

THE LAST LETTERS OF JOHN MacGILLIVRAY.

By TOM IREDALE.

The name of MacGillivray will ever hold a foremost place in the Annals of British Ornithology, as William MacGillivray (1796-1852) fought a way from obscurity, through almost unbelievable hardships, to attain the post of Professor at Aberdeen, Scotland. The vicissitudes he suffered have been told by a sympathetic recorder, but those of the son are not so well known.

It may be interposed that the name of MacGillivray is not unfamiliar in Australian Annals, as a son of William, and younger brother of the subject of this article, was the well known Paul Howard, of Bendigo, Victoria, an authority on polyzoa.

The son John started very early on a brilliant career which apparently ended on a low rung. This conclusion does not seem just, now seventy years have lapsed, and the reading of this article will, I hope, lift the veil, and allow his life's work to be better appreciated, any lapse being overlooked through his services to Australian zoology.

Mr. John Brazier, the old-time Conchologist, told me about MacGillivray, contradicting some of the traditional tale, but I had no proof to substantiate Brazier's account. This year, a chance remark, brought to light the evidence that seems conclusive and of great importance.

Mr. J. S. P. Ramsay, the son of Dr. E. P. Ramsay, at one time Curator of the Australian Museum and the foremost Australian zoologist of his time, has loaned me a series of letters written by MacGillivray to his father when the latter was an enthusiastic youth. These letters are, without doubt, some of the most interesting letters dealing with natural history that have yet been published. Mr. Ramsay has generously allowed me to copy these and reproduce them here. Moreover, he has loaned me the famous three-barrelled gun MacGillivray used on his collecting trips and a photograph is here added, as well as the only picture drawn of MacGillivray.

To begin at the beginning, John was born at Aberdeen, Scotland, on December 18, 1821 (the date usually given being 1822). Apparently he was precocious as he was selected as Assistant Naturalist on the "Fly", a surveying vessel that visited Australia in the years 1842-1846. He then was appointed Naturalist on the "Rattlesnake" which surveyed the Australian coasts between 1846-1850. Again he secured the position of Naturalist on the surveying vessel "Herald" and left England in 1852. From this point until his sudden death in Sydney on June 6, 1867, little of reliable import was known about him, but lots of rumours of the downward trail.

I will let this series of letters speak for themselves and then add some comments. When the "Herald" reached Sydney, MacGillivray left the service (it is said in disgrace) and became a professional collector of botanical and zoological objects, travelling through the islands, but no details were known.

These letters are the last he ever wrote, but through their acquisition, Mr. W. A. Rainbow, Librarian at the Australian Museum, brought to me a small pocket book which had belonged to MacGillivray. This is illuminating as it proves to be his working notebook, full of notes of the objects he hoped to collect, the cost of collecting, the results of his expeditions, and more important a sketch of his travels, and notes of the articles he had written. From this we can fill in the years, and realise his energy and

knowledgeableness on every zoological subject, while he was most of the time depending on botany for his living.

It must be remembered when reading these letters that they were written in the field without reference to anything save his own memory; written by an active hunter at the end of a day's work, and I think readers will agree with me that the bulk of the rumours about his incapacity were, to say the least of them, much exaggerated, if not entirely unfounded.

The first letter is addressed to E. P. Ramsay, Esq., University, Sydney, from Grafton, July 4th, 1865, with a note added, July 9th, 1865, and begins: "I received yours of the 29th ult. last night on my return after a fortnight's absence and answer it now, as I have some leisure, the last I shall have for a week, in all probability, as we have 21 skins of kangaroos to fill—of various sizes, from an old man upwards of 6 feet high down to the little rock wallaby, and including 7 full grown wallaroos, great bulky creatures. I may have made a mistake respecting the naming of a sternum marked *Geopelia tranquilla*—in the first batch—as in the last lot there was a second one, the two ought to agree. At any rate, the second one cannot have been confounded with a *Hiaticula*, as I had not been shooting any of the latter birds about that time. The sterna of pigeons and some grallators are remarkably similar. At any rate, carefully compare the 2 sterna alluded to, and if the first does not agree with the second and resembles *Hiaticula*, it must be *H. nigrifrons*, the only *Hiaticula* or small sandpiper except *Erythrogonys* I have shot in this district. I have never seen *Lathamus discolor* in this colony, where it must be rare. I met with it abundantly in Tasmania. Regarding *Nettapus*—The 'faint mark around the chest' indicates a male not in full plumage. The under tail coverts are black in the male when in full plumage, but in the female always remain light. The mottled and banded markings on neck, breast, etc., sufficiently indicate the female at all times, besides the want of the metallic green, etc. Respecting *Ptilonopus Swainsoni* & *Ewingi*, although closely allied, are very distinct. The former I never shot. I have seen a large number of specimens in one collection from the Manning, in which there was not one of *Ewingi*—a bird I have shot at Port Essington, Cape York, and elsewhere on the N.E. coast down to this place. Wilcox, however, *thinks* he has seen *Swainsoni* here also. I have not. *Ptilonopus Ewingi* is *smaller* than *Swainsoni*, has the crown rose pink and *not* deep crimson, breast pale greenish grey and *not* dull green, centre of abdomen rich orange and *not* lilac, tail feathers tipped with greenish yellow and *not* clear rich yellow, etc. I don't know what your specimen with purplish violet on back of head can be unless I saw it. Lesson described a New Guinea bird, *Pt. cyanovirens*, to which G. R. Gray referred well coloured in the head specimens in the B.M. shot by me on Wallis Islands, Torres Strait, referring other specimens of mine from same locality to *superbus*. Now I *know* they are the sexes of the same species, and Gray has since come to the same conclusion. *Superbus* I have also got at Cape York, but not, I think, elsewhere on the mainland. The young of *Ewingi*—sometimes at least—wants the pink on the head—at least, I have such here, which I wouldn't skin. You wish to know of our trip inland. We took a light dray which Wilcox drove, while I rode another horse. We had also a kangaroo dog—and when after a week Wilcox rode in to Grafton—for supplies—he brought back a pack horse in addition. We camped in a gorge of one of the valleys in the mountains through which runs one of the tributaries of the Urara, itself a branch of the Clarence. Several days elapsed before we were joined by the party of blacks without

whose assistance we should not have succeeded. We might, of course, have got shooting enough and some kangaroos, but our object was to make a collection of fine skins and skulls of as many sorts as could be procured at one time, and we persevered until we did so. I went out with the hunting party the first day we all mustered. I had, previously before going after the larger animals, gone out alone and shot rock wallabies, besides a lot of honeysuckers (*Ptilotis Auricomis*, *Mel. sericea*, etc., not found about Grafton) around the camp. Well, the first day we had 6 blacks, one of whom was furnished with a gun, and Wilcox and I had each his own, of course. In the long grass on a flat a mile up the valley we put up some kangaroos, to which the dog and blacks gave chase, making a tremendous noise, and so puzzled an old female that she did not notice me until I had given her a No. 2 cartridge, when she made a bolt, and after running 20 or 30 yards gave up the ghost. Planting the body, we ascended a steep mountain towards a gap leading into another valley in hopes of seeing some grey faces (*Osphranter Parryi*). Wilcox and a black with a gun skirted the range high up, while I did the same lower down, the whole of us forming an irregular line extending a mile. None of the shooters, however, but myself saw any. I observed 2 standing reconnoitring on the other side of a gully with no cover for me, so did not expect to get near. However, I tried and crawled a long way, the animals intently listening and looking another way at one of our blacks higher up. When I had got up to about 100 yards one suddenly bolted, and as there was not an instant to be lost I fired at the other still standing up, a little one beside her. She rolled over towards me into the gully, and when I came up she was dead—my first grey face—the most beautiful of all the kangaroos. Again in an acacia scrub I saw through the trees the head and ears of one partly covered by a tree, and on the instant of firing the creature bolted and I missed, but the shot rounded up about a dozen more, not one of which gave me a chance with the second barrel. They all went up the hill like a flock of sheep. Some time afterwards while following a sharp stony ridge where I started and shot a fine grey wallaby (*Halmaturus ruficollis*) I heard great shouting in a gorge below, and had not to look out long when another very fine grey face came in view, about 10 yards off, making right for me. Of course, he speedily diverged when a charge of (loose) shot made him roll over and over and stop. I was reloading, thinking it all right, when he got up again, hobbling along, and, as I thought I might lose him among the rocks and brushes, I was reluctantly obliged to give him a cartridge as soon as he had got far enough off. Then Wilcox joined me, and soon afterwards we put up a wallaroo, which he wounded, and half an hour afterwards saw again and shot. For the second time we stopped to skin the game when, of course, the blacks ate as much as they could stow away. We saw several more animals that day, one of which, a grey wallaby, was shot by a darkey. This was our first day's hunting. So I stayed in camp skinning while the others kept me going. As I don't care much about shooting *now*, it was a capital thing for my companion, who is extremely fond of shooting—and of this kind above all others. One evening at dusk when some of the blacks were approaching the camp from the rocks above one of them raised the usual noise to alarm and distract the attention of some animal. So throwing down my skin I rushed to the tent for my gun and just as a wallaroo which had slipped down a rocky gully and on emerging was crossing a ridge going from me at full speed. I fired hastily but not the less correctly, as on going up to look if there was any blood I found the beast itself lying on the

very spot still breathing but done for. The distance was found to be 75 yards—a long shot for a No. 2 shot cartridge to *kill* an animal as heavy as a sheep. So you see, the wallaroo even came to me. So next morning, before breakfast, as Wilcox took a spell at the camp that day, I went to return the visit. Although alone—the blacks not liking to turn out until the sun was well up—for the mornings were cold and frosty, I managed to catch a wallaroo asleep—about as difficult I imagine as in the case of a weasel—and whistling roused her to meet her fate. Within an hour afterwards I suddenly started 2 fine big ones—like the first—for curiously enough we saw not one young or half-grown wallaroos—all were adult or nearly so). They had been basking in a secluded hollow near a dead tree amid blocks of stone and grass trees and low bushes in a place where they had the full benefit of the morning sun. So I pitched into them, right and left, and if there had been a third I believe I would have killed it also with my third or rifle barrel, because snap shooting is that in which I feel most confidence in myself. While skinning them I took the opportunity of getting a number of specimens of a curious dipterous insect, like those on owls, kingfishers, etc. It is peculiar to the wallaroo. I suppose on account of the long alpaca-like silky wool, affording firm (indecipherable). However, I am giving too much of a yarn. Suffice we got fine skins for stuffing, 21 in number, of—

Macropus giganteus.—Kangaroo, ♂ and ♀.

Halmaturus ruficollis.—Wallaby, ♂ and ♀.

Osphranter robustus.—Wallaroo, ♂ and ♀.

Osphranter Parryi.—Grey face, ♂ and ♀.

Petrogale penicillata.—Rock Wallaby, ♂ and ♀.

Also skulls of all the above and of *Halmaturus ualabatus*—the last of which—a *very* large male—had the ears so torn, probably by a series of combats, as to be unfit for a skin. Besides, we saved the skins of all the others with good fur, and brought in with us to be eaten 2 carcasses of wallaroo and 3 tails of do. for soup. We had killed in all 42 head of large game. Even on our way back we had a grand opossum hunt and a splendid run with the dog, but as my mare carried saddle bags filled with heads I could not push her so as to be in at the death. After a fortnight's fine weather it commenced to rain as we were unloading *at home*. As I think I have said quite enough about kangaroos this time, I must conclude for the present until Sunday and go on with my work meanwhile.

Friday Night: We have completed stuffing the batch of mammalia much sooner than I anticipated, and they make a magnificent show in the verandah—19 in number—for we left out 2 which were wanted for another purpose. I do not believe that any skins of mammalia got and cleaned in the bush and, of course, much knocked about ever surpassed them—in fineness of fur (it being winter time)—in carefulness of preparation—even the feet being skinned and sewn up—and in the filling *naturally* and finishing off. And *now* that all has been accomplished in a manner perfectly satisfactory to W. and myself, I feel pretty sure that ere long we shall have another go in for these creatures—skeletons chiefly this time. I do not know anything about how the Adelaide Museum is supported, but as you correspond with Waterhouse, we should be much obliged if next time you write you would say we can supply him with wallaroos, etc., skins, skulls, and skeleton. Only *some* of this lot are for Melbourne, as Wilcox sup-

plied them and the Sydney Museum before. I have picked out the birds you want and some sterna which we send as before per Agnes Irving. On looking over the skins to-night, I see that the ♂ of *Ptilon. Ewingi* is considerably brighter in the colours, especially on chest and under tail coverts than the female. In *Cinclosoma* neither W. nor myself ever could detect any sexual differences. The spots occasionally differ, but as in *Pitta* I have sometimes seen an unusually finely coloured specimen turn out to be a female.—Yours truly, John MacGillivray. July 9th.—I also enclose 2 trachiae of *Geronticus*—old and young. The *Melithreptus* of last trip turns out to be *albogularis*."

These last two lines are added at the front below the address, the space after the signature being filled with a small account headed "Sundries No. 11".

The next letter reads:—

South Grafton, July 28/65.

Dear Sir,—

Yours of the 17th instant reached me in due time and, as I am in the way of writing to-day, the steamer being overdue, I may as well pen a few remarks, as there will be a little parcel of sterna for you. The two Australian species of *Eurystopodus* I have frequently started from the ground under bushes in various parts of the N.E. coast, but never found the nest. Of *Dacelo Leachi*, however, which you also mention, I got the eggs at Port Curtis, on Facing Island, opposite the settlement not then in existence. The nest was scooped out of an ant's nest on a tree just as with our jackass here. The two fine Cape York kingfishers—*Tanysiptera Sylvia* and *Halcyon Torotoro* (flavirostris of Gould) I found during my last visit to that place breeding in the large ant hills, the former abundantly, but of the latter I got only one egg. Of the long tailed one I have had a basketful brought me at once together with live specimens caught in the holes. Of *Mycteria* we have not got a skin. That of which you got the sternum was unfit for skinning, but the skull now forms part of the collection and looks well alongside of the pelican. The cold weather is unfavourable for macerating heads, consequently I have not done much lately in the skull way and the No. 1 collection is at present stationary at 105 species, and No. 2 at about 60. The 15 heads of mammalia, however, that I lately got, have now been cleaned and look well. I am glad you mentioned to Waterhouse about the kangaroos. There was a long notice in the local newspaper about them, and in consequence we have had many visitors; I expect a large batch shortly, according to notice. A small flock of spoonbills lately appeared on our swamp. I was out shooting ducks on two occasions and saw them but could not get near. Wilcox got closer on horseback and told me that he thought some had yellow bills. So I went out specially next day, my gun loaded with 2 cartridges and a bullet. As I could not at all get within shot and there was no shelter whatever, I managed to separate the long line when they were seated, and a straggler in making a sweep to join the others forced me to fire as my last and only chance, although apparently a most absurd one. However, I got it, but it was the *regia*—nor, although, I was anxious to determine the point, was I ever near enough to see the colour of the bills of the rest which flew out of sight and I have not seen them since. Ibises have not yet left—nor have the stilts, but as the days are now getting warmer I suppose they will soon be off. I have not been shooting much lately, except for the last 2 or 3 nights at bats, of

which I got *Scotophilus Morio*, *Sc. Gouldi*, *S. pumilus*, and *S. nigrogriseus*. Formerly I had obtained *Oligotomus Australis* (a new species and supposed new genus), *Nyctophilus Gouldi*, *Rhinolophus megaphyllus* and *Rh. auran-tius*. The only opossum mouse (*Acrobata pygmaea*) I have seen here was found yesterday morning drowned in a washing tub at a pool 200 yards from this where I have caught many a fine eel and shot many a bird beside ducks. When sitting there in the warm weather cleaning skulls I have been interested to see the birds from the bush adjacent coming down to drink. The Chalcophaps was my favourite, and seemed a very thirsty sort of bird, paying oft-repeated visits, as I would not shoot it *there*. *Saturday night*: Yours of the 24th arrived to-day. You are quite right I find about *Oreocincla* versus *Cinclosoma*. The skins sent were certainly *Oreocincla*, as is also the sternum—that of a male I find by my list. The ground thrush is a quite different bird—which I have shot in Tasmania and at Brisbane Water—the sexes also vary very much—the female wanting the black band and black throat and in *Oreocincla* they are alike. The *Cinclosoma* hen I have seen only during our late trip to the mountains. The best way will be to make the pair of thrushes sent you in a parcel and directing them to Wilcox give them to Underhill. I'll make up a fresh account for him and enclose for you a copy so that there will be no mistake on either side. Since I wrote the previous part of this *Platalea flavipes* has turned up and I send the sternum. To-day I shot among other things a *Plotus Novae Hollandiae*, but defer skinning it until to-morrow. I got also the best straw-necked ibis of many shot since they appeared here. Another *Platalea regia* of which I have kept the head and will send sternum next time and in haste.

I remain,

Yours truly,

JOHN MACGILLIVRAY.

In the notebook is pasted the draft of a note as follows:—

“ON OLIGOTOMUS, A SUPPOSED NEW GENUS OF BATS.

While residing in the Clarence River district of New South Wales I procured specimens of a bat which at first was supposed to be an addition to the six species of *Scotophilus* described as Australian. On more careful examination, however, the dentition was found to differ remarkably from that of the latter genus, for the upper incisors were seen to be only two in number and not four, nor were the molars furnished with the characteristic acuminate processes of *Scotophilus*. The genus *Nyctophilus* as originally characterised by Leach is stated to have only 2 incisors in the upper jaw, but the type of the genus *N. Geoffroyi* as well as *N. Gouldi* of Australia with which it was long confounded are provided with nasal appendages. In Tomes' Monograph in the Proceedings of the Zoological Society for 1858.”

Afterwards in the notebook the following was added:—

“*Oligotomus*.

♀ February 12/66.

Colour on shoulders, back and flanks where the fur is long and silky, of a fine chestnut, mixed with a few pale hairs, fur of head shorter, rather more inclined to grey, grizzled with pale hairs, whole of lower surface fawn coloured.

Snout to end of tail, $5\frac{1}{2}$.

Tail—bare portion only—1.6.

Forearm, 2.1.

2 and 3 phalanges, 2.0.

Leg, 1.0. Extent of wings, 14½ inches.

Hair on sides extending on the wings almost to a line between the knee and elbow. Ears very widely apart.

This individual was flying earlier in the evening than usual and with an unusual hovering flight."

Many notes were added giving details of the genera of bats as he received them from his correspondents, some pasted in as received. Little pencil drawings of the heads and details of the ears and teeth also made by MacGillivray suggested that he had inherited his father's facility with the pencil. In every case great care is shown, again suggesting his father's skill as the father was called "the accurate MacGillivray" by one of the hardest critics of his time.

To continue with the letters:—

Grafton, August 9th, 1865.

"Dear Sir,—

I have only a few sterna which it is scarcely worth while to send. The new ones I may take down from the list on the wall opposite my seat—

Fulica australis.

Podargus megacephalus.

Herodias plumiferus.

Graucalus mentalis.

Astur novaehollandiae (albino).

Plotus novaehollandiae.

Pitta strepitans (2).

Lobivanellus lobatus.

Ichthyaetus leucocephalus.

Regarding the nidification of the spoonbills of Australia I know positively nothing. It is only here that I have seen the birds alive. About bats it is only lately that I took to getting a few and we have only 4 species of *Scotophilus*, viz., *pumilus*, *nigrogriseus*, *morio* and *Gouldi*. Previously we had sent some to Melbourne, including numerous specimens of a largish one not belonging to any recorded Australian genus. The dental formula agrees with *Nycticejus* and it may belong to that genus. I shall soon know, however. I had described it minutely and provisionally called it *Oligotomus* from the small number of its cutters. They had it previously in the Sydney Museum marked and published in the catalogue as *Vespertilio macropus*, a bat to which it bears neither generic nor specific resemblance. You ask about one with the tail produced beyond the membrane. That is *Molossus wilcoxi*. It occurred once before my arrival here and has not been met with since. Several were found together in a hollow tree. I could not undertake to procure it.

. . . However if you want bats it is right to mention that unless specially ordered all we have on hand will be sent to Melbourne Museum next time we make a consignment which depends on advice from Professor MacCoy—now overdue—regarding our kangaroos, etc. . . .

On this day last year (August 9th) I entered into an agreement with Wilcox which I have acted upon for one year. I am not satisfied with the result and when we square up it is not likely that I shall remain here. . . . I have just been out taking a turn with the gun. Two ibises were in the paddock and I could have shot them with cartridge from my window. A flight of flock pigeons came into the big fig tree where also I saw *Spherotheres*, which has I think been absent for a while. You wanted a ♀ so I shot one. I am now going across the water so conclude and remain."

Grafton, August 29/65.

"Dear Sir,—

Yours of the 23rd was received on my return from a trip to the Urara for Helix, etc., and since then I have been so unusually busy that I must defer sending the things until next steamer after this one. I must also postpone answering some points in your letter until then. You are, I must however mention, mistaken in including *Lopholaimus Antarcticus* under "old prices" as I never had a specimen in the collection until lately as the only one I got last year went for a skull. . . . It is now dark, although moonlight occasionally, and I have to cross the river and after calling at the steamer with letters go a long way out of town to see a sick friend whom I am doctoring as he was improperly treated by one of our medicos in the first instance and begged me to take him in hand which very reluctantly I have done, and in haste, believe me."

This recalls the fact that he was studying medicine and had nearly completed the course when he forsook it to take the chance of naturalist for Lord Derby on the "Fly". It is quite commonly asserted that he was only eighteen at this time, but as this took place in 1842 he was fully twenty, having been born in 1821.

Grafton, September 8/65.

"Dear Sir,—

I wrote very hurriedly by last steamer and I now more leisurely continue the subject. The two tracheae without labels I find must be of *Geronticus spinicollis* sent in No. 11 on July 11th. Of the three birds you want I can send only *Lopholaimus antarcticus* ♂. It is a showy bird and, although common enough in this district at times, I shot only one last season and consigned its head to the skull pot. The ♀ *Sphecothes* I should have got while the birds were here, but somehow did not do so. They are now absent, but will arrive soon and breed as they do every year in certain cedar trees near the house where I saw four or five nests which were not molested. Even should I not be in Grafton at the time they will be looked after, but I am almost sure to be back before they have eggs. *Eurystomus* will be here soon also. I knew several nests in spouts in our paddock, but there was no black about at the time to send up for eggs. *Podargus Phalenoides* may never occur again to me. The only specimen we had is now, I suppose, on its way to Europe in a collection. You speak about eggs of *Menura superba*. Some months hence I anticipate going to a place in this district where this bird is found, but the egg season by all accounts is long past. You do not allude to *M. Alberti*, the season for whose eggs is also past. *Psophodes* has young now, I suppose, for I yesterday saw in possession of a boy I know a young coachman which he had caught after a long chase and which he will probably succeed in rearing, for it was quite uninjured. *Orthonyx* I also know to have young, for on Tuesday last while searching for a thrush which I had shot I disturbed a young spintail which ran and flew off from near my feet calling out loudly when in a moment it was joined by an adult bird, which I naturally supposed to be its mother, but which on dissection proved to be a male. The nestling was so curious in plumage that I skinned it. It crept under a tuft of grass and was killed with the shot fired at the old one which was watching it. The young coachman, I may mention, has no white on the sides of the throat and neck as in the adult. I have lately on Monday and Tuesday been in a scrub where

I saw and procured several fine specimens of this bird, common enough here but difficult to shoot. Talking of this scrub, had there been any *Sphcotheres* in the district I would have seen them there with the other birds feeding on the berries of a certain tree. The orioles were a perfect nuisance. In one good tree there were about half a dozen which pitched into every other bird which came near except the regent birds—females and young males I mean—for they mobbed a cock immediately on its alighting on a top twig, and had I not been quite ready I might have lost it, and, while re-loading, the noise above and chattering broke out afresh, and on looking up they were seen to be having a set-to with a black satin bird, and after giving *this* its quietus I had serious thoughts of shooting all the orioles as a nuisance. The dull coloured satin bird gave way to them at once as readily as the little *Ptilotis chrysolis*. Among the sterna this time is one of *Sphenoacacus gramineus*, the sex of which is marked ?, for I could not determine it by dissection. I have the skin, however, but do not know the *outward* sexual distinctions—if any. Talking of scrub birds, *Pitta* must be breeding now, judging from the condition of the inward of them I have lately shot. The last one very foolishly began calling out when I had been looking for it on the ground, and a little way up, for this directed me to the bird, about 15 feet from the ground, among some foliage, an elevation I had never seen it attain before. About getting sterna “so white and clean”, the latter part is of course the result of patient picking with the scalpel and scissors, and the former I never trouble myself about at all. I sometimes, indeed usually, when skinning at night, place the sterna as roughly taken out in my basin for the night and clean them in the morning. At other times if I have time I clean them right off without any maceration whatever, except a washing, and hang them up in the verandah to dry. Of this the sternum of *Orthonyx* now sent is an instance; for not more than an hour elapsed from my taking it in hand until it was put away in a box with a label attached. However, maceration followed by bleaching in the sun will make sterna as white as may be considered requisite. Salt added to the water helps to extract the blood, and the grease may be removed with potass, but I never use either now. Were I preparing *skeletons* the case would be different. If blood is once effused in the cellular substance of the bone it cannot I believe be removed. As for skulls, I put the heads—minus skin, eyes and tongue—into a small covered jar, which I keep beside a log out of doors on account of the smell, and about once a week I clean with scalpel and syringe, such as have been sufficiently macerated. *In warm weather* a week or ten days is sufficient time, but the day before yesterday when making a delivery I found that some heads which had been in water for *two months* were not ready, while others not more than two weeks in water were cleanable. I don't shift the water at all after putting the heads in. Wilcox and I with a blackfellow start for the Richmond on Monday. We take a light cart and shall be independent of house accommodation. We make for Lismore (passing through Casino) 70 miles from this and shall locate ourselves in such of the cedar brushes as we find to be suitable for our purpose. Having horses we can make long journeys in any required direction without breaking up our camp. And on our return Wilcox goes to Melbourne, instead of going by next trip of Urara, as was at first intended, and it will not be until his return that I can make my run down to Sydney. It is, of course, useless to speculate on what we may get, but this much is fully certain, that we shall bring back a cart-load of specimens of some kind or other, unless prevented by accident or

other untoward event. And if everything else fails we might do a little business in the bushranging way, for we are not known there and will be provided with good horses and first-rate guns. I have just been out with a light to look at a nest with 2 eggs found to-day in a banana plant. The nest is dome-shaped, well lined with feathers. Egg (one which I removed) of a stone colour or French grey ground with a corona of umber brown or darker still outside of which and elsewhere on the egg are minute freckles of same, but showing a faint reddish tinge. I don't know what the bird can be. However, to-morrow and Sunday, I'll look occasionally in hopes of seeing and shooting the bird. Any communication during my absence will be forwarded, as there is a weekly post hence, via Casino, Lismore and Ballinah, and we shall make suitable arrangements. If you want any birds it will be as well to be in time as there will be a *complete* clearance on our return to make room for the turning over of a new leaf."

The mention of "bushranging" indicates that MacGillivray had a slight sense of humour, which was rarely displayed.

Per Grafton, December 14th.

Grafton, December 10th, 1865.

"Dear Sir,—

Your last of September 13th arrived here when I was absent and I did not get it until two months afterwards. Before alluding to my trip to the Richmond, I shall first notice some points in your letter. *Menura Alberti* which you wanted we did not get at all. We had intended devoting a week to it in one of its haunts, but were disappointed by the person who was to take us to the place. I heard it call occasionally and once saw one for a moment in the dusk of the evening running across a drawing road. The eggs you speak of we did not get. An *Orthonyx* nest was shown Wilcox by some boys who had taken out and broken the eggs the day before. The coachman builds a domed nest on the ground against a tree or on vines a little way up. One sawyer who collected birds at one time for Palmer had several times seen the nest, and a man whom I met at a place near Lismore told me he *then* had one in his garden with 2 young ones. Had he said eggs I would have gone to the place, but I had been out all night in the bush and did not feel much inclined to turn back merely to look at the nest. I myself found an empty nest answering to the description exactly, but had to pull it to pieces getting it down. It was nearly or quite completed. *Eurystomus* and *Sphecothers* are now—I am informed—breeding about the house as last year, and I suppose I shall get some eggs of both, but I have not had time yet to look about. The first time I take the gun in hand (I am heartily sick of shooting at present) I must get you a female *Sphecothers*. The *Monarcha* you speak of is probably *leucotis*, described and figured in the Supplement to Gould from specimens procured during the voyage of the "Rattlesnake". I shot it as far to the southward as Dunk Island, and I daresay its range extends as far as Port Denison. Of eggs again, I may say that we got scarcely any. Two of *Melithreptus albugularis* which I found on our outward journey were put into the dray unblown and half an hour afterwards were smashed by the only capsiz we had. The nest I afterwards used towards filling a pademelon of an undescribed species by the bye unless it is the one which Masters told me Kreff was going to describe and call after him. *Pardalotus melanocephalus* we got about a dozen eggs at one of our halting places on the road. Nest and eggs of

Rhipidura motacilloides, magpie, titlark, spurwinged plover, Ptilotis chrysothis, and a nest and egg of *Sericornis citreogularis*. I saw the bird fly off this. The nest is extremely curious, the whole structure measuring about 2 feet in length. I got another pensile nest of a different construction with 2 eggs, but did not see the bird. The eggs were nearly ready for hatching, and are longer and more pear-shaped than in the other. The colour is different, but the same as one I got last year in a very different nest. There is no other bird I know of which could have made a nest of this kind with so large an egg bigger than any other *Acanthiza* or *Sericornis* would lay. I believe they are all the handiwork of *S. citreogularis*. Of these pensile nests I have seen from a dozen to twenty or more in a day when in the cedar brushes after rifle birds. I shot down some, only one of which *Sericornis frontalis* had eggs (5), but the chicks were so large that I could not blow them. The old nests probably hang for years, for no wind can reach them. On the last visit, however, which I paid to the brushes in order to get two more rifle birds to make up my number, I had a horse, and as both were by the side of drawing roads, many years ago, there was no difficulty in conveying them back to the camp, and I put them in the bottom of a can with large shells packed in moss so that they reached home in good condition. Talking of shells, we made a noble collection, and there are several species which I at present believe to be new. The largest are Falconari and Richmondiana. We made a fine collection of insects, at which I am now working, making up three ordered sets. Of birds, of course, we got plenty, but as our chief object was to get saleable ones, we chiefly looked out for rifle, regent and satin birds, shooting dragoons and lories and the like when they came in the way. A remarkable little bat is quite a novelty. Of the birds the most remarkable one is an *Atrichia* which may not be *clamosa*, so I do not send sterna until that point has been settled. A *Sphenoecacus* is in the same predicament. I never saw *Mirafra* alive before. It is a beautiful songster, more sky-lark like *Cincloramphus* and greatly its superior. Four which I shot one day were all males. I could not attend to sterna. I had so much on hand at all times. I lost a lot in a water hole which dried up, and allowed some creature or other to take them away. It is very well to clean sterna when you have water in plenty, a basin, and a house. Of the first I had sometimes none to spare. Not enough to drink, especially during upwards of a month when I was alone (for Wilcox left me there and came back again), and of the 2 other never had either. Last night, for the first time for 3 months, I slept in a house. I got some fine ferns for my sets, and altogether am very well satisfied with my success. As soon as things can be got ready will clear off at Melbourne and begin afresh and meanwhile in haste."

This is the first mention of the now famous "*Atrichia*", which recurs in succeeding letters, and it may be noted that the specimen Ramsay secured became the type.

The brief account of the hardships undergone on this trip hardly suggest the strain on his weakened constitution, which led to his untimely death eighteen months later.

Grafton, December 24/65.

"Dear Sir,—

Yours of 18th inst. was received yesterday. I might pack up to forward by the "Grafton" the birds' skins you mention to which I have added a female *Sphecoheres*, a bird about which you repeatedly inquired and which

I got as soon as I had leisure after my return from the Richmond to go out with the gun. I also shot a young male just assuming the adult plumage, and from the condition of the testicles I judge it had paired and had a family. I have been too late for eggs of Sphecotheres. I induced on three different mornings 2 blacks and a gin to look for eggs, but all the nests had young ones, although one besides 4 newly hatched young contained an egg with a large chick. With much care I managed to extract the youngster and the egg is a good enough specimen with a large hole. However, as the egg of *Sericornis citreogularis*, which you wanted, and which cost me a great deal of trouble to procure and bring here (with the nest), is not wanted now perhaps Sphecotheres egg is in the same predicament. I have lately—for the first time here—procured the female cowhat. Of this bird we formerly had males only, including one most remarkable specimen which had . . . about one half of the black feathers of the adult male. You frequently directed my attention to the *Anseranas melanoleuca*. Yesterday I shot two, one of which was a very fine gander, weighing 6 lb. So I thought I would skin it, although in a woeful plight from the mud through which I had to chase it and where I very nearly got bogged. My companion—a friend of mine, who gives a grand dinner on Boxing Day—coveted my gander, so I gave him the goose, a very large swan, and a lot of ducks—for we had two horse loads of game, and I might have got more if inclined, but I took little interest in the matter and none in the shooting. By dint of washing with soap and plenty of water and a brush the bird became all right. . . . The tracheae is extremely remarkable on account of its great length and convolutions between the skin and the chest. As for shells for W. Denison, of which you want 6 or 7 species, as I have not the slightest idea of what is wanted, it is useless to send any. You can have fine specimens of *Helix Falconari*, *H. Richmondiana*, and *H. Bidwilli*, *H. mariae*, a small undescribed *Pupina* and a *Helicina*, which I also believe to be new. There are many other kinds as *Porteri*, *mansueta*, *ammonitoides*, *Moretonensis*, *ptychomphaea*, etc., but we have none of these for sale except in lots. There are three kinds of *Unio*. We are awaiting a reply regarding shells from Dr. Cox with a view to sending a quantity to England where at least they will be appreciated and fetch their value. They have not been got without expense, and a large amount of labour of which shell purchasers in general know little and care less. However, this is Christmas Eve, and I have been at work all day and must conclude.”

“N.B.—The young ♂ rifle bird is the fourth mate taken by a female whom I widowed as many times at various intervals, extending over a period of two months. The first 3 were full plumaged, the last as you see. Yet it called a loud double note like an old male, and I saw it on the *same* large bough on which I had shot two of its predecessors, going through the usual antics, minus the rustling noise of the wings, which its wings could not accomplish, although the bird tried it. Other instances occurred to me to make me certain that sometimes at least the male pairs in the second year.

“December 26th.—The parcel goes on board the ‘Grafton’ to-night. A black has been looking for Sphecotheres eggs this morning—some young, but no eggs.”

Grafton, March 25/66.

“Dear Sir,—

Your note of the 15th instant reached me yesterday per “Urara” and I reply by same steamer. Also, according to request, I forward such speci-

mens as you ordered in a previous letter, viz., sterna—eggs of *Pardalotus melanocephalus* and of *Ptilotis chrysotis*. Of the former I have not now a dozen, so send only 8. Of the latter I did not say anything about the nest, for I well remember having used it for filling out a skin and send the 2 eggs only. I saw the bird on the nest frequently. Your answer about the egg of *Sphecothes* was too late, as well as your offer about the nests and eggs of *Sericornis citreogularis*, to which, however, we could not have acceded. *Sphecothes* this year did not breed as last in the small cedars near the house, and I had much trouble in getting even one egg. So much so, that, although I afterwards saw 3 nests in a cedar in the touch of untouched brush, I never had curiosity enough to re-visit the tree. The blacks come and go in a most uncertain manner. Yesterday I was fortunate enough to get some in the humour, and took 8 away with me in the boat to a reserved island in the river to hunt for the brush opossum, a series of which—the grey and black—♂ and ♀, I wanted (and got) for the Adelaide Museum. I got a nest of *Donacola castaneothorax* the other day. This I enclose in the parcel, as probably you have not got one so perfect. There were 6 eggs, but as this bird has for some years back been as common a cage bird as any of the "Rockhampton Finches" to be seen by hundreds in the market, and breeds freely in captivity (as I have seen in the Botanic Gardens), you have doubtless got some. I send a few sterna as per list appended. None of them are very recent, as I have given up preparing them, having got as I thought 100 kinds, although I now find I am a few short of that number. Still, although I have got even too much to attend to, I would undoubtedly save the sternum of anything very curious that might turn up. That of the Richmond River *Atrichia*, which contrary to my expectations agrees with Gould's description of *A. clamosa* from Western Australia, is very singular. In habits the bird resembles the coachman. We got only 2, both males. One goes to Adelaide, being on the extensive list of things ordered there; the other will go to Melbourne, along with all our best things, to the Intercolonial Exhibition. Both Wilcox and I are on the Grafton Committee, and our joint contribution will at any rate make a respectable addition to the Clarence River Products, while it will answer our purpose very well, as the lot will not come back again and I shall have plenty of room for the new stock. It had been intended long ago that Wilcox should take our things to the Melbourne market, but he never could see a clear chance of getting away for a month, so tied up is he here. And with myself, although I was in hopes of having a run down to Sydney for a week, and even now when I have an additional and most urgent reason, viz., to get medical advice, I am afraid I shall not be able. Next month I must go for 3 days to the Nymboida to get a fine specimen of the Murray River Cod, and I must go a week to the Urara Mountains for a grand kangaroo hunt to get flat skins, and my visit to Sydney seems again to be further off than ever.

As we have a commission of importance for some Richmond River things, I shall probably take a trip thither in June-July, when the *Menura Alberti* (some of which are ordered) is in the best plumage and is breeding. It will be extremely difficult to find rifle birds then as the cocks will not be calling. The insects paid us better than anything else, and we have now on hand a third order for Richmond Coleoptera from Castelnau, besides having supplied Mr. Macleay with a set and the Melbourne Museum with another, including all our specimens of the remaining *opteras*. I little thought at the time the beetles would have turned out so well and am glad

they were not neglected. But I must hurry to a conclusion, for I have not finished my opossums—although the day is Sunday and I lectured last Friday “On Missionary Life in the South Sea Islands”! So conclude.

Grafton, April 15/66.

“Dear Sir—

Your letter of March 29th received the day before yesterday. Having been from home for the last two days and having shortly to cross over to the other side to the steamer with letters and being also very unwell, I do not feel quite up to the mark of writing a long letter, so that this will be a short one. *Atrichia clamosa* is 15/- a ♂. The other specimen has gone to Adelaide. Gilbert got only males in W. Australia. It seems there to be extremely difficult to be procured, and Gould says Gilberts' specimens were much damaged by having been shot close at hand. The Richmond bird agrees with Gould's description and a tracing of the figure sent me; still, I cannot help thinking that some differences will yet be found to exist. I am certain that Gould would find little difficulty in making a species of it. I hope to get a few more when I go to the Richmond. On two successive evenings I watched for this bird which was calling within a few feet of me, but it was too dark to see it. I have not got *Calamanthus campestris*. The last skin of *Talegalla* has been sent to Adelaide, and we have none of the eggs. The last I saw were on the Richmond in December last; they were eaten. I shall have some skins soon, I believe. *Cladorhynchus* is a bird which has never occurred to me in a living state.

The lithographed plate of eggs seems to be highly satisfactory. You will find in the British Museum a good many kinds of Australian eggs of my getting. The last batch I collected—chiefly at Cape York—were sold by Cuming for upwards of £32. If I remember rightly, Gould bought some, but probably not for himself. *Ptilotis fligera*, *Halcyon Torotoro*, *Aplonis* and *Tanyiptera* were among them. Of the last I have purchased a basketful. Jardine, the P.M. at Cape York, says it arrived there the year before last, on November 30th, from New Guinea, after a storm of N.W. wind, with rain, as the natives informed him would be the case. They had years ago informed me that it breeds in the big ants' nests, and I had the satisfaction of verifying the fact. I skinned some which were brought me *alive* and in much better condition than shot specimens. Jardine states in his published report last year that his collection comprised upwards of a hundred species of *land* birds. Doubtless some were new. A fine collection formed by the surgeon was lost in the ill-fated “Fiery Star”. I was very much amused with the perusal of Jardine's report on finding that nearly the whole of it was borrowed from an old published one of mine to which he refers. The arrangement even is the same, and whole sentences are given almost *vevrbatim*. I never even heard of Gould's Handbook until you spoke of it. It is not very likely that the Victorian *Menura* is a good species. Two cedar cutters who reside at a mountain brush about 35 miles from this have been telling me that they hear the pheasants every day. From the description of the tail feathers it is certainly *superba* and not *Alberti*. I have promised to go up to their place in June and hope to go to the Richmond immediately afterwards. But if I can carry out only half of my intentions I shall be content. Obstacles are perpetually occurring. I have sent Waterhouse specimens of 16 species of birds which were among the desiderata. Also a fine lot of skins of mammalia. I expect another order

from him soon. We send 130 species of birds to the Melbourne Exhibition. Yet very many of the commonest kinds are unrepresented. My skulls have stuck at 120 species. There are about 80 species in the second set. I hope to get rid of the whole lot at once, and then I won't trouble myself again with them. Mammal's skulls pay better, and I have supplied Melbourne Museum with many fine ones. However, I must now conclude."

Grafton, May 7th, 1866.

"Dear Sir,—

Yours of 19th ult. was duly received on my return from a week's trip for the purpose of obtaining a specimen of our cod perch, which is specifically identical with the far-famed Murray River Cod of Victoria. In this we succeeded, as Wilcox caught a fifty-pounder, which I have stuffed, intending it as the representative of the fishes of our district in our contribution to the Melbourne Exhibition. We camped on the Nymboyda or Mitchell, a tributary of the Clarence, at a place 36 miles from this. There were 8 in our party (including 2 blacks), of whom our P.M. was one. You seem not to understand the meaning of these letters—simply Police Magistrate (not Mounted Police). It had been in allusion I suppose to Mr. Fawcett of the Richmond that I had formerly used these letters. Our P.M. is Captain Hill, a great sportsman, and to be hanged to him, for I have not yet forgiven him for causing me to ride 30 miles the other afternoon in 3½ hours in his anxiety to be at a friend's station in time for dinner. I didn't feel very lively next day, although I had got a fine bat (Rhine Megaph.) in the room during said dinner and during said ride the dogs caught a kangaroo rat of a kind I had never seen before—*Bett. Grayi*. Of course, I skinned it. Our fishermen were highly pleased. They caught 25 cod, the second largest of which weighed, when cleaned 32 lb., besides some enormous eels, and one of them had good sport with the rod fly-fishing for herring (*Myalops retipinnis*). We had kangarooing, of course. But to me—better than all—the sleeping out stopped my cough! As for *Atrichia*, I think you will find that the bird has or had only a *rudimentary furculum*. Such was my opinion at the time. I noticed and remarked to Wilcox—who distinctly remembers it—that in a bird otherwise so similar to *Psophodes* there should be such an important difference. I cannot now give you the colour of the iris or write an account of the habits. You think the price is high and expect the skin to be very good. I differ entirely about the price of this very rare bird. The specimen is not very good, having had the plumage ruffled by carriage and not having been put to rights, as it was of course intended to be stuffed. And I know what Gould says of the bad condition of Gilbert's skins of this bird which he had to shoot from the distance of a few feet only. However, if not satisfied, strike the price out of the bill, for I know a person in Sydney who will be but too glad to get it. I have reason to believe, from information lately received, but I speak without being positive, that Masters has got the *Clamosa*. I also believe that the Richmond one will prove to be different, although Gould's description agrees with it as far as it goes. You ask about the *Sphenoeaci*. Of *S. gramineus* I have one specimen (of which you have the sternum). It is the only example I ever met with here. Nor have I seen *Galactotes* at all for many years. I have shot both to the northward, I know, but I have not a very distinct recollection of the circumstances, so cannot say anything about them at present. I saw a good many lories and rosellas when

I was last away, but had no gun, because I did not wish to divert my attention from the main object. I will look out some skins in the morning and conclude this then. Gould's new book I do not care about at present.

Tuesday morning, 8th May. I have looked up the skins, but find only one ♀ rosella, so that I shall have to get. The steamer I see is about to start, so I have not had time to label any of the things. But this is not of consequence."

Grafton, June 3rd, 1866.

"Dear Sir,—

I would have answered yours of the 24th instant by same steamer had I not been extremely pressed for time, for, besides 4 kangaroos and a sea eagle on hand, and in process of preparation, our exhibition on the other side of the water had to be attended to—packing, etc. We had it open for 5 days, during which time about £25 was taken at the doors, and I was not sorry when it was over. Of course, I was stuck in for the lion's share of the work, including even the preparation of the long newspaper report, and an address or lecture at the close, besides arranging labelling, etc., etc. All these services were gratuitous, and our own business suffered materially, as we have many orders to execute. Of these kangaroos there is a splendid pair of grey faces (*Halmaturus Parryi*) and a new species near *H. ruficollis*, but very distinct. A fine old man, almost, if not quite as big as that exhibited, and which goes with its mate and the grey faces, and a pair of wallaroos, the eagle and a jabiru, to Adelaide concluded the lot, and we expended an almost fabulous amount of corn husks in the filling. Wilcox is now away for a few days after large animals with 3 horses and a black and, as on his return, probably to-morrow, I shall have several days' hard work finishing and filling such skins as he is sure to have I take advantage of a little leisure, the first I have had for a long time back; to write this. I yesterday arranged with a sawyer (an old shipmate) who lives among the mountains beyond Nymboida, about 35 miles from this, to spend a week with him a fortnight hence for the purpose of getting if possible a few lyre birds for which we have orders, among others from the Paris Exhibition Commissioners, to whom we shall send the first batch of skins next steamer. The Menura is the Superba, and the birds now, I have been informed, are unusually noisy. One of us will have to go to the Richmond for Alberti and one or two other things. Although the *Atrichia* agreed sufficiently with Gould's description as sent me by Krefft and Waterhouse, there were no measurements to guide, nor had I any means of comparing it with *clamosa*. Waterhouse got the other specimen, also a male, and marked in *precisely* the same manner. He wrote to Gould telling him of a *new* *Atrichia* and most likely sent him the skin also, although he had not done so when I last heard from him. There is not the slightest doubt in my mind as to the fact of both being adult birds. They were both noisy enough, mimicking *Sericornis citreogularis* and several other brush birds, besides having a note peculiarly their own, which I have listened to. Wilcox shot both of them. I have no note of the colour of the eyes. I have been obliged to give up all thoughts of being able to carry out my long cherished wish of taking a run up to Sydney and, instead for several months, I have before me the prospect of plenty of work, much of it of a disagreeable kind, for I hate skinning. I have not cleaned a sternum for a long time back, except that of the Jabiru, which goes with the skin to Adelaide. Yesterday I did not

even save the sternum of an eagle—a very grand old female, the skin of which does not exhibit the slightest vestige of blood, grease or dirt, although the bird fell into the swamp in a muddy place and presented a most woeful appearance with blood and mud. I washed it but gave it up for a bad job, but Mrs. Wilcox took up the matter and by using soda and hot water restored its respectability most thoroughly. It almost looked as if some magical influence had been employed. I never saw a finer specimen, and I have shot at least a dozen, chiefly on the N.E. coast, where also I have taken the eggs two or three times, as well as those of the osprey twice. *Pardalotus melanocephalus* is now building, and I got nest and eggs of *Amadina Lathamii* a few days ago. I think the little redhead is also building, as it appears to be almost always doing. But I must conclude this and turn in.”

Grafton, July 1st, 1866.

“My Dear Sir,—

Yours of 19th ultimo reached me yesterday and, although this is Sunday, yet as the steamer leaves to-morrow, I suppose I must answer it now, as I shall have to be at home all to-morrow from a press of work. Skinned a native bear to-day—completing the group of ♂, ♀, and young. In the first place I feel infinitely obliged to you for the Handbook. I took it to bed with me last night and, having in vain tried to sleep, being very unwell, I read it right through, finishing about daybreak, when the jackasses were beginning. The number of new names is positively alarming, especially those of the New Genera, and I don't know that I shall ever master them. Last week I shot a *Melithreptus*, larger I thought than *lunulatus* and having blue and not red about the eyes. I think it is the bird spoken of by Gould, who refers to 2 skins sent him by Bennett and Angas. But I have not had time to overhaul it completely. You are mistaken in supposing that “Wilcox does all the interesting part of the business, shoots, etc.” It is only during the last 3 weeks in virtue of a special agreement that he has done much bird collecting. We have done an amazing amount of work very lately—ducks by the flock and black cockatoos by the family (9 in a lot) and so on. I have not had time to attend to sterna. There are about a dozen and a half on the table beside me—but some are duplicates—a jabiru, white headed eagle, etc. Among good ones are the white ibis, yellow legged spoonbill (I killed one of each species the other day, right and left—the black and the yellow billed), *Falco melanogenys*, the 2 little grebes, etc. I was never quite sure about *Podargus megacephalus* until the other day, when one turned up, and we had recent specimens of *P. humeralis* to compare with it. It goes to Adelaide in a fortnight, being on their list of desiderata. I heard from Masters yesterday. He tells me he is going to Cape York in September. I should like amazingly to spend a few months there. I feel certain that he will get some novelties in the bird line, and he will get there in good time to catch many birds breeding. About January, I think, the natives will catch any reasonable number of *Tanysypterae* alive in their holes. This is better than shooting them. I have had the eggs brought me by the basketful! *Donacola castaneothorax* is now in flocks—or at least there is one large flock near us. I shot a lot last week, but only about 4 were in full plumage. Now those I last shot at Cape York (from a flock) in January or February were all in full plumage. Wilcox shot about 20 at a shot a few days ago, but *not one* was fit to skin. I hope

when Bennett's 2nd edition comes out he will have some more gatherings to add. What you state about the *Didunculus* is capital.

July 9th. I had not an opportunity of sending this away by last steamer and none has been in for a week back. I think I'll send a few sterna this time if not hard pushed, and the man to take me to the pheasant ground does not come to me before the day after to-morrow. I shot a *Melithreptus* the other day, which puzzled me. On looking into Gould I thought it likely to be that which he calls *brevirostris*, but on getting out the skin I found to my surprise that it is the South Australian *M. gularis*. A *Ptilotis* shot on the same day and which I looked upon as *Pt. fusca*—but the ear coverts are not blackish brown and I cannot see a ring of black feathers surrounding the eye. Our *Donacola castaneothorax* as I used to call it has the under tail coverts *black* and not white, and the bill instead of being black is bluish horn. I have 4 before me in adult plumage. I went out to-day to look for some fresh ones, but could not find the flock I had seen yesterday (Sunday) when, not having a gun, I startled several hundreds in one flock. However, this last is very likely distinct enough, and I'll look into the matter in all probability some time or other. Have yours—adults—black bills? I have been working away at the determination of a lot of land shel's for S. and W. Australia all this afternoon, and I was forced reluctantly to put them aside for the time—not to be taken up again for perhaps a fortnight. Had a shot at a jabiru on Saturday with a rifle and missed him, of course, never having fired or even handled a similar instrument before—Terry's b.l. rifled carbine. Better luck next time perhaps.

July 10th. A steamer has just come in, as I heard her blowing off a short time ago. So I have made up a rude bag to contain a few sterna. If you have an adult *Donacola castaneothorax*, I should be glad if you could lend it, and when I return it I shall add a skin of *our* *Donacola* which may be distinct. I have been working at land shells most of the day. If you can spare one each or better still a pair of *Bulimus atomatus* and *Helix Dupuyana* from the Hunter, I shall return some of the Richmond ones in exchange. I have a partial set of shells from various parts of Australia which I keep temporarily for purposes of reference and have not either of these 2 species, although I once had a few of the latter, got some 50 miles or so from this, which went to some one or other. I forget whom.

July 21st. The steamer alluded to above left again quite suddenly and unexpectedly, and besides it rained in torrents and we could have no communication with the other side. Yesterday when I returned from an excursion of several days' duration I found that the Grafton which arrived on the previous afternoon had already left. However, a slow coach—the Susannah Cuthbert—leaves, I believe, to-morrow, and I shall try to get this and a box of sterna sent over to her. We have not had a boat this year at all, although it was part of the agreement that I should have a boat whenever I required one. However, our agreement has been more honoured in the breach than the observance, and I am delighted to be able to state that now I have a prospect of a speedy settlement and shall be able to follow the bent of my own inclination which will lead me many hundred miles away from the Clarence and to the very best collecting ground in Australia. However, I need say no more at present. At our last Committee meeting we agreed to send Wilcox to Melbourne to see the Grafton things

placed, etc., and devoted £25 of the fund to defray his expenses. He leaves this on or about September 15th, on which day I leave this house. . . . Wilcox takes with him to be sold for whatever they may fetch *all* our collections, and on his return after the opening of the Melbourne Exhibition, and settling with me I leave for Sydney. During that interval I intend chiefly living at a squatting station on the Urara, 10 miles from this, coming to Grafton occasionally and doing a little collecting before returning to Sydney. Our contribution to the Exhibition, which remains untouched, will probably not be sold until its close in January, but this I care little about, as it need not affect my further movements.

The sawyer (an old shipmate), who was to come in for me with horses, has long been delayed by the floods. Even now the Nymboida where he lives is not to be crossed with packhorses. I have long been daily expecting him. He has sent me two messages, certainly, and it is no fault of his. Meanwhile the pheasants are breeding. Yesterday a black (who frequently shoots for me) came to tell me that another black had found a pheasant's nest with an egg and some dark night soon hoped to catch the old bird on the nest as he had left the nest unmolested. My informant—who had come in that day (yesterday) was about to start on his return and tired as I was—and with a lot of birds to skin, if I had had a spare horse for him—I would have gone off at once to try and get the egg. . . . However, I held out very strong inducements to Daddy, and I think he will get the egg. We had a jabiru for dinner a few days ago (skinned, of course), and it ate very well, but could not be compared to a kangaroo rat some days previously. "What's in a name, etc.?" I hope my sawyer friend will come down soon as I am anxious to get some pheasants (superba). But I have so much on hand now that I am afraid I shall not be able to go to the Richmond for Alberti, but I'll try when the waters have dried up sufficiently. But I have plenty more to do yet on this day of rest for all my neighbours so conclude."

This is the last of the Grafton letters. The succeeding two were written in Sydney, the second being the last letter now available, and shows MacGillivray to be full of enthusiasm for the future.

Dr. Cox's, Tuesday,
February, 18/67.

My Dear Sir,—

The Norfolk Island shell (there was only one kind in those I took) of which the lot chiefly consisted is *H. insculpta* of Pfeiffer. The glassy one from Ash Island is a var. of *H. rustica* Pfr. The reversed *Pupa* turns out to have in addition to the *two* plate-like teeth, not less than *three* others. It agrees with no described one and will come out soon under some grand name, *Dobroydensis* or *Plough-Innensis* or *Inncreekincola*. The solitary *Helix* you showed me of which you had seen one of Dr. Cox's specimens at the Misses Scott is not Australian. Cox has a large number from the Solomon Islands. The shell I mean is bristled all over, hence the name *Helix erinaceus* or the hedgehog snail. In haste.

P.S.—I opened this to tell you that Cox has just shown me the last part of Zool. Proc. Gould has made additions to the birds. The new ones are. They were collected by the late Jardine, it is supposed—

Gerygone personata Gould.

Ptilotis gracilis Gould—like *chrysotis*.

Monarcha albiventris Gould—like *trivirgata*.

Also add from Cape York, not in Handbook.

Rallina tricolor G. R. Gray—originally found by Wallace at the Arru Islands.
Hydrochelidon leucoptera Meisn. & Sch., formerly assigned to Celebes.

J. E. Gray has described the pademelon of Cape York as new. He had it from me 13 years ago and named it—a very large male—*M. agilis* in the Museum. But nowadays people do queer things. There is, of course, a new rat *Mus macropus* with very long black whiskers, the body and head are $10\frac{1}{2}$ and the tail $10\frac{1}{2}$ inches. It is therefore a large species not like yours."

174 Cumberland Street,
March 1st, 1867.

"Dear Sir,—

Yours of 27th ulto. was received this evening after my return from the daily conchological exercises at Dr. Cox's. So, as in my solitude—the reason for which I originally chose (when last in Sydney)—and now again have engaged this *attic* retreat with its windows, which I can keep open at night and sleep without danger of aggravating my dyspnoea—I feel quietly inclined, I answer your note at once.

In the first place, I cannot by any possibility leave Sydney in less than 2 months hence. My work with Dr. Cox will quite occupy that time, to do it thoroughly, and well; that is to say, conscientiously as well as my ability goes. And were it not for the delay about the plates, the result of which I cannot foresee, for the letter press of *Helix*, the first genus, cannot be put into the printer's hands until all the plates have been finished of that genus. I would be able, if the matter were placed in the hands of a proper printing firm—not that of the German Engel (Krefft's friend) to see the whole rapidly through the press and be ready for Cape York. Correcting as it passes through the press *must* be done by myself to ensure accuracy. I have thus explained so far my engagement with Dr. Cox, at least what I consider myself *morally* bound to do, and I shall do it, if the asthma doesn't choke me meanwhile, or one of the wild bulls of Bashan (or the county of Cumberland) stick his horns into my gizzard and bring my carcass before the Coroner.

When I go to Cape York it will not be for 2 or 3 months, but for *at least* one year and I hope two. By the beche de mer vessels which rendezvous there, I shall have opportunity of making trips to the islands in the Straits and elsewhere. I shall collect *everything except plants*.

My engagements are—those I mean by which I consider myself bound and which I shall strive to execute are—

1.—A *complete set of all insects* for Mr. McLeay to whom I am under obligations to that effect.

2.—A complete set of *shells* for Dr. Cox, for although I have not made any arrangement whatever with him to that effect, I feel in duty bound to let him have everything which I think he is likely to want, and knowing as I do, the extent of his collection, I believe I can do this very satisfactorily.

3.—I have to supply the Adelaide Museum with such birds as are mentioned in his list of desiderata.

I have no further engagement, for Mueller's offer about plants I have not accepted.

Therefore I am free to *engage with you* to supply you in the terms of your note with the nests and eggs which are desiderata to you, and you shall have *the first and best of everything* in that line. The skins of birds also will be attended to, but as you will understand from what I formerly stated, Adelaide gets the first pair—you will get the second. Nor do I know of one Cape York bird seen by me before of which I cannot to a certainty get more than 2 pairs as my visit will not be a flying one. For instance, if the first 2 *Microglossi* I shoot should be both males or both females, one goes to you. Among your birds you have left out *Tanysiptera Sylvia*—perhaps inadvertently. Some are Port Essington birds—as *Pitta Iris*, etc. These I cannot possibly get. You say nothing of *Sterna*. I can collect 1, 2 or 4 of each peculiar Cape York bird or rare northern species at 1/6 each. I would give in others—and tracheae as for instance the curious one of *Manucodia*. I shall, of course, be very glad when finished in Sydney and preparing for a start to receive an advance from you, but this can best be considered when the time comes. The outfit—for it will include means of living and collecting for 12 months during which I shall be entirely on my own resources—will be expensive, but what I shall have myself, and get from others, especially my brother, will suffice to furnish the means for collecting *efficiently*. I have put these things down *currente calamo*, but I shall explain matters better when I see you, which will probably be next week, on Saturday afternoon, if you are at home. If not some other Saturday will do. So I must now conclude this rambling letter and believe me to be yours truly.”

Little did MacGillivray think when he jestingly wrote about the Coroner that the words should prove so fatally true in such a short time. On the 6th June MacGillivray collapsed and died from heart disease, though his asthmatic condition probably contributed to the fatal seizure. It is pleasing to note that the “Sydney Morning Herald” referred to him as the “distinguished naturalist”.

The notebook fills in the pages from MacGillivray’s leaving the service in 1855 until his death as follows:—

- “June 28, 1856.—A few days before Anniversary Meeting of H.I.S. in School of Arts—Secretary then.
1858. Went to Port de France in February. September went to Eramanga Aneiteum.
1859. Tana, Eramanga and Aneiteum. September went to Eramanga in Cordelia, returned same year in Vivid. Windhover from Aneiteum to Eramanga.
1860. April went to Eramanga. Port de France in Bluebell. Julia Percy to Lizard Island.
1861. Torres Strait, etc. December returned to Sydney, via Rockhampton.
1862. In and about Sydney. A year lost.
1863. Went to Melbourne in March.”

From the letters we find that he went to Grafton, or rather contracted with Wilcox on August 9, 1864, and remained two years. Returned to Sydney, worked for Dr. Cox for a few months and died on June 6, 1867.

The year 1862, of which he wrote “A Year Lost”, is notable from his contributions to the Sydney papers of a series of articles dealing with his travels here. Twelve articles were printed in the “Sydney Morning Herald”

entitled "Wanderings in Tropical Australia", and others on Walkers Expedition, and Landsborough's Expedition.

In the first half of 1864 another series, at least nine in number, was written, "Scraps from Journals in the S.W. Pacific", published in the "Empire", Sydney. Probably others also appeared, but these are worthy of notice.

With regard to the "H.I.S.", of which he wrote in 1856, "Secretary then", this is not noted in the official Journal. This was "The Sydney Magazine of Science and Art", "containing by authority the proceedings of the Australian Horticultural and Agricultural Society and the Philosophical Society of New South Wales". The former was the successor of the H(orticultural) I(mprovement) S(ociety). In the first volume, dated June 15, 1857, there appears "a list of papers which have been read before these meetings (from May 15, 1855, to date)", and therein are included:—

- "17. MacGillivray, on the Vegetable Productions of the South Sea Islands.
- 19. MacGillivray, on Sandalwood.
- 24. MacGillivray, on the Vegetable Productions of Cape York."

These were the titles only, but in Vol. ii., April, 1859, appears:—

"p. 196. Some Remarks on the Sandal Wood of the South Sea Islands. By John MacGillivray.

Among the tracts in the Australian Museum there is also "Hints on the Preservation of Specimens of Natural History. Intended for Country Residents. By John MacGillivray, F.R.G.S. Author of "Voyage of H.M.S. Rattlesnake", etc." This comprises nine pages, printed by the Government Printer, New South Wales, but is not dated.

During the stay of the "Rattlesnake" in Sydney, MacGillivray married a girl from Aberdeenshire, named Williamina Paton Gray. The marriage took place at St. Andrew's Scots Church on March 19th, 1848, the Rev. I. McGarvie, D.D., officiating. A daughter (Isabella) was born at George Street on Christmas Day the same year, and Mrs. MacGillivray and the child accompanied MacGillivray home on the "Rattlesnake", leaving Sydney April 28, 1850, and reaching England in October. Another daughter (Marion) was born at Crown Street, Aberdeen, in 1850, and a son, John, in London, in 1852.

Apparently, after MacGillivray left the "Herald" at Sydney, he sent for his wife and family, and there is written, "W. P. MacGillivray died" at sea off Van Diemen's Land on board 'Washington Irvine' from consumption."

There is no further note with regard to the children, who apparently came on to Sydney.

In this notebook is a complete account of the births and deaths of his brothers and sisters, very carefully compiled, probably the only authentic account of the elder MacGillivray's family. From this we find that there were only twelve children (not thirteen, as given in some places), that one died at the age of sixteen months, another at seven years, while a third died of consumption at the age of seventeen years. Before MacGillivray himself died, two of his sisters had also died of consumption at Ballarat, Victoria, to which they had come with Paul and others after the deaths of their parents. A sister, Anne Dorothea, apparently married the Rev. P. C. Beaton at Mauritius on the way out, and MacGillivray constantly corresponded with this brother-in-law, who wrote in "Good Words" in 1868 an article about MacGillivray, entitled, "A Martyr to Science".

It may be noted that before MacGillivray left on his first voyage he appeared in 1842 as Vice-President of the Cuvierian Nat. Hist. Society of Edinburgh, an extraordinary honour for one of twenty years of age.

The following list seems to cover his published scientific writings:—

1841. Notes on the Zoology of the Outer Hebrides. *Ann. Mag. Nat. Hist.*, Ser. i., Vol. viii., pp. 7-16, September.
1841. On some Mammalia, Birds, and Fishes lately observed in the neighbourhood of Aberdeen. *Ann. Mag. Nat. Hist.*, Ser. i., Vol. viii., pp. 230-231, November.
1842. Catalogue of the Marine Zoophytes of the neighbourhood of Aberdeen. *Ann. Mag. Nat. Hist.*, Ser. i., Vol. ix., pp. 462-469, August.
1842. Account of the island of St. Kilda, chiefly with reference to its natural history, from notes made during a visit in July, 1840. *Edinb. New Phil. Journ.*, Vol. xxxii., pp. 47-70, 178-180.
1846. An Account of Raine's Islet, on the N.E. coast of New Holland. *Zoologist* (Vol. iv.), 1846, pp. 1473-1481, October.
1846. Ornithological Excursion to the North Coast of New Holland. *Zoologist* (Vol. iv.), 1846, pp. 1481-1484, October.
1846. Notes on Australian Natural History. *Zoologist* (Vol. iv.), 1846, pp. 1485-1491, October.
1846. Nidification of some Australian Birds (signed, John MacGillivray; Old Aberdeen, September 25th, 1846). *Zoologist* (Vol. iv.), 1846, p. 1546, December.
1848. Letters from J. MacGillivray, Esq., Naturalist to H.M. Surveying Ship *Rattlesnake*, Capt. Stanley, R.N. (Communicated by Professor Edward Forbes). *Ann. Mag. Nat. Hist.*, Ser. 2, Vol. iii., pp. 21-32, July.
1850. A Brief Account of the Researches in Natural History of John MacGillivray, Esq. The Naturalist attached to H.M. Surveying Ship, 'the *Rattlesnake*, on the North Eastern Coasts of Australia, New Guinea, etc., by John Gould, with Tabular View of Occurrence of Procollaridae. *Contr. to Ornith. (Jardine)*, Vol. ii., pp. 92-105.*
1851. Sketch of the Natural History of such portions of the Louisiade Archipelago and New Guinea, as were visited by H.M.S. *Rattlesnake*, June to September, 1849. *Journ. Royal Geogr. Soc.*, Vol. xxi., pp. 15-17.
1851. Narrative of the Voyage of H.M.S. *Rattlesnake*, commanded by the late Captain Owen Stanley, R.N., F.R.S., etc., during the years 1846-50. Vol. i., pp. i.-xii., Map, pp. 1-402, 7 pls. and 15 text figs. Vol. ii., pp. i.-vi., Map, pp. 1-395, 5 pls. and 2 text figs.
1852. Excursion to Botany Bay, New South Wales (dated January). *Zoologist* (Vol. x), 1852, pp. 3383-3386, March.
1852. Subterranean Colony of Freshwater Mollusks (dated March). *Zoologist* (Vol. x), 1852, p. 3430, April.
1852. Visit to Teneriffe, and Ascent of the Peak of Teyde (dated London, April). *Zoologist* (Vol. x), 1852, pp. 3441-49, May.
1852. Mangrove Swamps and their Inhabitants (dated March). *Zoologist* (Vol. x), 1852, pp. 3451-52, May.
1854. [South Pacific Botany]. *Hooker's Journ. Botany*, Vol. vi., 1854, pp. 353-363.

*Although title page and plates are dated 1852, this was issued in middle of December, 1851.

1858. Description of a new species of Grass Finch from New Caledonia. *Ann. Mag. Nat. Hist.*, Ser. 3, Vol. ii., pp. 263-264, October. (*Poephila paddonii*).
1860. On the Habit of *Notopteris Macdonaldii*, Gray. *Ann. Mag. Nat. Hist.*, Ser. 3, Vol. vi., p. 152, August.
1860. Zoological notes from Aneiteum, New Hebrides. *Zoologist* (Vol. xviii), 1860, pp. 7133-7142.

Whatever may have been MacGillivray's faults, all conchologists owe a deep debt of gratitude to him for the foundation of the study of the land shells of Australia. He had collected meticulously, and upon his leaving the service in Sydney he collected in the South Seas, and in 1861 went to Torres Straits, and upon his return Dr. J. C. Cox engaged him to arrange his collection. This was done, and a small Catalogue was issued by Cox in 1864. It was an unpretentious effort, but workmanlike, and some new species were included in it. After his expedition to the Northern Rivers, of which the preceding letters give some idea, MacGillivray was again engaged by Cox, this time upon an ambitious Monograph, and we have read MacGillivray's own idea of his responsibility. After MacGillivray's death the work was duly published, and is a work of reference to this day. It is so unlike any of Cox's later work that it was obvious to the student that Cox alone had not prepared it. In the notebook above referred to are notes dealing with the difficulties met with by MacGillivray in classifying Cox's new species. The elder MacGillivray wrote his own obituary notice, beginning, "I have been honest and sincere in my endeavour to promote the truth", and I would, notwithstanding anything, affirm that dictum as applicable to John also.
