TL:119  
SKL: C.O. STM: 1/1, crickets, beetles, grass-hoppers.  
WING: R. L.2. } Covs. Q.  
L.2.  
BODY: all uppers and unders V.M.

SK. No. 45E. NOTOPHOYX.  
Notophoyx nov: Female SUB-AD., 1/2 minus.  
SHOT: 9:15 a.m. WGHIT: 473.35 gms.  
SKL: Thick and opaque, only 1/2 showing ossif. marks.  
STM: 1/2, grasshoppers. ABR: W/T. nil.  
MOULT:  
BODY: upper back, nape, crown, M., belly, breast, Q. neck & C.  
SOME OTHERS DONE THIS DAY OF NO ACCOUNT ZOSTEROPS LATERALIS. DATA TOO CONFUSED FOR VALUE. RETIRING WITH FLU.  
FROM THIS DATE ON WAS DOWN WITH INFLUENZA. NO WORK.
Wailu Area: River Valley 0-100 foot A.S.L.

EXTRA SPECIMENS BROUGHT IN DURING LAY OFF.

SK. No. 46 EOPSALTRIA

Eopsaltria. Female AD, 1/2 minus, repose.

SOFT PARTS: Iris, very dark brown; Bill, dark and pinkish horn (Injury?); L&F, very dark grey.

SHOT: 5:30 p.m. (approx. native capture).

WGHT: 13.5 gm. W: 71 TL: 54

SKL: C.O. STM: 1/2 ants, small beetles.


Body: upper back, nape 0. belly, breast C.

SK. No. 47 ARTAMUS

Artamus leucorhynchus melaleucus (Wagler): Male IMM. 1/4 minus, colorless.

SOFT PARTS: Iris, dark brown; Bill, blue horn, black tip; L&F, dark slate.

SHOT: 10:00 a.m. WGHT: 38.6 gm. W: 131 TL: 70

SKL: 8 ossif. STM: 1/1, winged insects.

MOULT: NIL. ABR: W: nil TL: slight
Wailu Area: River Valley and thousand foot mountains up to 4 or 5 miles inland.

Monday, 15th May, 1939.

Weather: Fine, dull, overcast, morning; sun & cloud in afternoon.
Light SE breeze, clouds, 100-80%.

Habitat: To get the country in the area properly orientated and see the types of vegetation in the area I did a full ten miles across the hills. The most striking feature of the country is the irregularity of the types of habitat. The kinds of habitat fall under only three main heads and a subhead. Heathlands: varying in thickness and extent, but generally speaking being more or less well up on the sides and tops of the hills. Valley scrubs. These occur irregularly far up in pockets on the hill sides are sometimes only an acre or so in extent and sometimes fairly extensive. Valley bottoms scrub: These are all along the river valley bottoms or on flats where native reservations exist, generally when the land is owned by a white the land is cleared or semi-cleared for cattle pastures. In this type of area occurs the subhead of artificial habitat in the areas planted under coffee where shade trees over coffee form a fairly dense form of growth much frequented by birds, especially insectiverous birds. Native gardens occur in this area also but as most of the cultivation is taru., little yam being grown, this comes into almost the next sub-type or Swamp areas, which are not really swamps but really more wet river flats. The heathlands carry the least bird life. The swampy areas and coffee cultivations the most. There does not seem to be any real line of demarcation in what areas the different birds frequent except that certain
specialized birds which one would not expect in certain areas entirely unsuited to them keep outside those areas. e.g. Megalurulus will not be found in short grass grazing paddocks, though it is common in heathlands where there is some ground cover. Porphyrio, will not be found in the heathlands except by accident and probably only at night on a migration from one valley to another across the dividing ridge.

**BIRDS:** There was little individual species notes this day. Birds were very inactive all day.

All species of birds in this area suffer a great deal of persecution from natives who appear to be meat hungry as kingfishers, hawks, thickheads, in fact all species are eaten by them. One often sees injured birds which have been hit with stones and so on about. I saw a Philimon with a broken wing, and a kingfisher I shot had a pierced and broken beak from an arrow wound.

Collected Specimens Data: Monday, 15th May, 1939.

Wailu Area: Sea level to 1000 ft., A.S.L. All types in ten mile tramp.

**Sk. No. 48A. Haliastur.** Origin identified as Pandion haliaetusMicrohaliatus. Haliastur sphenurus johannea (Brasil): Female AD., 3/4, O.V.S.E., discoloured oocytes, yellowish, Had distinct Right ovary showing small oocytes.

SOFT PARTS: Iris, grey; Bill, dark horn, black horn tip; Legs & Feet, white; claws black.

SHOT: 2:30 P.M. Hawking over fresh water river but about 1 1/2 miles inland but within tidal influence.


SKL: C.O. thick. STM: 1/4 residue, pellet, fur and bones of rat or mouse.

MOULT: Nil. ABR: W/T: slight

**Sk. No. 48B. Megalurulus.**

Megalurulus: Female, poss. IMM. 1/2 plus. (Note added in ink here as follows - OK Sex referred to body again & it is definitely ♀ 1/2 +.)

SOFT PARTS USUAL: A characteristic of this species is that the inside of the mouth, pallet, well down the throat is black.

SHOT: 1:30 p.m. Tall rushes on river margin.

WGHT: 22.1 gms.

SKL: prob. .66 ossif. STM: 1/4, beetles, insects.

MOULT: Nil. ABR: nil.
SK. No. 48C. Megalurulus

Megalurulus: Male Imm., 1/4 plus, pale white.

SHOT: 9 a.m. Mountain top heathlands, 1000' asl.

WGHT: 27.55 gms. Fat.

SKL: .6 ossif.

STM: 1/1 small insects.

MOULT:

Wing: R.4,11,16 M
L.4,5,16 \{ Sec. C, covs. 0.

Tail: R:1f,3,4,6
L:1f,2,3,5,6 \{ covs. 0.

Body: upper back M, nape C. ABR: W:slight
all unders C. TL:nil.

SK. No. 48D. Coracina

Coracina: Female Imm.

SHOT: 11 a.m. 800' asl.

WGHT: 118.9 gms.

SKL: .8 ossif.

STM: 3/4 beetles, fruit seeds (?)

MOULT: uppers & unders 0.
Wailu Area: River valley bottom, river margin scrub flat.
20 ft. a.s.l.

Wednesday, 17th May, 1939.

Weather: Dull over cast, showers off and on, light drissel most of the time, light variable winds, Clouds 100%.

Habitat: Native taru gardens and coffee plantations on river margin, heathland hillsides.

Birds: Two types of area much the same as usual. Nothing out of the ordinary was seen. *Porphyrio*: Two were seen in the dense taru gardens, impossible to get a shot but some may be collected in the area. Saw where a native had left an old scare-crow (old white dress) which seemed to be efficient in scaring them off young recently planted cane. *Haliastur*: One shot but did not drop till too far away for finding. *Accipiter*: One male was seen in the usual slinking quiet way hunting through these gardens. *Megalurulus*: It was noticable that this species seemed to be absent in the very wet vegetation of the gardens though it was ideal habitat for them. Numbers were heard in the dryer grasslands just on the hillside above the gardens. All birds were very spasmodic in their activity this morning. Generally speaking there was little general activity till well on in the morning.

Sk. No. 49A. *Accipiter fas*, viq.

*Accipiter fas*, viq.: Male Ad., 1/1, white, (L.T. 20xl1 mm. R.T.22x12 mm. Tot. Wght. 2.15 gm.)

Soft Parts: Iris, yellow; Bill, blue & black horn. Cere, greenish yellow; L&F. yellow.

SHOT: 10:15 a.m. WGHT: 280 gms. Fat.

SKL: CO STM: 1/4 grasshoppers.

MOULT:

Body: powder down, upper M. under C.

ABR: Very mixed in wing and tail, ranging in individual feathers from much to very slight.
SK. No. 49B. Artamus

Artamus: Male Sub. Ad. 1/4 minus, colorless.

SHOT: 11 a.m.
WGHT: 37.85 gm. W: 132 TL: 71 plus
MOULT: Nil.
SKL: .9 ossif.
STM: 1/1 locusts

SK. No. 49C. Megalurulus

Megalurulus: Male Ad., 1/2 plus, white.

SHOT: 9:30 a.m.  WGHT: 27.5 gms.
SKL: C.0.  STM: 1/2, small insects, (ants, beetles?)
MOULT:
Wing: R. f, 13, 14, 15f. L. f, 1f, 13f, 14, 15f.
Tail: L. 5, 6. covs. O.  ABR: W/T: nil
Body: crown, cheeks O.  rest of body 0 few scattered.

SK. No. 49D. Gerygone.

Gerygone: Female AD., 1/2 minus, repose.

Soft Parts: Iris, red; Bill, black; L&F., black.
SHOT: 10:30 a.m.  WGHT: 5.59 gms. W: 50 TL: 38
SKL: C.0.  STM: 1/2, minute insects.
MOULT:
Tail: M.  ABR: W/T: nil.

SK. No. 49E. Artamus.

Artamus: Female IMM., 1/4.

SHOT: 11.10 a.m.  WGHT: 40 gm. W: 133 TL: 67
SKL: .8 ossif.  STM: 1/1 flies, beetles, locust.
MOULT: Nil.  ABR: Nil.

SK. No. 49F. Aegintha: (Bengalee Finch) Estrilda astrild.

Aegintha bengelensis ?? Male IMM., 1/4 plus, white.

SOFT PARTS: Iris, ??; Bill, light red; L&F., black.
SHOT: 10.55 a.m.  WGHT: 8.3 gms.
SKL: .8 ossif.  STM: 1/2 grass seeds.
MOULT:
Wing: R. f, 1, 2, 13, 14; covs. C.
L. f, 1, 2, 14. covs. C.
Tail: R lto6 covs. C.  ABR: W/T. nil
L. 1, 2.
Body: all uppers 0. exc. back M.  all unders C.
SK. No. 49G. Coracina
Coracina cal. cal.: Male AD., 1/2 minus, repose, Black.
SOFT PARTS: Iris, yellow; Bill, black; L&F., Black.
SHOT: 8:30 a.m. WGT: 155 gms. W:196. TL:172
SKL: C.O. STM: 3/4, fruits, chili peppers, seeds.
MOULT:
   Wing: R. 14,15f. ABR: W/T: nil
   L. 14,15f.
Tail: covs. O.
Body: all uppers O.
   vent, belly, flanks, brest M; neck, chin O.
Wailu Area: River valley 0-50ft. A.S.L.

SK. No. 49 H. Rhipidura f.b.
Rhipidura flab. bulq.: Female Ad., 1/2 minus, repose.
SHOT: 10:30 a.m. WGT: 6.1 gms. W:72 TL:?? O.
SKL: C.O.
STM: 1/4 minute insects
MOULT: Tl. W ABR: w/s
   Body: Nil. tl./c.

SK. No. 49J. Zosterops; (flav.)
Zosterops xanth.: Male AD.; 1/2 minus, (repose),
   L.T., white; R.T., black.
SOFT PARTS: Iris, hazel; Bill, black horn, light horn base;
   L&F, pale blueish grey slate.
SKL: C.O. STM: 1/2, lantana berries.
MOULT: ABR: W:nil TL:slight
   Body: nape, crown, cheeks O.
   chin O, few scattered on unders.

Thursday, 18th May, 1939.
STEADY RAIN ALL DAY. Wind light airs, clouds 100%. 24 hours
rain up to 6 p.m.
Wailu Area: River valley, coffee cultivations. 0-50ft. A.S.L.

Friday, 19th May, 1939.

Weather: Dull cloudy almost constant drizzle and many heavy showers, floods in rivers etc., wind gusty strong E. Clouds 100%.

Habitat: Coffee plantations under shade trees. Shade trees from 25 to 50 ft. in height.

Birds: Little bird life was seen this morning. All were very subdued. Owing to the flooded rivers I thought Porphyrio might have been driven out into more open country. Several were heard but none seen as they kept well under cover in the dense parts of the coffee. Trichoglossus: A pair were heard flying high over head. Megalurulus: It was very noticable that this species had abandoned areas where it was common in dry weather as doubtless the vegetation was too damp for its liking. They were probably all in the more open heathlands in this weather and in the little heathland passed through 2 were heard.

Noted this morning the reason why birds in this area are inclined to be shy. There are two native boys schools in the area and I saw three of the native lads with caterpaults made from the inner tube of an old motor tyre. While under my observation I saw one lad stun a kingfisher.

Sk. No. 50A. Gerygone

Gerygone: Male IMM., 1/4, pale white, not flat.

SHOT: 8 a.m.  
WGHT: 5.95 gms.

SKL: .66 Ossif.  
STM: 1/4, minute insects.

MOULT:  
ABR: W/T. slight.

Wing: L.16  
Body: neck, chin 0.
SK. NO. 50B. Myiagra:

Myiagra: Male AD., 1/2 minus, repose, white.

SOFT PARTS: Iris, dark brown; Bill, blue horn, black tip; L & F., black.

SHOT: 7:55 a.m. WGHT: 11 gms.
SKL: C.O. STM: 1/4, minute insects.

SK. No. 50C. Corvus:

Corvus: Male AD., 1/4 plus, black.

SOFT PARTS: Iris, dark brown; Bill, black; L&F, black.

SHOT: 9 a.m.
WGHT: 316.2 gms. W: 253 TL: 180
SKL: C.O.
STM: 0/0 scraps of meat, caterpillar.
MOULT: Nil. ABR: NIL.

SK. No. 50 D. Corvus:

Corvus: Male AD., 1/4 minus, white, very small.

SHOT: 9 a.m. WGHT: 287 gms. W:250 TL:175
SKL: C.O. STM: 1/2, ground-grubs, molluscs, insects

SK. No. 50E. Lichmera:

Lichmera: Male AD., 1/2 plus, white.

SHOT: 8:45 a.m. WGHT: 16.95 gms.
SKL: C.O. STM: 3/4, insects. (fuller than usual in this species.)

MOULT: nil ABR: W/T. nil
Wailu Area: River valley, 0-100ft. A.S.L.

Saturday, 20th May, 1939.
Weather: Dull showery, clouds 100%. All rivers in area running in flood, paddocks more or less under or swimming with water. Fining up a little later in the day. (4p.m.)
Habitat: River valley trees along water courses, heathlands, coffee cultivations, pasture paddocks with guava scrubs (5-10ft.), open Noulie forests, Noulie only about 10-15ft. high not very much underbrush in between.

Birds: Noted the usual run of birds. Birds were not very active, this weather seems to make them very quiet. Accipiter haploch: One female seen playing on wind over Noulie forest or savannah. Circus: One seen drinking in the first grey dawn at a puddle in forest, shot and lost. Megalurulus: As thought this species in the wet weather moves to the dryer heathlands, seems to entirely leave the wetter grass flats where it is common in dry weather.

SK. No. 51A. Corvus:
Corvus: Male Ad., 1/2 minus, yellowish white.
   SHOT: 9 a.m. WGHRT: 285.2 gms. W:258 TL:171
   SKL: C.O. STM: 1/2, cow dung beetles.
   Wing: R. 14,15
   L. 13f,15

SK. No. 51B. Myiaqra:
Myiaqra: Female IMM., 1/4 plus.
   SOFT PARTS: Iris, dark brown; Bill, dark brownish horn, black edge and tip (rather unusual colored bill); L&F, dark grey.
   SHOT: 9:10 a.m. WGHRT: 11.45 gms. W:67 TL:65
   SKL: .6 ossif. STM: 3/4, insects.
   Wing: R. 11.
SK. No. 51C. Megalurulus:
Megalurulus: Female AD., 3/4 plus, (advancing).
   SOFT PARTS: Usual exc. legs & feet much paler than usual,
               more or exactly, true flesh color.
   SHOT: 6:45 a.m.  WGHT: 20.05 gms.  W:2
   SKL: C.O.   STM: 1/2 insects, (ants ?).
                   Body: vent, belly, flanks, 0.

SK. No. 51D. Megalurulus: LTV
Megalurulus: Male AD., Both testes damaged.
   SHOT: 10 a.m.   WGHT: 28.5 gms.
   MOULT: W:R14,15: TL.B.   ABR: W/S: TL/M.

SK. No. 51E. Erythrura:
   SHOT: 10:15 a.m.   WGHT: 11.75 gms.
   SKL: C.O.   STM: 1/2, seeds.
   MOULT:         ABR: W/T: slight
                   Body: upper backM; nape 0; crown, cheeks, C.
                   all unders C.

SK. No. 51F. Aegintha:
Aegintha: Male Sub. AD., 1/2 minus, pale white.
   SOFT PARTS: Iris, brown.
   SHOT: 9:30 a.m.   WGHT: 8.1 gms.
   SKL: .8 ossif.   STM: 1/4, seeds.
                   Wing: R.1,2f, 0.
                   L.1,2f,14
                   Tail: R.3f. covs. M.
                   Body: all uppers 0 exc. rump M
                   all unders 0.

SK. No. 51G. Donacola:
Donacola castaneothorax: Female AD., 3/4
   SOFT PARTS: Iris, brown ?; Bill, pale blueish horn;
               L & F, dark blueish slate.
   SHOT: 10:20 a.m.   WGHT: 13.3 gms.  W:53   TL:34
   SKL: C.O.   STM: 1/2, spear-grass seeds.
   MOULT:         ABR: W. slight
                   Wing: R, 13.   T. very slight.
SK. No. 51H. Artamus:
Artamus: Female SUB. AD., (gonads shot damaged)

SHOT: 10 a.m.  
WGHT: 33.8 gms.
SKL: .9 ossif.  
STM: 1/1, beetles, wasp, winged insects.
MOULT:  
ABR: W/T. nil

Body: all uppers 0 exc. nape C.

BIRD NOTE OMISSION: This morning I saw in quava scrubs
the first MYZOMELA seen in this area. This was an IMM. male.
Wailu Area: River valley, heathlands, coffee cultivation, Nouli scrub. 0-100'.

Monday, 22nd, May, 1939.
Weather: Dull cloudy showery, strong east wind, gale force in open, strong in all but very sheltered valleys, gusty. Clouds 100%. Miserable weather.
Habitat: All types except tall forest.
Birds: The birds today were very still and inactive, in this observers opinion because they have had a bad and tiring night clinging to swaying limbs. It is worth noting that species one would expect to perch on large limbs close to the trunk of a tree such as Corvus are more active than the smaller birds. The birds during the past week have had a very miserable time with the weather as it has been raining and blowing at almost gale force from the east. Floods, wet vegetation and the country like a bog have been very unpleasant for the birds. This morning it was noticable that even very common and hardy species like Artamus were rare and seemed to have given the weather best and retired elsewhere. 
Circus; 2 were seen both flying very close to the ground at some distance from the observer.
Hypotaenidia: Several were heard and one seen, the first actually seen in this area. Corvus: In spite of its objectionable habits and bird killing this species must do a lot of good in coffee cultivation.
Unidentified bird was very fleetingly glimpsed but the sight was so brief little can be said about the bird. It passed on the wing about 8 Ft. from observer, seemed to be flying rather clumsily, but that may have been from fright on seeing observer so close. The bird gave the following impression but it was very uncertain.
The bird appeared to be a little bigger than Hypotaenidia with little or no tail, long bright yellow legs and the body appeared to be a light soft dove grey, about the grey of the Kagu. I would have thought it a small hawk but for the absence of tail, but it actually may have had a tail as the glimpse was too fleeting to be sure. If it was a hawk it must have been a species about as large as the Nankeen Kestral of Australia.

Sk. No. 52A. GERYGONE

Gerygone: Female IMM. 0/0 plus.
SHOT: 7:10 a.m.         WGHT: 5.95 gms.
MOULT: nil             ABR: W/T. slight.

This specimen has all the outward appearances of an adult even to the white eye-brow which is generally a sure sign, being yellow in IMM. and white in adults.

SK. No. 52B. GERYGONE

Gerygone: Male IMM. 1/4 minus, pale whitish.
SHOT: 8:10 a.m.         WGHT: 6.4 gms.
SKL: .6 ossif.
STM: 1/2 minute insects, ants.
MOULT: All uppers 0, few.
Breast, neck, chin 0.    ABR: W/T. Nil.

SK. No. 52C. CORACINA:

Coracina: Male SUB. AD. 1/4 plus, black (round not flat).
SHOT: 9 A.M.            WGHT: 147.3 gms.
SKL: .9 ossif.
STM: 1/1 grasshoppers, seeds.
MOULT: All upper covs. M.   ABR: W/slight
      Back C, Nape M.        TL/much
      All unders C.

      ABR: W/slight
      TL/much
SK. No. 52D. MEGALURULUS:
Megalurus: Female IMM. 1/4 plus, oviduct plainly visible.
Gape soft yellowish, palate and inside throat yellow not black.
SHOT: 9:15 a.m.  WGHT: 19.55 gms.
SKL: no ossification.
STM: 1/2 insects.
MOULT: T1::R, 1f, 2f, 3f \{L, 1f, 2f, 3f\} sequence increasing from 3 to 1.
Rump: M.
Belly, breast, neck 0.  ABR: W/V.S.

SK. No. 52E. CORACINA:
Coracina: Male AD. 1/2 minus black (repose).
SHOT: 7 a.m.  WGHT: 150.7 gms.
SKL: C.O.
STM: 0/0 empty.
MOULT: Nil. (?)  ABR: W/Tl. Nil.

SK. No. 52F. MIAGRA:
Miagra: Male AD. 1/2 minus white.
SHOT: 9:45 a.m.  WGHT: 10.4 gms.
SKL: C.O.
STM: 1/2 small insects.

SK. No. 52G. CORACINA:
Coracina: Female AD. 1/2 plus. Shot damaged.
SHOT: 8 A.M.  WGHT: 150.9 gms. Specimen excessively fat.
SKL: C.O.,  STM: 0/0 empty.

SK. No. 52H. RHIPIDURA f.b.
Rhipidura flab. bulg.: Female AD. 3/4 minus.
SHOT: 7:30 a.m.
WGHT: 6.5 gms.
SKL: ?  MX.
STM: 1/2 insects.

Definitely adult by white wing covert tips which are brown in an immature.
Wailu area: River side flats, grazing paddocks, low scrub, tall trees. 0 - 50' asl.

Tuesday, 23rd May, 1939.

Weather: Showers, heavy and light off and on slowly becoming finer till later in day showers were at wide intervals.
Strong E wind, clouds 100% and only about 600 ft. up. Generally miserable day.

Habitat: River side flats with native gardens, low scrub, grazing grass paddocks, scattered tall trees on immediate bank of river.

Birds: Birds were very irregular and at times active for a few minutes then still for long periods. Only shooting very close to camp which is not a good shooting area.

No unusual species seen. Megalurulus: Noted this species was present within a few feet of the rear of native dwellings but was very shy and impossible to observe. Natives resident in these houses did not know the bird when they saw a specimen. This speaks for the shyness of the species. Haliastur: Saw one of this species twice but too far for shooting. Was hawking over grass grazing paddocks of the river flats. Myzomela: Heard but did not see one of this species, only the second record in this area.

SK. No. 53A. Rhipidura f.b.
Rhipidura flab. bulg.: Male AD. 1/2 Minus (repose) white.
SHOT: 6:45 a.m.          WGHT: 7.2 gms.
SKL: C.0.
STM: 1/4 insects.
MOULT: Nil.          ABR: W/T1. Nil.
(The text is not legible due to the quality of the image.)
SK. No. 53B. ZOSTEROPS l.

Zosterops lateralis: Female AD. 3/4
SOFT PARTS: Iris, hazel with outer duller ring of greyish brown; Bill, pale horn slightly darker tip; L&F, dusky livid flesh.
SHOT: 7:30 a.m. WGHIT: 13.1 gms.
SKL: C.O. STM: 1/4 seeds (lantana?), grub.
MOULT: W::R.1f ABR: W/Tl. Nil.
All uppers and unders 0.

Sk. No. 53C. ZOSTEROPS l.

Zosterops lateralis: Male AD. 1/2 minus, white.
SOFT PARTS: Iris, hazel; Bill, dark horn, lower mandible bluey white horn; dark tip; L&F, dull grey.
SHOT: 9:15 a.m. WGHIT: 13 gms.
SKL: C.O. STM: 0/0 empty.
MOULT: All uppers 0. ABR: W/Tl. Nil.

Sk. No. 53D. ZOSTEROPS (flav.)

Zosterops xanth.: Male AD. 3/4 minus, white.
SOFT PARTS: Usual (as at Pirogues).
SHOT: 9 a.m. WGHIT: 12.45 gms.
SKL: C.O. STM: 0/0 few insects.
MOULT: All uppers 0; nape 0.
All unders 0. ABR: W/Tl. Nil.

SK. No. 53E. ERYTHRURA.

Erythura: Male IMM. 1/4 plus, white (not flat).
SHOT: 8:15 a.m. WGHIT: 11.3 gms.
SKL: .25 ossif. STM: 1/2 grass seeds.
MOULT: W::L.1,2f,3. ABR: W/Tl. Nil
Chin 0.

Wednesday, 24th May, 1939

Weather: Fine sunny, light west wind, clouds 60-80%.
Laid up with a bad foot from wading in the wet, swamps, etc., during the past week. Barcoo-rot or some such.
\( \text{Problem 10.5}\)
Monday, 12th June, 1939

Weather: Fine clear and sunny, calm, clouds 10%

Habitat: Grassy river flats near river mouth with odd scattered clumps of low thorny scrub nowhere higher than 5ft.

Birds: After calm clear cold night it was noticeable the birds were not feeding till the sun had warmed up the place from about 7 a.m. onwards. Birds could be seen making out of cold sheltered sunless vallies onto the sunny portions of the grass flats and after a preen of feathers in the sun they commenced to feed.

I was seen flying high over the river. It later was seen about a poultry yard across the river. It was fired at by the owner of the poultry. Megalurulus: It is very noticable that this species is now not so common in the dryer heathlands but is very common on the grass flats.

Sk. No. 54. MEGALURULUS:

Megalurulus: Female IMM. 3/4 plus, o.c.e.

SHOT: 7:30 a.m. WGHr: 22.7 gms.
SKL: .25 ossif. STM: 1/2, beetles & insects.
MOULT:
Wing: R.1,2f,15. A. ABR: W/T: nil
L.1,2f,15.
Body: unders 0 few.

Sk. No. 54A. LICHMERA:

Lichmera; Male AD., 1/2 plus, (L.T. 3/4 minus, spotted, granulated; L.T. 1/2 plus, white)

SHOT: 7:30 a.m. WGHr: 16.8 gms.
SKL: C.O. STM: 1/4, spider, nectar. (Vomited when shot.)
MOULT: Nil ABR: W/T: nil

Sk. No. 54B. LICHMERA:

Lichmera: Male IMM., 1/4 white.

SHOT: 6:45 a.m. WGHr: 14.55 gms.
SKL: .25 ossif. STM: 0/0 nectar (vomited when shot)

Body: 0 few scattered.
ABR: W/S.
TI/ nil to considerable.
Sk. No. 54C. ZOSTEROPS LATERALIS:
Zosterops lateralis: Female Imm. 1/4 plus.
SHOT: 6:40 a.m.  WGHt: 13.7 gms.
SKL: .85 ossif.  STM: 1/2 fruit seeds, berries.
MOULT: Wing: R. M
         Body: chin O.

SK. No. 54D. ZOSTEROPS LATERALIS:
Zosterops lateralis: Male Imm. 1/4 minus, colourless.
SHOT: 7:30 a.m.  WGHt: 11.15 gms.
SKL: no ossification.  STM: 1/2 seeds, insects.
MOULT: Wing: L.9
      Body: All uppers and unders M.

Sk. No. 54E. LALAGE:
Lalage: Male SUB-AD. 1/4 (L.T. white; R.T. black)
SHOT: 7:45 a.m.  WGHt: 20.3 gms.
SKL: .9 ossif.  STM: 1/2 caterpillars.
MOULT: ABR: W/Nil.
      TL: covs. O.  TL:F.
      Body: All uppers O exc. rump M.
      All unders O.
      Often feeds on ground in open grasslands.

SK. No. 54F. LALAGE:
Lalage: Male AD., 1/2 black, (L.T. 1/2 plus, R.T. 1/2 MINUS)
SHOT: 8:30 a.m.  WGHt: 21 gms.
MOULT: ABR: W.T: Nil.
      Body: Rump C; back, crown O.
      all unders O.

Sk. No. 54G. ZOSTEROPS LATERALIS:
Zosterops lateralis: Female Imm., 1/4 minus.
SHOT: 7:35 a.m.  WGHt: 11.9 gms.
SKL: .1 ossif.  STM: 3/4 seeds, small insects.
MOULT: ABR: All uppers and unders VM.
       ABR: W/T1. S.
SK. NO. 54H.

Erythrura: U.S. IMM.

SHOT: 6:30 a.m.    WGHT: 11.45 gms.
SKL: .4 ossif.    STM: 0/0, few grass seeds.
MOULT: nil    ABR: W/T: nil

Has a great number of louse eggs at base of crown feathers, probably a legacy of the nest, which is always very verminous.
Wailu Area.
Tuesday, 13th June, 1939.
Weather: Fine sunny, light SSE wind, clouding over later.
Cold in early morning, sunrise 6:45 a.m. Warm by 8 a.m.
Clouds 0 to 80% by 11 a.m.

Habitat: Grass flats at mouth of river. Short grass, buffilo grass, low clumps of dense scrub 3 or 4 ft. high and in ten ft. square clumps approx. average, with open patches in between and narrow lanes in places. A thorny shrub from 6 to 10 ft. high, nowhere dense and the shrub itself is a thin type of foliage.

Just visited the extreme edge of heathlands bordering the main road for a minute on the way home.

BIRDS: Birds were as yesterday, did not become active till 7:30 a.m. or thereabouts, when the atmosphere had warmed up a little. From then on all species were extremely actively feeding.

Were still active and feeding at 10:30 a.m.

MEGALURULUS: On the way home a pair of these carrying dry grass for nesting was seen and shot. Nest must have been within 150 ft. of the main road. This speaks for this species powers of escaping observation when it is unknown to many natives.

SEE DAILY SPECIES NOTES:

Pandion: One seen again near poultry yard but it cleared out when shooting commenced.

Chalcities: Three were heard calling and one was shot. This species seems to be calling more in the last week or so.

Trichoglossus: Two were heard calling and seen to fly over very high up near the mouth of the river, passing inland up the valley after having been following the coast line.
SK. No. 55. **CHALCITIES l. layd.**

*Chalcities lucidus layardi*: Male IMM.? 1/2 minus, (repose)
yellowish white; seminal cords very conspicuous.

- **Iris**: ?, (gold ring ?); **Bill**: black; **L&F**: dull blue black.
- **Shot**: 7:10 a.m. **Wght**: 22.5 gms. **W;99** **TL**: 67
- **SKL**: .3 ossif. **STM**: 1/4, caterpillars.

**MoulT**:  
- **ABR**: W/T: nil
- **Body**: Breast 0.

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SK. No. 55A.

*Megalurulus*: Female AD., 1/1 plus, O.V.M.E. Diam. largest

- **Shot**: 9:30 a.m. **Wght**: 24.25 gms.
- **SKL**: C.O. **STM**: 3/4, beetles & insects.

**MoulT**: Breast 0.  
- **ABR**: W/T: nil.

This specimen was carrying nesting material when shot is
probably mated with SK. No. 55B.

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SK. No. 55B. **MEGALURULUS**: Native name: **PANU**

*Megalurulus*: Male AD., 1/1 minus (L.T. 1/1 plus
R.T. 3/4 minus)

- **Shot**: 9:40 A.M. **Wght**: 26.2 gms.
- **SKL**: C.O. **STM**: 1/4, insects.

**MoulT**: Nil.  
- **ABR**: W: nil; **T**: very slight.

Was carrying nesting material when shot. Is almost
certainly mated with **SK. 55A**.

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SK. No. 55C. **LICHMERA**.

*Lichmera*: Male AD., 1/2 minus (repose).

- **Shot**: 7.5 a.m. **Wght**: 14.9 gms.
- **SKL**: C.O. **STM**: 0/0 residue

**MoulT**: W: L.14.  
- **ABR**: W/T. **Nil**.

Abdominal cavity parasitis worms.

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SK. No. 55D. **CORACINA**.

*Coracina*: Female AD., 1/2 plus.

- **Shot**: 8:00a.m. **Wght**: 140.4 gms.
- **SKL**: C.O.

- **STM**: 1/1 beetles, large insects, chili peppers.

**MoulT**: Nil.  
- **ABR**: W/T. **Nil**.
SK. No. 55E. ZOSTEROPS lat.
Zosterops lateralis: Female AD., 1/2 (discoloured oocytes)
SH: 7:45 a.m. WGHT: 11 gms.
SKL: C.O. STM: 0/0 empty; residue, berry skins.
MOULT: Nil ABR: W/T: Nil.

Sk. No. 55F. LALAGE.
SH: 8:30 a.m. WGHT: 20.85 gms. W:87. TL: 79
SKL: C.O. STM: 3/4 blue berries, seeds.
MOULT: scattered
   Uppers: rump, back E; neck, crown O.
   All unders: few scattered.
ABR: W/T. Nil.

SK. No. 55G. ERYTHRURA:
Erythrura: Male SUB-AD., 3/4, white.
SH: 8 a.m. WGHT: 11.4 gms.
SKL: .99 ossif. STM: 0/0, few grass seeds.
MOULT: ABR: W/T: nil
   Body: nape C, crown O.
   Chin O.

SK. No. 55H. AEGINTHA:
Aeginta: U.S.,
SH: 8:15 a.m. WGHT: 8.25 gms.
SKL: C.O. STM: 1/2, grass seeds.
   Tail: covs. O.

OTHER SPECIMENS WERE COLLECTED BUT MANY WERE IMM.
EVIDENTLY IMM. GREATLY OUT NUMBER AD. IN MANY SPECIES
AT THIS TIME OF THE YEAR.
Wailu River Valley

Wednesday, 14th June, 1939.

Weather: Fine sunny early, showers later in day. Clouds from 30 to 80%. Light SE wind.

Habitat: Dense mimosa scrubs, reeds and generally dense river valley bottom scrubs, average height 10 to 15 ft. with many taller trees up to 30 ft. here and there.

Birds: The usual run of birds seen and behaviour was usual.

Megalurulus: Another nesting pair were seen but the nest was not found. Saw the nesting pair chasing each other about and both flew up into a fairly dense tree and were fully 12 ft. above the ground, but soon returned to the lower and usual levels. This is by far the highest I have ever seen this species.

Haplipastur: One seen flying high. Circus: One seen hawking at a distance over heath lands.

Porphyrio: One heard calling in dense reeds in river margin swamp just after a gun shot. Trichoglossus: Two small flocks of 8 and 3 were seen and heard flying over very high up.

SK. No. 56. ZOSTEROPS lat.

Zosterops lateralis: Male AD., 1/2 plus (white).

SHOT: 8:30 a.m.  WGHT: 12.8 gms.
SKL: C.O.  STM: 1/1 blue berries
MOULT: Nil.  ABR: W/T. Nil.

SK. NO. 56A. MEGALURULUS.

Megalurulus: Male AD., 1/2 (yellowish white)

SHOT: 7a.m.  WGHT: 29.25 gms.
MOULT: Nape C.  ABR: W/T Nil.
The text is not clearly visible or legible due to the quality of the image or the content being partially obscured.
**BIRDS - NEW CALEDONIA**

L. Macmillan

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**SK. No. 56B. ERYTHRURA.**

*Erythrura:* Female AD., 1/2 plus.

*SHOT:* 9 a.m.  *WGHT:* 11.35 gms.

*SKL:* C.O.  *STM:* 1/4 grass seeds.


**SK. NO. 56C. PHILEMON.**

*Philemon lessoni:* Male AD., 1/4 (white).

*SHOT:* 9 a.m.  *WGHT:* 78.2 gms.  *W:* 125  *Tl:* 115 plus.

*SKL:* C.O.  *STM:* 0/0 empty.

*Moult:* Nil  *ABR:* W: Nil.

*Tl:* C.

**SK. No. 56D. LICHMERA:**

*Lichmera:* Male AD., 1/2 plus (white).

*SHOT:* 8 a.m.  *WGHT:* 16.15 gms.

*SKL:* C.O.  *STM:* 1/4 nectar, insects.

*Moult:* Nil.  *ABR:* W/Tl. S.

**SK. No. 56E. AP* APLONIS.**

*Apalonis:* Female IMM., 1/4 plus.

*SHOT:* 8:15 a.m.  *WGHT:* 52.6 gms.

*SKL:* .8 ossif.

*STM:* 1/1 purple berries, big seeds.

*Moult:* Nil.  *ABR:* W/T. VS.
Waiulu River Valley
Thursday, 16th June, 1939.
Weather: Dull cloudy, showery, some sun later but generally overcast: Clouds 80 - 100%. Wind variable from N. to SE.
Habitat: Grass and shrub covered river flats near mouth of river.

Birds: Trichoglossus: This species seemed to be very numerous this morning but was only seen flying over at great heights. Columba: One was seen on the wing. This species is definitely not common in this section of this area. Chalcities: This species has become suddenly very common. 4 were seen today in areas where they were not before. It almost looks as if this species may be also a migrant to the New Hebrides or elsewhere as it was at the same season exactly that they suddenly became plentiful on Uvea. Also the appearance of the species on Aniwa Island, in the New Hebrides as a migrant occurrence seems to definitely point to such being the case as they only pass through that island en route for somewhere.

The birds this morning were inactive for a little while after dawn, though it was not a cold morning, then they became extremly active. Many species were seen feeding on a hatch of caterpillars on the grass flats. As many as 25 Pachycephala rufiventris were seen in one very small clump of shrubs feeding on them. The following species were seen to be eating them, Chalcities, Halcyon, Lalage, Coracina, Megalurulus??, Gerygone ??, Myiagra, Pachycephala rufiventris, Artamus, Aplonis, Philemon, 2 species of Zosterops.
SK. No. 57. MEGALURULUS:
   SHOT: 9 a.m.  WGHT: 27.4 gms.
   SKL: .8 ossif. Unusual Ossif.

SK. No. 57A. HALCYON:
Halcyon. Female IMM., 1/4.
   SHOT: 8:20a.m.  WGHT: 41.1 gms.  W. 91  TI:55
   SKL: .6 ossif.  STM: 0/0 empty, residue.
   MOULT: Unders: Belly, breast C; neck, chin O.
   ABR: W: Nil  TL: VS.
   Specimen very poor. Badly infested with winged ticks and internal parasitic worms.

SK. No. 57B. CHALCITIES:
Chalcities 1. layr. Male IMM. 1/2 plus, white.
   Iris: ? dirty yellowish white ring outside brown ring.
   SHOT: 7.10 a.m.  WGHT: 21.9 gms.  W:97
   SKL: .25 ossif.  STM: 1/4, caterpillars.
   MOULT: Body: brest 0.  ABR: W/T: nil/

SK. No. 57C. APLONIS:
Aplonis: Male IMM. 1/4 plus (black).
   SHOT: 7:30 a.m.  WGHT: 48.6 gms.
   SKL: .2 ossif.  STM: 3/4 red chili peppers,
   blue berries.
covs. 0.

SK. No. 57D. CHALCITIES 1. layd.
Chalcities: Female IMM., 1/4 minus.
   IRIS: dark brown.
   SHOT: 8 a.m.  WGHT: 21 gms.
   SKL: .3 ossif.  STM: 1/2 caterpillars
   MOULT: W:R.2,5,8,17.  covs. sec. M.
   L.1f,5,8,17.
   TI:R.2.
   L.2.
   Back 0, nape, crown M.
   All unders M increasing from head to tail.
   ABR: W:Nil  TL: F.  some colour abrasion.
SK. No. 57 E. CHALCITIES l. layd.
Chalcities lucidus layardi: Male IMM., 1/4 white
  SHOT: 8:45 a.m.  WGHT: 21.3 gms.  W:90
  SKL: .5 ossif.  STM: 1/2 caterpillars.
  MOULT: Nape, crown 0.  ABR: W/Tl. Nil.

SK. No. 57 F. ZOSTEROPS x, f.
Zosterops flavifrons: Female SUB-AD., 1/4 plus.
  SHOT: 7:40 a.m.  WGHT: 11.65 gms.
  SKL: .95 ossif.
  STM: 1/2 lantana berries, small grub.
  MOULT: Nil.  ABR: Nil.
Wailu River Area
Saturday, 17th June, 1939.

Weather: Extremely variable, generally close but windy, average temperature fully 10° Far. above that of previous day but sudden strange drops in temperature. Clouds 90 to 100%. Wind variable direction and force, mostly from the E to S quarter.

Habitat: River flats with low dense scrub and open grass patches.

Birds: This was an extremely strange morning for bird behaviour. All species except *Pachycephala rufiventris*, *Lichmera*, *Artamus* and *Zosterops later.*, and to a less degree *Lalage* were not feeding. All species were extremely restless and shy. In a mornings shooting only five were shot and these were nearly all IMM. The reason for this was probably the large number of birds of prey about. Never before in the area have I seen so many about at the one time. At one time in the sky I could see 7 and there were numbers of *Accipiter* (2 species) perched in different places in trees around about. There did not seem to be any reason for this excessive number of birds of prey unless there was some species of migrant bird arriving on which they were preying. This on top of the sudden increase of *Chalcities* noted the previous day almost looks as if this may have been the migrant species, but strangely I saw none of this species about this morning nor did I hear any call. During an afternoon shoot conditions had not altered and hawks were just as plentiful as in the morning. *Accipiter*: Both species were present and at least 10 of each species must have been seen. *Pandion*: 3 and possibly more were seen. *Haliastur*: 4 of these were
April 18, 1944

Dear Sir,

I have been informed by my superiors that it is necessary for me to

inform you that I am unable to continue in this position due to

health reasons. I am currently undergoing medical treatment and

am unable to fulfill my duties.

I appreciate your understanding and support during this time.

Sincerely,

[Name]
seen in one party and several other single ones were seen.

*Circus*: Fully 20 of these must have been seen during the day.

*Erythrura*: In places where this species has been very abundant none or only an odd one was seen today. *Trichoglossus*: Numbers of these were seen but all were extremely noisy and restless and would only settle for a moment then leave in a shrieking mob as another hawk passed over or was sighted. *Falco*: Three of this species never seen here before were seen during the day.

*Collocalia*: Were all feeding high today. *Halcyon*: Was as numerous as usual but did not appear to be feeding and were very restless. *Lalage*: Not as common as usual and was restless.

*Megalurulus*: Very subdued and not calling as usual and very few seen or heard during the whole day. *Aplonis*: Entirely absent where it was common the previous day. All other species were either subdued or almost absent and even those which were about to a certain degree were shy and wary.

Sk. No. 58. ZOSTEROPS later.

*Zosterops lat. gris*. Male AD., 1/2 minus, yellowish white, Test. very small for AD.

**SHOT**: 8:30 a.m.  **WGHT**: 15.2 gms.

**SKL**: C.O.  **STM**: 1/1, blue berries, red chili peppers.

**MOULT**: Nil  **ABR**: W/T. nil

♂

Number/others shot all IMM. in several species.
Wailu River Valley
Monday, 19th June, 1939.
Weather: Dull cloudy and showers of rain, cloud fog in valley at a few feet above sea level. Later fine but quickly clouding over and more rain threatening. Clouds from 40 to 100%. Wind light Southerly.
Habitat: River flats subject to flooding. Open grass patches with low scrub and bush.
Birds: This morning bird behaviour was quite normal and in spite of the showers the birds were feeding very actively. Porzana tabuensis: One shot in a low dense bush fully two feet from the ground. Not seen but shot by call only. It was calling within 30 yds. of the same spot two days before. The call is entirely different to that of this species in both the New Hebrides and Loyalty Is. This specimen may have been an imm.
Corvus: This species ventured out across the grass flats today to feed on the caterpillars but it was very cowardly and nervous and would dive squaking for cover if anything, even Notophyx, passed overhead. Nycticorax: A brown bird which may have been this was glimpsed flying low across the river between two patches of mangrove. Pandion: One again seen near the poultry yard.
Hypotaenidia: The grass flats were alive with this species this morning and three were shot but lost. Many were heard calling or seen at a distance. They may have been feeding on the caterpillar hatch. Trichoglossus: Numbers seen high in flight overhead. Some were feeding in coconuts across the river. They were quieter this morning, not so restless or so nervous. Megalurulus: Behaviour and calls were normal but they had moved out from the wetter parts of their usual habitat.
Sk. No. 59. PORZANA TABUENSIS:

Porzana tabuensis: Male IMM., 3/4 white, LT 8x4mm. RT 5x3mm.

Badly shot damaged.

Iris, bright crimson; Eyelid edge, red; Bill, black;
L&F, light bright red, paler under toes.

SHOT: 7 a.m.  WGHT: 41.5 gms.

SKL: .2 ossif.  STM: 0/0 empty, grit & few small seeds.

MOULT:

Wing: R.4
Body: nape 0.
neck 0.

SK. No. 59A. LICHMERA:

Lichmera: MALE AD., 1/2 plus (clear white).

SHOT: 7.15 a.m.  WGHT: 16.6 gms.

SKL: C.O.  STM: 0/0 residue.

MOULT:

T1:R.3½,6f.
L.6f.

SK. NO. 59B. MEGALURULUS

Megalurus: Male IMM. 1/2 minus, white.

SHOT: 10:30 a.m.  WGHT: 24.45 gms.

SKL: .1 ossif.  STM: 1/4 insects, muddy water.

MOULT:

Tail: R.1,2?,3,4f.  ABR: W:slight
L.2,3f,4f.  covs M.  TL nil.

Body: nape crown 0.
unders 0 few.

SK. No. 59C. ERYTHRURA.

Erythrura: Male AD., 1/2 minus (white).

SHOT: 9 a.m.  WGHT: 12.1 gms.

SKL: C.O.  STM: 3/4 grass seeds.

MOULT: W:R.1,11.

L.1,11,13,14.  ABR: W/Tl. Nil

TL: covs M.

Upper back M, nape 0, crown M.
All unders M.
SK. No. 59D. LICHMERA.
Lichmera: Female AD., 3/4 minus.
SHOT: 7:5 a.m.           WGHT: 11.75 gms.
SKL: C.0.               STM: 1/2 small insects.
Tl: L.1,2,3,4, Ø.
       SOFT YELLOW GAPE.

SK. No. 59E. LICHMERA:
Lichmera: Male AD., 1/2 minus, white.
SHOT: 8 a.m.           WGHT: 15.35 gms.
SKL: C.0.(?) damaged. STM: 1/4 nectar, insects.
MOULT: Neck, chin Ø.     ABR: W/Tl. V.S.

Wailu River Valley

Tuesday, 20th June, 1939

SK. No. 60. MEGALURULUS.
Megalurus. Female IMM., 3/4 O.SE. (dis. oocytes)
BADLY SHOT DAMAGED
SHOT: 7 a.m.           WGHT: 23.5 gms.
SKL: .2 ossif. STM: 3/4 insects, insect eggs.
MOULT: W.L:Ø
       Tl.L:2. covs M.     ABR: W/Tl. S.
       rump, back £; nape 0.
       unders 0.

SK. No. 60 A. GUADALCANARIA:
Guadalcanaria: Male AD., 1/2 plus, white.
SHOT: 8 a.m.           WGHT: 27.1 gms.
SKL: C.0.               STM: 1/4 small insects, nectar.
MOULT: Nape 0, chin M.     ABR: W/Tl. Nil.

SK. No. 60B. TRICHOGLOSSUS:
Trichoglossus: Female AD., 1/2.
       Iris, crimson; Bill, corn red, paler tips;
       L & F, grey slate.
SHOT: 9 a.m.           WGHT: 105.3 gms.
SKL: C.0.               STM: 1/4 chewed flowers, seeds.
MOULT: Nape 0.       ABR: W/Tl. Nil.
       neck 0.
null
SK. No. 60 C. ERYTHRURA L.T.V.
Erythrura: Male SUB-AD., 1/2 plus white.
(Badly shot damaged bill and wings.)
  SHOT: 7.10 a.m.  WGHT: 12.2 gms.
  SKL: .95 ossif.  STM: 3/4 grass seeds.
  MOULT: Nil.  ABR: W/T. Nil.

SK. No. 60 D. LICHMLERA:
  SHOT: 8.15 a.m.  WGHT: 13.2 gms.
  SKL: C.O.  STM: 0/0 residue, nectar.
  MOULT: Nil.  ABR: W/T. Nil.

SK. NO. 60E. AEGININTHA:
Aegintha: Male AD., 1/2 minus, white.
  SHOT: 8:30 a.m.  WGHT: 8.5 gms.
  SKL: C.O.  STM: 3/4 grass seeds, wildflower seeds.
  MOULT: Nil.  ABR: W/T. Nil.
MANGROVE SWAMPS AT MOUTH OF WAILU RIVER.

Wednesday, 21st June, 1939.

SK. NO. 61. NYCTICORAX c.c.
Nycticorax caledonicus: Male AD., 1/2 minus, repose, silvery grey.
SOFT PARTS: Iris, yellow; Bill, black with green horn streaks (upper M); lower M, black horn tip and edges and pale green horn base. Cere, yellowish green.
L, greenish yellow; F, bright yellow, claws, horn.
SHOT: 9:30 a.m. WHT: 884 gms.
SKL: thick, hard. STM: 1/11 large flathead fish recently caught, weighing 130 gms, and 211 mm. long and 40 mm. wide.
ABR: W/Tl. Nil
MOULT: W.R:2,22
L:2,15,23. M.
All uppers 0.
Unders 0 few.

W:296
T1:100

SK. NO. 61A. CORVUS
Corvus: Female AD., 1/2 minus, repose.
SHOT: 7:30 a.m. WHT: 230.2 gms.
SKL: C0. STM: 1/2 caterpillars, small insects.
MOULT: Nil. ABR: W.S
T1.M.

SK. NO. 61B. DEMIGRETTA
Demigretta: Female AD., 3/4 plus, 0. SE. (diam. of largest oocyte 4.25 mm.; of 2nd. 4 mm. discoloured oocytes.)
Soft Parts: Iris, yellow; bill, black and yellowish horn; 1&f, weed green, undertoes yellowish.
SHOT: 9:00 a.m. WHT: 604.5 gms.
SKL: C.0. STM: 0/0 residue small sardines
MOULT: W.R:4,5f, 21.
L:4
T1: R:5. covs M.
T1/ Nil.
All unders 0.
All uppers C.

SK. NO. 61C. CORVUS
Corvus: Female AD., 1/2 minus, repose.
SHOT: 7:15 a.m. WHT: 230.6 gms.
SKL: C.0. STM: 3/4 chili peppers
MOULT: T1:5f ABR: W/T1. Nil.
MANGROVE SWAMPS AT MOUTH OF WAILU RIVER

Thursday, 22nd June, 1939.

SK. NO. 62. NYCTICORAX, c.c.
Nycticorax: Female AD., 1/2 plus, 0. VSE.
Iris, yellow; Bill, black and green; Cere, green;
L&F, weed green.
SHOT: 7 a.m. WGT: 621.5 gms.
SKL: thick and hard. STM: 3/4 mangrove crabs.

SK. NO. 62A. ZOSTEROPS lat.
Zosterops lateralis: Female AD., 1/2 plus.
SHOT: 11 a.m. WGT: 13.7 gms.
SKL: C.O. STM: 1/2 lantana berries

SK. No. 62B. STERNA.
Sterna: Female, 1/2 plus rising.
SHOT: 8 a.m. WGT: 312.9 gms.
SKL: thick and hard. STM: 1/4 large sardine.
MOULT: Tl. covs. 0.
All unders C. ABR: W/Tl nil.
All uppers C.
SOFT PARTS: Iris, dark brown; Bill, greenish yellow;
L&F, black.

SK. NO. 62C. NYCTICORAX c.c.
Nycticorax: Female AD., 3/4 minus, 0.S.E.
SOFT PARTS: Iris, yellow; Bill, black and green; L&F, green.
SHOT: 7 a.m. WGT: 615.5 gms.
SKL: thick and hard. STM: 1/2 mangrove crabs.

SK. No. 62D. NOTOPHONYX:
Notophonyx: Female AD., 1/1, yellow and white oocytes,
diam. of largest 4mm. 0.CE.
SHOT: 8 a.m. WGT: 527.5 gms.
SKL: C.O. thick. STM: 0/0 residue.
MOULT: Tl. M.
nape 0, neck 0. ABR: W/Tl. Nil.
Sk. No. 62 E. STERNA.
Sterna: Male, 1/2 minus, white dark spots at end.
SOFT PARTS: Iris, dark brown; Bill, greenish yellow; L&F, black.
SHOT: 8 a.m. 3/4 tide rising. WGT: 315 gms.
SKL: thick and hard. STM: o/o residue, sardines.
MOULT: W. Covs. 0. ABR: W/TI. Nil.

Sk. No. 62 F. ACCIPITER hap.
Accipiter haplochrous: Male AD., 3/4 minus, white.
Captured in detached domestic kitchen having chased domestic poultry actually into the building. First record.
SHOT: 2 p.m. WGT: 168 gms. Very fat.
SKL: C.O. thick. STM: 0/0 empty.
MOULT: Nil. ABR: W/S

R:1,3. Covs. M.
All uppers and unders 0.
COL DES ROUSETTES. CENTRAL MOUNTAIN CHAIN, 200' A.S.L. INLAND FROM BOURAIL.

Thursday, 29th June, 1939.

Sk. No. 63. PACHYCEPHALA p.
Pachycephala pect.: Female AD., 1/2 plus. (Female imma. plumage)
SHOT: 11 a.m.  WGHT: 23.75 gms.
SKL: C.O.  STM: 1/1 small beetles.
MOULT: Uppers 0 few.  ABR: W/Tl. Nil.

Friday, 30th June, 1939.

Sk. No. 64. CLYTHORHNCHUS.
Clythorhynchus: Male AD., 1/2 minus (Lt. black Rt. white.)
SOFT PARTS: IRis, brown; Bill, pale blue, lighter toward the tip; L&F, pale blue.
SHOT: 7 a.m.  WGHT: 29.4 gms.
SKL: C.O.  STM: 1/1 crab, spider, scorpion, beetles.

Sk. No. 64 A. ZOSTEROPS flav.
Zosterops flav. Male AD., 1/2 plus, yellowish white.
SHOT: 9:30 a.m.  WGHT: 13.5 gms.

Sk. No. 64B. RHIPIDURA ver.
Rhipidura verreuxi: Male AD., 1/2 plus, white.
SHOT: 7 a.m.  WGHT: 11.2 gms.
SKL: C.O.  STM: 1/2 insects.
ISLANDS OF FRINGING REEF.

Sunday, 2nd July, 1939.

Sk. No. 65. STERNA.
Sterna: Female, 1/4 plus.
SOFT PARTS: Iris, dark brown; Bill, greenish yellow; L&E, black.
SHOT: 11 a.m. WGH: 320.9 gms.
SKL: Fairly soft STM: 1/4 very few small sardines.
MOULT: T.L.1
   All covs. VN ABR: W/S
      Back C, neck crown M. TL./C.
   Belly, breast M.

SK. No. 65A. PANDION.
Pandion: Male AD., 3/4 plus, white.
SOFT PARTS: Iris, yellow; Bill, black horn, blue horn base; L&E, white with faint bluish tinge, claws black.
SHOT: 6:15 a.m. (sunrise) WGH: 1054 gms.
SKL: thick hard. STM: 0/0 empty.
MOULT: Nil. ABR: W/VS.
   TL/S.

SK. No. 65B. PANDION.
Pandion: Male AD., 3/4 white.
SHOT: 6:15 a.m. WGH: 1062 gms.
SKL: thick not very hard, probably 1 year bird.
STM: 0/0 empty.
MOULT: Nil. ABR: W/VS
   TL/S.
WAILU RIVER VALLEY.

Wednesday, 5th July, 1939.

Sk. No. 66, ACCIPITER hap.

Accipiter haplochrous: Female AD., 3/4 O.SE. Has R ovary almost as big. as L.

**SOFT PARTS:** Iris, orange, yellow, eyelid edge, yellow; Bill, black horn, blue horn base; Cere, pale yellow; L&F, bright yellow (almost orange tint)

**SHOT:** 10 a.m.  **WGHT:** 281 gms.

**SKL:** C.O. tough.  **STM:** 0/0 empty.

**MOULT:** Nil.  **ABR:** W/T1. Nil.

Specimen has large winged tick parasites.  
Was chasing **NYMPHICUS** when shot.
TAO AREA. MOUNTAIN AREA OF THE NW END OF MAINLAND.

Thursday, 20th July, 1939.

Weather: Clear and fine, west wind, clouds from 10 to 60%.

Habitat: Very narrow coastal strip at foot of mountains rising sheer almost, in ridge to the main massif of Mount Panie, 5400 ft. A.S.L., the highest peak on the island. The centre of the peak is only 3 1/2 miles from high tide mark approx. The coastal ledge is nowhere more than a matter of some 200 yds. in width and is mostly only 30 to 40 yds wide. It has coconuts and an open scattered coastal scrub of bastard cotton, rose-wood, Barringtonia ect. Then rises steeply and these slopes are covered with open Noulie forest to an average height of some 6 to 8 hundred feet a.s.l. with here and there in valleys thick forest coming in tongues much lower, almost to sea level in places. Above that height the hills seem to be covered with a dense tropical forest with a slight thinning out towards the top of the mountain. The density and composition of these forests are as yet unknown.

BIRDS: The area seems to be very good for birds and generally speaking the birds seem to run to a much larger size than elsewhere in New Cal.

The following were seen, or are reported present, Notophoyx: said to be present. Butorides: Said to be present but not common. Generally about mangroves and for short distances up the small steep rivers of this area. Demigretta: Five blues seen on previous days since arrival and three seen today. Presumably ad. chasing young away were seen today,
Zosterops lat: Present but does not seem very common. Zosterops flav: Common and appears large. Erythrura: Present but appears to be extraordinarily large. Does not appear common. Aegintha: Present but does not appear common. Larus novaeholl: Present and common. Sterna: several species present those identified were S. bergii, S. dougalli, S. summutrana, is said to breed on the sand banks of the reef hereabouts but the species breeding are indefinite. Some species of petrels are breeding in the mountains as they may be heard passing inland at about 8p.m. at night.

SAID TO BE A SMALL WHITE HAWK WITH RED EYES (NATIVES)?

Sk. No. 67. DEMIGRETTA.
Demigretta: FEMALE (prob. IMM.), 1/4 plus.
SOFT PARTS: Iris, yellow; Bill, black and dirty greenish yellow horn; L&F, pale green.
SHOT: 6:30 a.m. Wght: 710 gms.
SKL: softish.
STM: 0/0 empty.
MOULT: Nil.
ABR: W/T nil.

SK. No. 67A. STERNA sum.
Sterna sumatrana: Male AD., 3/4 minus, yellow.
R.T. 3/4 plus; L.T. 1/2 plus.
SOFT PARTS: Iris, dark brown; Bill, legs & Feet, black.
SHOT: 9:30 a.m. -- 3/4 tide, falling. Wght: 105.2 gms.
SKL: softish, opaque.
STM: 1/1,4 small sardines
MOULT: W.R:1f,2f,3,4f.
L:1,8
AR: W/T. Nil

Sk. NO. 67B. STERNA sum.
SHOT: 9:30 a.m.--3/4 tide falling. Wght: 108.5 gms.
SKL: softish
STM: 1/1,6 small sardines.
MOULT: W.R:1,2f,8,9f,18. Upper covs M.
L:3,4f,10f.
T1.R:1,2,6.
L:4
ABR: W/T Nil.

All uppers C--M. All unders C= M.
TAO AREA, COASTAL MOUNTAIN AREA OF THE NW END OF ISLAND.

Thursday, July 20th, 1939 (Continued)

SK. No. 67C. STERNA sum.
SHOT: 9:30 a.m. 3/4 tide, falling. WGHT: 113.5 gms.
SKL: softish. STM: 1/1 small sardines.
MOULT: W.R:3?,4, 10, 11, 16?
L:3,4,12,19-21.
Tl. covs, M.
All uppers C - M. ABR: W/T. Nil
All unders C - M.

SK. No. 67D. STERNA sum.
Sterna summ: Male AD., 1/2 plus, yellow.
SHOT: 9:30 a.m., 3/4 tide falling. WGHT: 99.5 gms.
SKL: Fairly tough. STM: 1/1, 8 sardines.
MOULT: W.R:1,2.
TL.R:2f,4.
All covs. 0.
L:2.
All uppers 0.
All unders C.

SK. No. 67. E. STERNA sum.
Sterna Summ.: Female AD., 3/4 plus, many discoloured oocytes.
SHOT: 9:30 a.m., 3/4 tide falling. WGHT: 93.5 gms.
SKL: softish. STM: 0/0 residue, sardines.
MOULT: W.R:1,5,14f,16. covs
L:1,5,10,15.} secs.} M
TL.R:3. covs 0.
L:3.}
Uppers 0 increasing tail to crown.
vent, flands C, all unders 0/
ABR: W/T Nil.
TAO AREA: COASTAL MOUNTAIN AREA OF NW MOUNTAIN CHAIN (MT. PANIE AREA)

Friday, 21st July, 1939.

Weather: Fine sun and cloud, light west wind. Clouds 40 to 80%.

Habitat: Mountain slopes up to 1200 ft. A.S.L. Lower slopes up to 800 ft. covered with open Noulie forest with dense underbrush between of ferns, grass, et c. Thence upwards dense original forest fairly open underbrush of ferns etc. trees from 40 ft. in height and under with a great many smaller trees of from 15 to 30 ft. in height.

BIRDS: The forests are ideal bird areas. Added to the forest species recorded yesterday the following were added today.

Hypotaenidia: Seems to be fairly common especially in the grass and ferns of the Noulie forest and along the narrow coastal ledge. Tricholimnas: A local resident captured one of these with a dog three years ago but it is very very rare. Without a doubt this is the species he speaks of. Drepanoptila: Several were seen and 2 shot. The first seen in New Cal. Chalcophaps: Several were seen. Nymphicus: One was heard at about 1200 ft. is said to be more common heigher up the mountains. Eopsaltria: Seems very abundant in the forests. Pachycephala pectoralis: Abundant in the true forests. Aplonis: Seems very abundant in forests and fairly common in Noulie.

Leptomyza: Is very abundant in the true forests. Pandion: Saw nest and brooding female and the male on a branch near by. Nest in dry hard wood tree about 300 yds. inland and about 150 ft. up the hill side in a valley.

NEW SPECIES ACCIPITER: The small white hawk the natives spoke of is the A. haplochorous type smaller but areas of white and black the same but the eyes are blood red. It is exceedingly
savage, kills Phaenornhina and birds much larger than itself, and even flying foxes, fowls, etc. Seems to favour the forests more than the open areas and seldom comes out of the forests except at very dry seasons when food and water is scarce.

LOCALS SPEAK OF A MYZOMELA WITH AN ALL RED TAIL (?)

SK. NO. 68. LEPTOMYZA (DAHT)
SHOT: 10:00 a.m. WGT: 230.6 gms.
SKL: C.O. STM: 3/4 native fruit, pandanus (?).
MOULT: Nil. ABR: W/T. Nil.

SK. No. 68A. ACCIPITER hap. HAH-MIN-JAH.
Accipiter hap.: Male AD., 1/2 plus, yellow (sex verified)
L.T. 3/4 minus; R.T. 1/2.
POSSIBLY NEW SUB SPECIES.
SOFT PARTS: Iris, blood red; Eyelid edge, yellow;
Bill, black horn, blue horn base; cere,
bright yellow (tinge of green);
Legs, bright yellow.
SH ori: 10:00 a.m. WGT: 217.9 gms.
SKL: C.O. STM: 1/4 lizard.
MOULT: Nil. W/T. Nil.

SK. No. 68B. PACHYCEPHALA pector:
Pachycephala pectoralis: Male AD., 1/2 white.
SOFT PARTS: Iris, reddish brown; Bill, black; L&F,
nigger brown.
SHOT: 10:00 a.m. WGT: 22.5 gms.
MOULT: Nil. W/T: Nil
TAO AREA: COASTAL MOUNTAIN AREA OF NW MOUNTAIN (MT. PANIE AREA)

SK. No. 68C. MYIAGRA:
Myiagra: Male AD., yellowish white (L.T. 1/2 minus R.T. 1/4)
SHOT: 9 a.m. WGHT: 10.8 gms.
MOULT: W covs 0. ABR: W/Tl. Nil.

SK. No. 68D. LEPTOMYZA.
Leptomyza: Female Ad., 3/4 discoloured oocytes, O.SE.
SOFT PARTS: Wattles, orange tinged with red; Bill, upper mandible black, lower mandible black and pale grey horn; L&F, pinkish grey.
SHOT: 10 a.m. WGHT: 151.8 gms.
SKL: C.O. STM: 3/4 native fruit or nut.

SK. No. 68E. LEPTOMYZA:
Leptomyza: Male AD., 3/4 white (L.T. 3/4; R.T. 1/2 plus)
Wattles: orange yellow.
SHOT: 9:30 a.m. WGHT: 248.2 gms.
SKL: C.O. STM: 3/4 chewed vegetable matter, (young palm leaf?)
MOULT: T;R;2;4. CoVs M. ABR: W/Tl. F.
Rump, back M.

SK. No. 68F. LALAGE:
Lalage: Female AD., 3/4 minus, discoloured oocytes.
SHOT: 8:30 a.m. WGHT: 19.6 gms.
SKL: C.O. STM: 3/4 berry, seeds, ants.
All unders Q.
TAO AREA: COASTAL MOUNTAIN AREA OF NW MOUNTAINS. (MT. PANIE AREA)

SK. NO. 68G. MYZOMELA. GUI-LAN-DAH.
Myzomela: Male IMM., 1/4 plus.
SOFT PARTS: Iris, dark brown; Bill, black, yellow gape; L&F, dark grey, yellow under.
SHOT: 11 a.m. WGH: 7.45 gms.
SKL: .6 ossif. STM: 1/2 nectar insects (ants?)
MOULT: Nil. ABR: Nil.

SK. NO. 68H. DRESPANOPTILA: GOOH-HE-MEN (name for IMM.)
Drepanoptila: Male AD., 3/4 white.
SOFT PARTS: Iris, strawberry, pale bluish outer ring; Bill, bluish green horn, dark; L&F, purple plum colour.
SHOT: 11 a.m. WGH: 275.9 gms.
SKL: C.O. STM: 1/1 native fruits and berries.
Rump M, all uppers 0.
All unders 0.

Saturday, July 22nd, 1939.

SK. NO. 69. ACCIPITER hap.
Accipiter hap.: Male AD., 1/2 minus, reddish white.
SOFT PARTS: Iris, yellow; Lid, paler yellow.
SHOT: 3 p.m. WGH: 171.7 gms.
MOULT: Nil. ABR: W. Nil.
Tl. slight.

Specimen attacking domestic poultry. Always attacks from the perch.
TAO AREA
COASTAL N.W. MOUNTAINS (MT. PANIE).

Week of the 25th to 29th, July 1939.

Observations made during ascent of Mt. Panie while natives were cutting track.

It is noticeable that there is a zone of dense bird life immediately above the open Noulie forest area at about 4 to 6 hundred ft. a.s.l. From here up to about 2 thousand feet there does not appear to be any appreciable difference in the amount of bird life. All species one would expect to be present in the forest seem to be fairly represented. It was somewhat difficult to tell exactly just how dense is the bird life of the area as while natives are cutting a track the birds are naturally frightened and keep at some distance, thus all observations here after in this week of watching are subject to drastic alteration, or may be entirely wrong when subsequent observations of a more normal nature are made. The forest in these areas is more or less a normal mountain forest with the taller trees which run up to about 40 or 50 ft. in height being found in the lower levels and slowly becoming shorter with the increase of altitude. At about 2000 ft. the trees are thinner and very few are more than 25 ft. in height, on the ridges at least though they are taller in the valleys. From 2 to 3 thousand feet there appears to be little or no bird life except for Zosterops flav and Myzomela, and a few pigeons in the valleys. The bush here is mostly in the form of scattered trees about 15 to 20 ft. apart with a fern and pandanus and low shrubs very densely growing in between.

From this level up the bird life appears to increase in numbers and though the underbrush becomes very much less dense the trees appear to get slightly taller, though very little. Flowering trees and shrubs appear to become more plentiful though the upper leaf
area of the trees is very much less dense and there is no actual contiguous leaf canopy. The ground brush is much less dense and more suited to rails and petrels. As there is a lack of water in the area it is possible that is the limiting factor in the bird life. In these higher levels there are a number of small springs which quickly peter out and these may suit the bird better, though actually I very much doubt water plays an important part as it rains a great deal in this area. From the flowering trees and shrubs I should say it is very likely parrots such as Charmsoyna will be found. The natives speak of a black rail SLIGHTLY LARGER THAN Hypotaenidia which is found in these forests. It is caught by dogs and is said to be flightless but an exceedingly fast runner. They also speak of a green backed bird about the size of Guadacanaria with green bars under. Trichogliminas is said to be present though very rare. It was once very common. Cats gone wild and wild dogs are said to be responsible for its decrease. Myzomela at this altitude is very abundant and appears to be much brighter with the red more extensive. Natives speak of one with an all red tail. Leptomyza appears to be absent at the higher levels but is abundant lower down, it has a call of two notes which exactly sound like two notes on a xylaphone, "Think-Thonk". It calls much at night and has many weird calls. Natives speak of a very large parrot which I am uncertain about. It may be a large Nymphicus though they make no mention of a crest. Camps on the mountain after the track cutters have gone may yield some startling results and on the other hand they may not and all the labour of cutting tracks etc. may be useless. The main object of the altitude project is in the hopes of getting Trichoglimnas as it is here in these original forests at a level which has not been visited even by natives more than four or five times in the last 25 years that I am in hopes of finding the remnant of the race in fair numbers. MORE AND I HOPE MORE INTERESTING NOTES WILL FOLLOW FROM THIS GREATER ALTITUDE.
no of words: 2,432

The text is not clearly legible and cannot be accurately transcribed.
TAO AREA: COASTAL AREA NW CENTRAL MOUNTAINS (MT. PANIE)

26th, July, 1939.

SK. NO. 70. ACCIPITER HAP.

Accipiter hap., Male AD., 1/4 plus, white.

Iris: Orange yellow; edge of lid, pale yellow.

Shot: ? a.m. Wght: 172.3 gms.

Skl: C.O. Stm: 0/0 empty

Moult: Nil. ABr: W/T1/Nil.

SK. No. 70A. MEGALURULUS:

Megalurus: Male AD. 1/2 minus, white.

Iris; Warm brown; Bill, black, palate, black; Legs & Feet, dusky flesh.

Appears to have an extra long tail in this area.

Shot: 7:30 a.m. Wght: 26 gms. W:75. TL:100

Skl: C.O. Stm: 1/1, wood-louse, insects.

Moult: Nil ABr: W/T: nil.

SK. No. 70B. ZOSTEROPS LAT:

Zosterops lat.: Female AD., 1/2.

Shot: 8a.m. Wght: 13.65 gms.

Skl: C.O. Stm: 1/1 blue berries, (lantana?)

Moult: Nil ABr: W/T: nil.

Time of shooting was wrongly entered on this label.

SK. No. 70C. CHALCITIES:

Chalcities: Layrd: Male, 1/2 yellowish white.

Shot: 9:30 a.m. Wght: 22.45 gms.

Skl: 1/2 ossif. Stm: 1/1, caterpillars.

Moult:

TL: covs M.

all uppers 0 exc. rump M, nape C.

unders 0.

Native Name: TAO Dialect: MAR-KU-LU-NANGUK.

SK. No. 70D. LICHMER A:


Shot: 10 a.m. Wght: 18.6 gms. Excessively fat.


Moult: Nil. ABr: W/T: nil.

Another species seen this day in this area was Ptilinopus greyi, an IMM. being seen showing that it breeds here. Actually I do not think it is at all common except after a cyclone from the Loyalties direction, it is then very abundant for a month or two but either dies of starvation or returns to the islands. A few remain.
TAO AREA: COASTAL N.W. MOUNTAINS, (MT. PANIE AREA).

Friday, 28th, July, 1939.

Weather: Fine clear and sunny, later windy and showry. Clouds 50 to 100%. Wind strong Easterly.

Habitat: Coastal scrubs and bare reef.

Birds: Usual run of birds seen.

SK. NO. 71. LICHMERA.
Lichmera: Male AD., 3/4, white.
SHOT: 8 a.m.  WGH: 15.55 gms. Excessively fat.
SKL: C.O.  STM: 1/4 nectar, small insects,

SK. NO. 71A. HALCYON:
Halcyon: Male SUB-AD., 1/4 plus, white.
SHOT: 9 a.m.  WGH: 41.35 gms.
SKL: .9 ossif.  STM: 1/1, small crabs.

SK. NO. 71B. LICHMERA:
Lichmera: Male AD., 3/4 minus, white, (LT. 3/4, RT. 1/2 plus)
SHOT: 8:30 a.m.  WGH: 17.2 gms. Excessively fat.
SKL: C.O.  STM: 0/0, residue, nectar.
MOULT: Nil  ABR: W/T: Nil.
TAO AREA: COASTAL NW. MOUNTAINS, (MT. PANIE AREA).

29th July to the 1st. August, 1939.

CUTTING AND CLIMBING TO SUMMIT OF MT. PANIE, (5500ft. app.)

Weather: Sun and cloud and odd showers, mostly fine weather.
Habitat: Up to 600 ft. Noulie forests with open scanty grass and bracken fern in between.

Mt. Panie Eastern or coastal face. 600 to 1500 ft. A tall dense mountain forest with trees up to 50 ft. in height and with little underbrush on the ground. 1500 to 3000 ft. A slowly stunting and less dense tree growth of trees of only 15 ft. in height and with a dense inbetween growth of pandanus, cane-grass, ferns etc. 3000 ft. to 4000 ft. Fewer trees and slightly taller and a less dense inbetween growth with more true mountain plants appearing. In the valleys in this area the trees though not plentiful were tall and generally speaking the area was much more suitable for bird life. 4000 to 4500 ft. On the ridges a low dense scanty growth of 90% pandanus with only low trees of ten feet or so in height, in the valleys a dense growth of ferns and taller trees. 4500 to the summit at about 5500 ft. A true mountain forest with a not very dense growth of undertrees but a fairly dense ground brush of ferns only 2 ft. in height thus leaving an open type of forest, with a distinct and level upper leaf canopy at about 30ft. Much flowering types of trees and shrubs orchids and epiphytic ferns and growths, many species of moss and lichens etc. Very strangely from 5000 ft. to the actual summit the forest is solid stand of kauri pine, a smallish hard wooded slow growing red species. At 5000 ft. it forms about 60% of the tree growth, commencing very abruptly, and slowly increasing in quantity till at the actual summit which is a small plateau it forms 90% of the tree growth.
Before we proceed, it's important to consider the potential consequences of our actions. We must ensure that our decisions are well-informed and that we have thoroughly evaluated all possible outcomes. It's crucial that we approach this task with a clear and analytical mindset.

In the past, our methodology has been effective in achieving our goals. However, we must be mindful of the potential challenges and risks associated with our current project. It's essential that we have a comprehensive plan in place to address any unforeseen obstacles that may arise.

Let's begin by brainstorming ideas and discussing potential solutions. This will allow us to gather the necessary insights and make informed decisions. Remember, collaboration is key to ensuring our success.

As we move forward, let's maintain a clear focus on our objectives. By doing so, we can stay on track and avoid any potential pitfalls.

Finally, it's important to remember that this project represents an opportunity for growth and development. We should approach it with enthusiasm and a positive attitude.

In summary, our approach to this project must be thorough and thoughtful. By doing so, we can ensure that we achieve our goals and make a significant impact.
MT. PANIE - WEST FACE OR INLAND SLOPE. BY DISTANT VIEW FROM THE SUMMIT.

This face of the mountain is much less rugged and rises more gradually. It seems to be covered with a solid stand of tall forest and appears an extremely interesting area, probably the best area in New Cal. for bird life. From 3 thousand ft. up to the summit on that face the forest appears to be 80% kauri pine and below that level a narrow strip of shorter forest seems to occur but from 2500 ft. to the valley bottom at about 400 ft. a.s.l. it appears to be a tall forest and very dense. In the actual valley bottom appear a few scattered patches of Noulie forest but these were nowhere extensive. Further mountain ranges occur to the west with a mixed type of habitat but none of these mountains rise much above 1000 ft. To the north Mt. Panie carries on in three peaks which all reach the 5 thousand ft. mark or close to it, All appear identical with Panie in vegetation. Far to the west the coastal flats which appear at the distance to be scanty Noulie and grass paddocks (grazing properties) may be seen and the fringing reef of that coast is visible. To the north at some distance two high peaks rise, one at the back of Oubatch on the east coast and one at the back of Gomen on the west coast. Both appear to be forest covered and to rise to about 4000 ft.

SUMMIT OF MT. PANIE. Is formed of two slightly lower peaks which are razor backs which come up the ridge from the SE these are not much below the highest peak of Panie and are close to it. The highest peak is a small plateau in the NW corner as it were. From here the ridge descends into a saddle
at about 5 thousand feet then rises into an unnamed peak at about 5200 ft. the ridge from there continuing on to Mt. Collnet which reaches about 5300 or so ft. Panie itself is probably about 100 ft. higher than is given on the charts.

**BIRDS: COASTAL FACE ONLY.**

**RR.** - Reliable report **N.R.** - Doubtful

**R.** - Not so reliable **Seen** - Actually seen

In general the following would be a rough description of the zones of bird life.

**0-600 ft.** Noulie types of birds, and coastal flats.

*Notophoyx nvh.* Not common though a few are to be seen occasionally along the small rivers. None seen. **R.R.**

*Butorides s.m.* Not common but is occasionally seen in the mangroves at the coast and for a short distance up the rivers. None seen. **R.R.**

*Demigretta s.* Common on coast and up rivers. Nests in forest trees up to 600 ft. a.s.l. Only blues seen. **SEEN.**

*Nycticorax c. c.* Is fairly common at times on the small rivers but generally stays near the sea. Nests. **RR.**

*Botaurus p.m.* - Not common. Occasionally appears on the river banks and in Noulie swamps. Is not well known. **R.**

*Haliastur s. j.* Appears at all levels from the summit of the mountains to the sea. Is common and calls much. Hunts much about the coast but appears to hunt little at higher levels. Is a carion feeder. **Seen and plentiful.**

*Accipiter h.* Is present but mostly stays in the forest areas at greater heights than the Noulie but is such a common visitor to this area that it must be included in this zone. **Seen.**

*Accipiter h. sub-spec.?* Red-eyed smaller type seems to frequent the forest only but at certain seasons comes into
the Noulie. Does not appear abundant. Not seen by me in Noulie but seen in the forest.

**Accipiter f. v.:** Not at all common in the area but does appear. Appears to frequent only the Noulie and rarely visits the forest. Seems to prefer the plains to the mountain country. **Seen.**

**Circus a. w.** Is present but not very abundant except high up in the mountains where it hunts about the ridges coming suddenly on its prey over a crest of the ridge. Does visit Noulie areas frequently. One seen at the actual summit. **Seen.**

**Pandion h. m.** Is present and nests on the hillsides. Is nesting now has eggs I believe. **Seen.**

**Falco p. e.** Is present and feeds much on the mutton birds which nest high in the hills, frequents the steep precipitous slopes further south along the coast where it nests more than the actual mountain area of Panie, One was seen playing on the wind above a peak to the north of Mt. Panie. Seems to live mostly on sea-birds. **Seen.**

**Hypotaenidios p.s.** Present and common in the Noulie and especially on the coastal flats. Does not appear to frequent the forests to a very large extent but is present. **Seen.**

**Tricholimnas L.** Very rare almost extinct if not already so. Appears to frequent the forests and seldom visits the Noulie. Should not be in this zone at all but as a very reliable local resident speaks of a flightless bird, a little larger than Hypotaenidia which his dogs have caught, says it is black, I temporarily place it in this zone till I have placed this bird.

**Porzana t. sub-spec.** Present but not very common. Very shy and seldom seen. Appears to frequent the river and coastal flats. **RR.**
Porzana c. i.
Believe it to be present but not common. R. Apparently only on the coastal-flats.

Porphyrio a. c. Present but not at all common. Appears only near the coast and about native gardens. RR.

Rhilinopus g. Not common except after hurricanes travelling from the Loyalty Is. Appears to stay more about the coast but is reported to be in the forest. One, an IMM. seen on coastal-flats.

Dolumba v. h. Not common but occasionally appears in the Noulie and along the coast. RR.

Chalcophaps i.d. Is present in the Noulie and along the coastal flats. Is not abundant. Seen.

Trichoglossus o.d. Common in the coconuts and flowering trees of the coastal flats and not so common in the Noulie. Seen.

Chalcities ll Is present in the Noulie and on the flats but does not appear excessively abundant in relation to its host. Seen.

Tyto a. l. Is present in the Noulie areas but does not appear to be plentiful at this season. One heard calling.

Aegotheles s.
Is apparently a bird confined solely to the Noulie habitat or to the narrow coastal flats adjacent there to. Is not common though one has been collected but was badly shot damaged by large shot. See notes on collected specimen. later.

Collocalia e. u.
Appears abundant along the coast and in the Noulie areas also is seen a lot in the forests but none were seen above 3 thousand feet.

Collocalia s. l.
Very common about the coast and hawks over the bare coastal reef at low tide. Is common in the Noulie but does not seem to go far in the forests. None were seen above about 1500 ft.
I would next come once the (insert date) at 10 a.m.21

This would add another level of twine and quill to the already complex

21 Could this be the date of the next event? It is not clear from the text.
Halcyon c. c. Very common about the coastal flats and fairly abundant in the Noulie. Some were heard and seen in the forests up to 1500 ft. but none above that. It may be present at higher levels though not seen.

Lalage Very common about the coastal flats and in the Open Noulie forests. A few were heard in the forests up to about 2500 ft. but none higher. It probably occurs at greater heights though.

Coracina c. c. Is not uncommon on the coastal flats and appears in the forest up to about 1500 ft. Seen.

Megalurus m. Is a bird entirely confined to this zone. Is only found where grass and ferns are found in conjunction. Inhabits the coastal flats and Noulie and is found right up to the margin of the forest and even in small isolated patches of Noulise close to the forest margin but actually enclosed by forest, though I believe is not plentiful in such patches, but does not appear to enter the forests at all. None were heard or seen once true forest was entered. It like Aegotheles appears to be a bird of very definite and defined habitat.

Gerygone f. f. Common at all levels and in all types of habitat except the scanty bird zone but even there it is present.

Rhipidura s. v. Appears to be mostly a mountain forest species. It rarely appears in the Noulie and as far as I could see appeared to not go above about 3 or 4 thousand feet.

Rhipidura f. b. Appears to be a species with a very irregular distribution. It is the species common on the coastal flats and in the Noulie areas and then appears to be replaced by R.s.v. but is still found in the forest generally high in the trees though not abundant. It appears to be absent between 2 & 4 thousand feet and appears again at the very summit of the mountains at 4 thousand ft or more. This is
open to doubt though as all seen there were high in the trees. If this is this species it may be possible that there is some variation in the species.

*Myiagra c. c.* This species does appear in the Noulie and in the coastal scanty scrubs but seemed to be more of a forest margin species and is common about the forest-Noulie margins and for about one thousand feet above that altitude. None were seen above 2 thousand feet. Nowhere was it abundant.

*Pachycephala r. x.* This species seems to inhabit the Noulie and the coastal scrubs and nowhere does it penetrate more than a few yards into the forest in this area. It is exceedingly abundant along the coast and is possibly the commonest species in the Noulie.

*Artamus l. m.* Very abundant in the Noulie and in the coastal scrubs. Does not appear to enter the forest very much in this area. None were seen about 2000 ft.

*Aplonis s. s.* This species is not common in the Noulie or in the coastal scrubs but it does visit these areas frequently and is thus a bird of these areas which may be met therein at any time. It appears to be a bird more of the forests but is not by any means abundant there. It was seen at 5000 ft. and though it appeared to be different in size and with a slightly larger beak did not appear very different at that level.

*Corvus (P.) m.* Is common about the coast and in the Noulie but is not as common there as in the true forests, especially about the margins of the true forest and for a thousand feet above that level. After that it becomes much less common but may be met with even right at the very summit of the mountains at 5 thousand feet and more. It is an extremely noisy and cowardly bird.
Philemon L. is common about the coastal coconut palms but does not appear to visit the Noulie to any great extent. It is common in the true forest and was met with at the very summit at well over the 5 thousand feet. There appeared to be a zone from about 3 thousand to 4 thousand feet where it was entirely absent. Birds at the summit appeared larger and brighter with more blue in the wing and with larger bills.

Guadalcanaria u. This species is common about the coast and in the Noulie scrubs is fairly common. It is common in the forest but none were seen or heard above 2 thousand ft. till the actual summit was reached when it was again seen and heard. At the summit it appeared a much larger bird with much brighter plumage and with a very much longer bill. The specimen shot had a small patch of pale yellow feathers on the chin but these appeared irregular and not a true pattern change, possibly freak feathers. Still the difference in the size of the beak would almost constitute a different super sub-species.

Lichmera i. i. This species seems to be confined to the Noulie and the coastal scrubs and coco-nuts. It was neither seen or heard once the forest was entered. Even at 400 ft. it was not common. At the coast it is one of the commonest species. Here in this area it spends much time feeding near the ground in ferns and shrubs at some distance from coco-nuts.

Myzomela c. c. This species is uncommon near the coast and is uncommon in the Noulie but once the forest is entered it is much more common, till in the vicinity of 3000 ft. it is by far the commonest bird, in fact in the lower pandanus scrubs it appears to be almost the only bird. It appears right at the very summit and all the way up the mountains it becomes progressively brighter as greater altitude is attained. At the summit the amount of scarlet appears to
come considerably lower down the breast and there is much more scarlet on the back, in fact the whole back is a conspicuous scarlet instead of an admixture of black and red.

**Zosterops X.**: Is common in the coastal scrubs and in the Noulie. It appears common and evenly distributed in the lower forest areas and becomes rare in the lower pandanus forests. From 3 to 4 1/2 thousand feet it seems to be nearly absent. It is present at the summit but appears to be larger and with a longer beak, plumage is a little brighter.

**Zosterops l.q.**: Abundant in the coastal scrubs and in the Noulie but does not appear to enter the true forest beyond the first few yards.

**Erythrura p.**: Is present but not common in the Noulie and on the coastal flats. Is found, but not common, in the forests up to 2 thousand feet but was not seen or heard above that level.

**Introduced finches**: Two species present in the Noulie and coastal scrubs but not in the forests. Is not abundant.

**Petrels**: Unknown what species nest in the mountains but there at least three species nesting there above two thousand feet. Burrows were seen at 4 thousand and 5 thousand feet.

**Tall Original Forests**: 600 to 1500 ft. A.S.L.

**Tao Area**: Coastal N.W. Mountains. (Mt. Panie area)

In this area the densest bird life appears to be present. Nearly all species appear to be well represented, except such species as are coastal or confined to the Noulie.

**Haliastur s.j.**: Visits the area.

**Accipiter h. sub spec**: The red eyed species appears to be very abundant in this area.
Accipiter f.v.: Visits the margins of this and the Noulie area.

Circus a.w.: May be seen hawking over the area.

Hypotaenidia p.w.: Present but not common.

Tricholiminas l.: This appears to be the area which is the natural habitat of this species. None were seen or heard but the species is very well known to the natives and the whites, who have seen odd ones of the species and because of its rarity are struck by the sight. It is said to be an exceedingly fast runner and cannot be caught by humans but occasionally a dog will catch one. It is said it needs to be a fast dog to catch them.

Rhynochetos j.: Was never very abundant in the forest hereabouts but a few are present there today though by no means common. One was heard calling while we were on the mount. This was at about 4 thousand feet up.

Ptilinopus g.: Frequents this area but is not common.

Drepanoptilla h.: This seems to be the natural habitat of this species and though not very common it is more abundant than elsewhere in this area. It does not appear to go above 2 thousand feet.

Phaenorhina: This appears to be the area in which this species is most abundant. They may be heard calling a great deal in this area but are not very abundant. This species is in danger of extinction of persecution is continued. This species appears to be found right to the summit though at the higher levels (above 2000 ft.) it is not at all common. It probably only visits the higher levels to feed when food in the taller forest areas is not plentiful.

Chalcophaps l.d.: Present but not common.
Columba v.h.: Is present and more abundant in this habitat than elsewhere. It also is found less abundantly up to 4 thousand feet but above that it was not seen or reported.

Cyanorhamphus n.s.: This species is present but not abundant. None were seen but it is known to locals. It does not appear to be found at anything above 2 thousand feet.

Nymphicus c. c.: This species is present and said to be abundant. Two were heard and this would point to its being abundant as it is a shy species and the passage of a larger party would scare it. It is said to be present in the kauri pine at the absolute summit and this is very likely as it is in such trees it would find very suitable nesting sites. None were heard above 1500 ft. but I believe it would be found at all levels to the summit from the tall forest up, it would only cross the shorter bush areas very rapidly, probably following up the taller growth of the valley bottoms to get to the summit. It is said to be abundant on the western slope of the mountain.

Trichoglossus o.m.: Is present in this area and appears to return here to roost at night. It probably goes much higher when food is scarce but would only do so if food at lower levels were finished, its natural habit being to go lower to feed. It is a wide ranging fast flying species so would probably be met with anywhere. It nests in this tall forest area.

Charmosyna d.: There seems to be some mystery about this species as it is exceedingly little known. The only persons who could tell me anything of it were two very old men who had lived at 3 thousand feet on the west side of the mountain but who had come to live on the coast since their tribe had died out. One chap described the female without being asked but was not sure about the male. He said it fed on flowers in the tall trees above the 4 thousand
foot mark but at a slightly lower level on the western slopes. He was somewhat vague about it as it is long since he had seen one, he having lived on the coast and not been above 1 thousand feet for 20 years. No other whites or natives knew the bird at all. The old man said it never came down to lower levels. He said it had never been common and was a rather silent species with only a low murmering note. Generally speaking this species seems something of a mystery. I have very faint hopes of getting or even seeing any.

**Chalcities l.l.**  Present but not common.

**Collocalia:** 2 species : see previous notes.

**Halcyon c.c.**  Present.

**Lalage l.m.**  Present and common.

**Edolisoma a.**  Present and fairly common. By report, though only two were heard. It is said to go to the top of the mountain. Is said to be very noisy and calls much. This level is probably its densest zone area. Apparently not as common here as in the Baie des Pirogues forests.

**Coracina c.c.**  Is present and fairly abundant. Does not appear to go above 15 hundred or 2 thousand feet.

**TURDUS p.x.**: This is ideal habitat for this species but it is entirely absent as far as I can see. It seems to be unknown to whites and natives and is I think ENTIRELY EXTINCT. One or two old men seem to have recollections of such a bird but the younger generation seem to know nothing of this bird or anything like it. We camped on the mount and heard no morning or evening calls such as this bird gives.

**Gerygone f.f.**  This species is common and at higher levels.

**Rhipidura s.v.**  This is the forest species and is exceedingly abundant in this tall forest area. It goes to about 3 thousand feet but I saw none higher. It appears to be very large on the
mountains in this area (Tao). It appears to frequent the lower levels of the forest up to about 15ft., mostly, though it does go higher. It is a friendly species and will almost alight on an observer.

**Rhipidura f. b.** Present; see previous zone notes.

**Myiagra c. c.** This appears to be the natural habitat of this species. See lower zone notes.

**Clythorinchus p. p.** This appears to be the natural habitat of this species and it is not uncommon, but is extremely shy and retiring. Does not call much and does not call like the N.H. species nor like the same species elsewhere in New Cal. Does not appear to go above 2 thousand feet but it may as it is such a shy species and calls so seldom we may not have seen it.

**Eopsaltria f.** This species seems to be fairly common in the tall forest and was heard right up to 3500 ft. but none were then heard till the summit was reached when a single one with a different call was recorded. Up to 1500 ft. seems to be its natural habitat and in the taller growth of the valleys it appears to find congenial habitat from there to about 3500 ft. but does not visit the ridges I think.

**Pachycephala p. c.** Common and abundant in this area and slowly decreasing in numbers as one gets higher except in the valleys where it finds a more congenial habitat. It does visit the ridges but is not common on them. It probably inhabits all levels to or almost to the summit on the west side as the forest is taller and more continuous there.

**Artamus l. m.** See previous zone.

**Aplonis**: This appears to be the natural habitat of this species. See previous zone.

**Corvus**: This is the natural zone of this species and it is here it reaches its greatest numbers. See previous zone.
**Philemon:** Abundant, possibly its natural zone. See previous zone.

**Leptomyza a.:** This is this species natural zone and it is here that it reaches its greatest numbers. It has many and weird calls. It calls in the early morning at about 3 o'clock and goes on calling at intervals till daylight. I believe it is a good mimic as it appears to get a number of other birds calls and it attempts many that are beyond its powers hence the weird and strange sounds. It has some really frightful hysterical calls. It has two notes like the notes of a xylophone or some clicking their tongue with a tink-tonk sound. It is found right to the summit by report but we saw or heard none beyond about 2 thousand feet.

**Guadalcanaris:** Abundant: See previous zone notes.

**Myzomela:** Present: Abundant: See previous notes.

**Zosterops x.:** Present abundant. See prev. zone notes.

**Erythrura p.:** Present, probably nests. See prev. notes.

**TAO AREA:** Coastal NW Mountains, (Mt. Panie Area)

1500 to 3000 thousand feet

This zone merges so gradually with that below it and the deep steep valleys running back into it make it more or less very similar in bird life with that below that it is very much the same with a lessening of all bird life in it, except as regards Myzomela which here appears to reach its greatest density, especially toward the top. Gerygone is also plentiful in the area and though not as common as the other shares the upper part of the area with Myzomela almost exclusively.
TAO AREA: Coastal NW, Mountains, (Mt. Panie Area.)

3 to 4 thousand feet: All bird life which reached this altitude seemed to be more plentiful and there seemed to be a zone of birds reaching down more from the mountain top in this area. Species recorded in the area were: Halialustur: Circus; Phaenorhina; Gerygone; Pachycephala p.c.: Corvus: Myzomela; Zosterops x.: 

4 to 4 1/2 thousand feet: This area appears to be like that lower down in that it is somewhat indeterminate and in the valleys taller trees cause a reaching downwards of the zone above. Bird life was very scarce, Myzomela only appearing abundant. This may have been because we were compelled to keep to the scanty scrubbed ridges. I make a few notes on the species but till I have made further investigations in the area I would prefer to leave these incomplete notes open.

Summit area: We were such a short time on the summit that it would not be worth while making full notes of this area and such observations as were made will be found under the species concerned in that of other zones at lower levels.
TAP AREA: Coastal NW Mountains, (Mt. Panie Area)

Tuesday, 1st August, 1939

Weather: Sun and cloud, light west wind, clouds 60%.

Habitat: Kauri pine forests at above 5 thousand feet A.S.L.

Mountain top.

Philemon.:
Philemon: Female AD, 1/2 minus, repose.

SOFT PARTS: Usual
SHOT: 12:30 P.M. Wght: 49.5 gms.
SKL: C.O. STM: 1/4 chewed blossoms of mountain shrub.
MOULT: Nil ABR: W/T: nil. Some transport damage.

AEGOTHELES s.:
Aegothel: Female AD., 1/1 plus., diam. largest oocyte 3.5mm., 2nd. 3mm. and many others a little less. Damaged gonads.

This specimen was collected on the coastal flats as the party were returning along the coast after descending from the summit of Mt. Panie. The gun was loaded with large shot for flying-foxes and resulted in considerable shot damage to the specimen. Many feathers on the breast were carried clean away. A great number of stitches had to be made in the skin and both wings were damaged, but a rather poor quality skin was made from the remanants.

IRIS: pale transparent pinkish, mauveish tint with the light at certain angles. Eyelid edge, dull brownish.
BILL: Warm black, brownish tint towards base.
LEGS & FEET: Nigger brown shading to black at the toe tips.
TOES: dark horn with a comb on the inside of the middle claw.
SHOT: 8:30 a.m. One day past full moon.
WGT: 77.3 gms. (? damage) WING: 183. TAIL: 136
SKL: C.O. STM: 1/1, flower frequenting night-moths.
MOULT: W. rel. shot dam.
	TL: covs 0. ABR: W/T. nil
	Body: nape 0.

NATIVE NAME: KAPA-RU-ITCHEN.

NOTES: This species to this observer seems more akin to Eurostopodus of Australia or to Caprimulgus of that country than to Aegothel. It has the white on the chin divided as has C. but is darker on the back being more like Cayley's plate VII. (What Bird Is That). No. 21. The greyish markings are very large and
3.4.1 Examples

Example 1: Given a function f(x) = 2x^2 + 3x + 1, find the derivative of f(x).

Solution: To find the derivative, apply the power rule to each term:

\[ f'(x) = 2 \cdot 2x^{2-1} + 3 \cdot 1x^{1-1} = 4x + 3 \]

Example 2: Consider the function g(t) = \cos(t) + \sin(t). Find the derivative of g(t) with respect to t.

Solution: Using the rules of differentiation for trigonometric functions:

\[ g'(t) = -\sin(t) + \cos(t) \]

Example 3: If h(x) = \int_{0}^{x} e^{t^2} dt, determine h'(x).

Solution: By the Fundamental Theorem of Calculus, the derivative of an integral is the integrand evaluated at the upper limit of integration:

\[ h'(x) = e^{x^2} \]

These examples demonstrate the application of basic differentiation principles to various types of functions.
NOTES: Aegotheles (continued)
pronounced, doubtless a case of camphlage to suit the light
coloured bark of the Noulie. In fact I believe this is a bird of the
Noulie absolute. Its gape is large as expected in this species.
Its flight is slow and laboured, somewhat undulating or one might
say humping. (The effect can be produced by opening the hand palm
downwards, fingers together and humping the hand at the knuckles),
the tail appearing somewhat heavy. It is a species much closer to
the swifts than the owls as the legs are very thin and weak and
are probably useless for normal perching. The species I think
only perches on a large flat broad branch in the attitude of the
night-jars. It sleeps in the day on a flat limb near the ground
or on a fallen tree or large branch on the ground, in a swamp or
long grass or ferns. It has several times been flushed in the
day by a local white when deer hunting on the Noulie forested
hillsides, his dogs putting the bird up. It never flys far but
quickly pitches to the ground in a near by patch of ferns or grass.
The peculiar comb on the middle claw may be some assistance in
holding large slippery powdery moths on a branch while the bird
tears it to pieces. Thought the gape is large the throat seems
small.

Friday, 4th August, 1939
Weather: Rainy and stromy, clouds 100%. Wind strong East.
Habitat: Coastal coco-nuts and Noulie.

ACCIPITER f. (Attacking Domestic chickens when shot at dawn.
Accipiter fas. Vig. Male AD., 1/1 plus, white,
(L.T. 24x12mm. R.T. 20x11mm)
SHOT: 6:15 a.m. (sunrise) WGH: 264.5 gms.
SKL: C.0. STM: 0/0, empty.
MOULT: Body: powder-down C.
Seemed large for a male though wings are normal.
TAO AREA: Coastal N.W. Mounts. (Mt. Panie Area)

Saturday was rainy, Sunday the 6th Aug. fine and sunny.

Monday, 7th, August, 1939.

Weather: Fine clear sunny.

ATTEMPTED TO REACH THE CAMP WE HAD ESTABLISHED AT 4000 FT. A.S.L. BUT HAD TO TURN BACK FROM ABOUT THE 1000 FT. MARK AS THE TRACK WAS VERY STEEP AND WAS DANGEROUSLY SLIPPERY.

Some shooting was done on the way down but nothing unusual was seen or heard or collected.

SK. No. 75 GERYGONE:

Gerygone: Male AD., 1/2 minus, yellowish white.

SHOT: 1 p.m. At sea level. WGHt: 6.45 gms.

SKL: C.0. STM: 1/1, small insects & Insect eggs,


SK. No. 75A. CLYTORHYNCHUS:

Clytorhynchus p.p.: Male AD., 1/4 plus, black.

SHOT: 2 p.m. WGHt: ?

SKL: C.0. STM: = 1/4, few insects.


Tail: Θ.

Tuesday, 8th, August, 1939


Habitat: Climbing to 4 th. ft. Camp. See other notes.

Birds: Natives mentioned tale of Megalurulus, if it calls on the right hand all is well but if it calls on ones left the project he is engaged on is doomed to dissapointment. Also that when Leptomyza gives its xylophone call it means rain.

Collected at 2500' a specimen of Leptomyza with its ear coverts a deep ginger. Natives speak of there being two species this one and the plain eared one. As they speak of one being large and
one small they may be correct but as both inhabit the same area
and are seen together it seems more likely that this is an age
mark or breeding plumage or some such, but will mark these
specimens with a sub. sp. mark in the log till the position becomes
clear.

During the night very great numbers of petrels were heard passing
over the camp (4000 ft.) all the night long, not as is usual with
these only at certain hours, and from the calls I would have
thought they were *Fregata albigularis* but the next morning a
burrow, where the bird had been heard calling at night, close to
the camp was investigated and though no bird was obtained from it
some feathers were which seemed to be those of *P. lherminera nugax.*
It is more than likely that as on Tanna and the Southern New
Hebrides there are several species of petrels nesting in these
hills. Burrows are very scattered owing to the soil being only
sufficiently sandy in small patches for them to burrow. Later
attempts will be made to collect.

SK. No. 76. *Leptomyza* sub-sp.

*Leptomyza* sub-sp.: Female AD., 1/2 minus, repose, poss. never
bred yet.

**SHOT:** 11 a.m.  **ALTITUDE:** 2500' A.S.L.

**SKL:** C.O.  **STM:** 1/4 , kernal of areica palm nut.

**MOULT:** Nil  **ABR:** W/T: nil/

**SOFT PARTS:** Iris: dark brown. Bill, up M., black,
Low. M., horn with black tip. **L&F,** livid flesh
Wattles: Orange yellow, ear coverts (feathers) ginger.

NO WEIGHTS OF BIRDS ARE POSSIBLE ON THE MOUNTAIN AS EVERY OUNCE OF
MATERIAL CARRIED UP HAS TO BE CONSIDERED. THE PEAK OF PANIE IS
ONLY 3 1/2 MILES AIR LINE FROM THE COAST AND IT IS OVER 5 THOUSAND
FEET UP. NATIVE CARRIERS ARE VERY HARD TO GET AND ONLY TWO WERE
AVAILABLE FOR THE CLimb.
Odd showers during the night and morning of the 9th. set into continuous rain early on the ninth and made collecting impossible. This rain continued without a break till the early morning of the 12th. The camp was a washout in more ways than one. Food running out ropes were used to come down the slippery tracks to the coast. Later an attempt will be made to collect on the mountain. With better luck I hope. Inches of rain fell and the ground was completely saturated, even to rising through the ground forming the floor of the tent. The tent was left pitched for the return attempt.