

An Ornithological Trip around Eyre Peninsula.

By J. Sutton.

The members of the party consisted of Dr. A. M. Morgan and Messrs. J. Neil McGilp and J. Sutton; with a "slushie." The trip extended from 6th August, 1923, until 1st September, 1923, and 1,467 miles were motored in that period.

6th August.—We left North Adelaide at 9 a.m. with the weather threatening for rain and a cool south-west wind, but the weather improved as we journeyed northwards. The roads were muddy, but generally in a fair state. We had our first al fresco meal at 1.15 p.m. near the "House That Jack Built" just beyond Clare. We met the worst portion of the road

between Yacka and Gulnare. We arrived at Murraytown at 5.26 p.m., and stayed at the hotel there for the night. Distance motored, 162 miles.

7th August.—The night was cold, but the weather was fine as we left Murraytown at 9 a.m. We went back two miles to the road leading through the Back Creek (Telowie) Gorge. The journey through that Gorge (nine miles) was delightful, and the stream that runs beside the road was crossed 39 times before we emerged on the plains on the western side of the Flinders Range. We did not go into Port Germein, but turned northwards when we met the Port Augusta road. We lunched at the Baroota Creek, and arrived at Port Augusta at 4.17 p.m. Distance motored, 63 miles. We stopped at three places en route, and worked the surrounding country for 4½ hours in all.

8th August.—We stayed at the Great Northern Hotel. After getting stores and petrol we left Port Augusta at 9.25 a.m., were ferried across to Port Augusta West, and left that place at 9.55 a.m. on our main journey. We reached the entrance to the Lincoln Gap—the pass in the Range of the same name—at 10.21 a.m., and after going nine miles we were clear of the Gap. At 15 miles from Port Augusta West we had our first view of the Gawler Ranges straight ahead of us. At 11.50 a.m. we entered "Pandurra Station," and going on we arrived at the Head Station of "Corunna", at 4.40 p.m. Distance motored, 44 miles. Five stoppages en route for 3.55 hours in all. This homestead (Corunna) is situated at the foot of the southern end of a range of red conglomerate, some 600 feet above the surrounding country and 1,200 feet above sea-level. This range may be described as the eastern spur of the Gawler Ranges, which extend almost due westwards beyond Yardea and are composed of red felspar porphyry. From "Corunna" the Iron Knob is situated three and a half miles south-west, and the township there can be clearly seen with the aid of a field-glass. As we entered the station gate a single-seater motor-car had just passed through, and a little before that we had passed another single-seater. Those were the only motor-cars we passed on the roads until we reached Yantanaby on 21st August. We were put up at the homestead for the night.

9th August.—It was very windy during the previous night with a little rain. We left Corunna at 9.46 a.m., and shortly after leaving the homestead we came to forked roads, and, on the advice that "Jim" tendered, given him by one of the men on the station, to follow the road hugging the range, we did so;

with some misgiving, and after following that for seven and a half miles we reached a dam, which Mr. McGilp recognized as Burney Dam, and we found we had taken the wrong track, so we had to turn and go back to the other road. At 11.44 a.m. we reached Lake Gilles Tank, about one mile from Lake Gilles, which had been visible on our left for some time. The tank is a typical one—75 feet x 21 feet—built of concrete and covered over with galvanized iron, the roof of a diamond shape and surrounded with guttering. A spoon-drain leads to the tank at the back. The tank is enclosed with a four-barbed-wired fence, of great strength. The water is drawn up by means of a hand pump and falls into an iron trough. The depth of the tank is probably 10 feet. Lake Gilles was dry, the centre showing a gleaming white, whilst the other portions were a dark grey colour. A slight shower fell whilst we were at the Tank, and two other showers later as we passed through a part of "Uno" Station and entered the "Siam" Station. We passed the latter homestead at 2.48 p.m., and shortly afterwards entered "Nonning" and reached the homestead at 5.20 p.m. Distance motored, 44 miles. Three stoppages for 3.40 hours. The portions of the three stations passed through may be described thus:—"Corunna."—Rough range of hill and sandy hilly country clad with porcupine grass. Fine open flats covered with saltbush and bluebush and sparsely belted with patches of myall, sandalwood, needle-bush, and black oak. Not much herbage; dry country; wants rain. "Siam."—Flats covered with herbage of clover and geranium, and odd dry water-courses with trees of mallee, mulga, and myall. On the hill-sides, porcupine and pinwood. "Nonning."—Mostly hilly country. Hillsides covered sparsely with porcupine and saltbush, with trees of mulga, myall, sandalwood, black oak, and pinwood.

10th August.—The station bell was rung at 6.30 a.m. We had breakfast at 7 a.m., and left for Coralbignie, 12 miles southwest of Nonning, at 9.8 a.m. A fox—the only one seen during the trip—crossed the track in front of the motor six miles from Nonning. We stopped at Ucarro Dam for a few minutes, and reached the old homestead at Coralbignie at 11.32 a.m., stopping twice on the way for 1.14 hours. On arrival we worked the hill and scrub at the back of the house, and at 2 p.m. Mr. Archibald McTaggart arrived by motor-cycle to take us to a mallee-fowl's nest in the range, to which we motored as far as possible and then walked to the top of the range and along to the nest. After examining the nest we went on down the valley and he motored round to meet us and took us by another route back to the old homestead, which we reached at 5.16 p.m. Distance

motored for the day, 33 miles. The country seen was mostly hilly, with nice green flats between the hills well covered with saltbush and bluebush and timbered with mulga, myall, and odd mallee in the dry watercourses. Herbage very good. Ucarro Dam is a fine sheet of water. We slept in one of the huts at Coralbignie.

11th August.—We were up at 7.15 a.m. and left at 9.11 a.m. for a patch of mallee scrub, seven miles from Coralbignie, which we worked over and arrived back at Coralbignie at 1.22 p.m. In that scrub we came across a two-chain track, cut in a southerly direction, which reaches the coast near Elliston. This was cut for a road by the Government, but is gradually being grown over by the mallee. We left Coralbignie at 3.22 p.m., and arrived at Nonning homestead at 5.44 p.m., stopping once at a dried samphire swamp for 1.50 hours. Distance motored for the day, 28 miles.

12th August.—We were up at 7.30 a.m., and left by motor for Scrubby Hill at 10.29 a.m., reached Fly Camp at 11.50 a.m., and stopped at the first Angle Swamp for lunch. There are three swamps within a distance of a mile, and two of them are of a fair size. We arrived at "Tom Croft's" Hut, at Scrubby Hill, at 3.54 p.m. Distance motored, 28 miles. Five stoppages for 4.25 hours on the way. We went out in the saltbush near the Hut for 1.36 hours, arriving back at 5.54 p.m. We slept in the Hut, having sheepskins on the floor beneath our own outfits.

13th August.—Up at 6.30 a.m., we left the Hut at 8.30 a.m., guided by Tom Crofts, a modern boundary-rider, on a motorcycle with a rifle slung across his back. He went ahead for about two miles to show us the turn-off to the Wipipippee Rocks. This track was a poor and narrow one, and the two in the back seat of the car were employed all the journey in fending themselves from the branches of the trees. The Rocks were reached at 9.20 a.m. Distance motored, $13\frac{1}{2}$ miles. There is a small clearing, and the rock outcrop of red felspar porphyry covers about half an acre. In it were three potholes—12 feet x 12 feet, 12 feet x 8 feet, and 18 feet x 7 feet—which seemed to be of fair depth and full of clear, good water. One hole was covered with galvanized iron, and the two others with wire on wooden supports. We could see some sandhills near Lake Gairdner, about a mile away, and at 9.41 a.m. we set out for the Lake, through the scrub. The sandhills reach half a mile from the actual shore-line, and they are about 200 feet high at the spot where we reached the Lake. The appearance of the Lake

is very deceptive, and even when quite near it seems to contain water. Out about a mile the salt is gleaming white, whilst near the shore the surface is of a dark-greyish colour and is just a thin crust which does not stick to one's boots. There was no water at all, and we could see the coast-line at the south and western sides, but no land could be seen to the north. Where we were the Lake is 20 miles wide; the southern shore was 10 miles away. The Lake is over 65 miles in length. The boundary-rider told me there was a little shallow water in the south-eastern corner of the Lake. The sandhills on the side near the Lake were covered with a stunted saltbush. The only living things about the sandhills on the shore side were a Wedgetailed Eagle, a Crow, a White-fronted Chat, and a Pipit (Ground Lark). The trees on the outer sides of the sandhills consisted chiefly of myall and showed excellent growth. The sand is of reddish colour, hard, and easy to walk over. We got back to the Rocks at 3.27 p.m., and after lunch we went out in the scrub until 5.50 p.m. We camped out in a tent, for the first time, under three mulga trees, and our "hippers" were made up of tufts of old speargrass. The night was warm. The country around Scrubby Hill consists of fine open flats covered in saltbush and bluebush, with a fair amount of herbage. On our way to the Rocks we went through thorny thick scrub of mulga, myall, and sandalwood. On the ground about those places there were thousands of caterpillars. They seemed to be attacking the saltbush and bluebush.

14th August.—Up at 7 a.m., we were out in the scrub at 9 a.m., and returned about noon. Flies were troublesome on the previous afternoon, and again on this morning—our only experiences of this pest during the trip. We left by motor at 1.30 p.m., and stopped after going a few miles for 34 minutes in order to oil the left front wheel bearing. We reached "Tom Croft's" Hut at 3.19 p.m. He was waiting for us, and had prepared afternoon tea, which we greatly appreciated. We stayed half an hour, and then went on. Five miles from the Nonning homestead we passed 12 kangaroos close to the track. Those were the only live kangaroos we met on the trip. We arrived at Nonning at 5.42 p.m. Distance motored, 40 miles, stopping once for 35 minutes. Tom Croft told me he had killed 280 foxes and 52 dingoes last year, and when the vermin-proof fence was erected he destroyed over 7,000 rabbits in the first year. The section of the country he patrols is 80 miles in length.

15th August.—Up at 7.15 a.m., we left by motor at 10.15 a.m., accompanied by Mr. Ian McTaggart on a motor-cycle for five miles in order to put us on the right track after working Whip-

stick Creek (dry), and arrived at Houlderoo Dam, near the Coralbignie Rocks, eight miles south of Nonning, at 1.7 p.m., after stopping at Whipstick Creek for 2.15 hours. At 2.27 p.m. we went to the Rocks, about half a mile away from the Dam. They are composed of red felspar porphyry, and consist of two separate pyramidal peaks of rock, about 80 feet in height. Upon one is a trig. station, and around the other are some smaller pyramids of rock in a semi-circle. They are all situated in the plain, and there are no hills or rocks within two miles of them. The country is composed of saltbush flats, with trees of mulga, myall, pinwood, and sandalwood. We camped out close to the Dam, and our "hippers" were made up of myall spines. Whilst we were fixing up the camp there were numbers of mosquitoes about, but they had disappeared by 10 p.m. We did not meet with mosquitoes elsewhere on the trip.

16th August.—We were up at 6.40 a.m. The morning was cold, with ice on the top of the water in the bucket, and one inch thick in the billy. The condensed milk in the tin was also frozen. After 30 minutes' walk in the scrub we left at 10 a.m., and arrived at Nonning at 10.24 a.m., in time for "smoko." After bidding final adieu to our hosts we left Nonning at 11.4 a.m., meeting just near the homestead four bullock teams carting wood, and then, at a mile from the station two teams of 28 donkeys each, cairrying about 80 bales of wool, from Yardea to Iron Knob. (The donkeys were harnessed thus—two in the lead, two in the shafts, and the remainder in six rows of four abreast.) After motoring eight miles we entered "Kalendo" Station. We stopped at the Yannabie Dam for water, and at 21 miles we reached the entrance gate to "Mt. Ive," arriving at that homestead at 4.27 p.m. Distance motored, 33 miles. Three stoppages for 4.23 hours.

The country in "Kalendo" consists of fine open plains of saltbush, with fair herbage around hills mostly covered with porcupine. "Mt. Ive" is heavily timbered near the entrance gate with myall; after that there are poor plains of saltbush, with very little grass growth and herbage, caused by want of rain.

17th August, 1923.—Up at 6.45 a.m., we left at 9.19 a.m., passing at a little distance from the homestead over a large dry saltpan covered with samphire; then stony rises with mulga, pinwood, and mallee; and after going 12 miles we entered the old "Thurlga" Station property (now part of Yardea). Eight miles further on we passed the Thurlga homestead— noticing water-pipes laid out past this house. Eleven miles further on we passed through the Yardea vermin-proof fence, and arrived

at Yardea homestead at 3 p.m. Just as we reached the homestead gate a horse and cart laden with four blacks and their goods came from a north-easterly direction. These were accompanied by nine nondescript dogs, which rushed towards us in full cry. At the station were three blacks and their lubras, just returned from a trip with fox and dingo scalps and eagles' heads as a result. After afternoon tea and purchase of stores we motored on, and reached Donald's Plain, six miles south-west of Yardea, at 4.28 p.m. Distance motored, 44 miles. Three stoppages for 3.24 hours. We camped near the Government Dam. Our "hippers" were made up of mallee branches.

The country in Thurlga consists of fine open grass flats, with a good growth of herbage, sparsely timbered with myall, sandalwood, and patches of black oak. In Yardea the valley leading to the homestead is covered on both sides with mallee, myall, mulga, and bullock-bush, and beyond the homestead are open plains fairly grassed. At Donald's Plain there is fine big mallee, with open spaces lightly grassed with clover and green herbage.

18th August.—We were up at 6.45 a.m., and there had been a very heavy dew. We went into the mallee at 8.28 a.m., returned for lunch at 1 p.m., out again at 2.10 p.m., and got back at 5.12 p.m. That night was very cold.

19th August.—Up at 7.30 a.m. The grass was white with frost and there was ice on the water in the bucket. We went out in the mallee at 9 a.m., and returned for lunch at 1.10 p.m. At 2.39 p.m. we left by motor down the Pondanna track for two miles to a patch of mallee, and got back to our camp at 5.42 p.m. Distance motored, five miles. At 9 p.m. a fox was calling out to the west of the camp, and at 10 p.m. south of the camp. Each night after six p.m. about a dozen horses came in to the dam, and after having a drink they galloped off on the track towards Yardea.

20th August.—Up at 7 a.m. The morning was mild. We left by motor at 9.59 a.m., and reached Yardea at 10.23 a.m. After purchasing stores and having morning tea at the homestead we left at 11.52 a.m., following the road along the telegraph line (to Eucla). At five miles near Yartoo (old homestead) we crossed a low spur in the range, and then went down into a valley and up another spur. This type of country continued for over three miles. The road had now become very poor and intersected with dry watercourses. At 18 miles we reached Hiltaba Station property. At 19 miles we passed out of the ranges on to the plains. The foot of the range as it abutted

on the plains was covered with golden everlasting flowers. At 23 miles we reached Narlaby Well, but it was dry. We were now afraid we were on the wrong track, and we were on the look out for the Punkey Plains Reservoir, the next entry on the map. We at length found it at 3.21 p.m. at 28 miles. That "Reservoir" is only a small-sized dam, and on and near the embankment were the skeletons of 12 cattle, some of them close to the water. We filled all our water-bags and moved on, and at 4 p.m. we arrived at Narlaby Tanks. Distance motored, 41 miles. One stoppage for 1.14 hours en route. We worked through the mallee and myall near our camp for 1.21 hours before nightfall. It was a very serious meeting round the camp-fire before bed-time. The road to Hiltaba and Tarcoola joins the Streaky Bay road just near these tanks, and the tracks of a heavy-laden wagon proceeding Hiltaba way were noticed on the road we were to use on the morrow. The leaders seriously debated our prospects of getting through the sandhills after that track had been cut up by the heavy wagon. As we came along we enquired at each station, and also from teamsters and an aboriginal at Yardea, as to the track through the sandhills, and had received various opinions as to the probability of our getting through. Generally we were advised to arrange for horses to pull us through.

As we had now left the Gawler Ranges it may be stated that the road was excellent from Port Augusta West to Yardea. It is made of the ordinary reddish soil of the plains, in which small ironstone "shot" are very plentiful. From Corunna the road runs south of the main range and practically due west. Near to the "Siam" homestead a spur from the southward comes to within a mile of the northern range. The road then runs practically in the valley until Yardea is reached. Between Thurlga and Yardea this valley narrows to about 200 yards for half a mile, and then opens out to a mile or so. From Corunna to the western end of the Gawler Ranges the distance is about 100 miles, and the ranges are from 200 to 500 feet above the plains. The tops and sides of the ranges are covered with porcupine grass, but are devoid of trees. The heights of some of the mounts above sea-level have been worked out approximately by the Lands Department, and are as follows:—Mt. Yardea, 1,500 feet; Mt. Nott, near Thurlga, 1,436 feet; Rockwater Hill (Coralbignie), 1,380 feet; Three Crown Hill (Kolendo), 1,209 feet; Mt. Micollo, 1,170 feet; and Mt. Nonning, 1,007 feet (both in Nonning).

21st August.—We were up at 7 a.m., and left at 9.18 a.m., and after passing two dry saltpans we arrived (four miles), at

9.30 a.m., at a causeway across another dry saltpan. The first sand-ridge was at the end of this causeway. We all got out to view the track, and the wheels of the wagon above mentioned had sunk in about a foot deep and nearly a foot wide into the sand, and the track was very narrow for straddling. On looking at the cut-up state of the track and the height of the ridge I candidly thought we had no chance of getting through if this was a sample. However, we searched for a track to escape this ridge, and after 15 minutes' search Mr. McGilp discovered one going round on the edge of the saltpan and joining the road at the back of this 'first' ridge. The back tyres were first deflated and the motor-car got round the first ridge and up the next one. We went on for 12 miles on this sandy track with a number of sand-ridges, passing Middle Tanks (eight miles) and Weetara Tanks (16 miles). At the latter place the water in the radiator was boiling, and we stopped a little further on at 12.10 for lunch. Thinking that we were over all the sand-ridges the tyres were inflated. We were greatly pleased at having got through without much trouble and with no pushing. We moved on, but at 3.24 p.m. (20 miles) we met with another sand patch and ridge, and through the tyres being so tight the motor-car did not surmount the ridge and had to go back and have another try, and we pushed the car for 10 yards and got it over. At all the ridges we got out of the car, the driver taking the first three ridges on low gear and all the others on second gear. The sandy track and ridges covered in all a distance of 16 miles. Going on we reached the Yarrama Tank (23 miles) and came into the cleared country, the first wheat crop being noticed at 27 miles. We crossed the narrow-gauge railway line at Yantanaby and stopped half a mile further on in some big mallee at 5.3 p.m. Distance motored, 34 miles. Four stoppages for 3.5 hours. The day was very windy. There were great quantities of dead "roly-poly" lying about amongst the mallee, and we made use of some as a breakwind for our camp. Rabbits were seen in fair numbers about three miles before we reached Yarrama Tank. Up to that place we had seen very few from the time we left Port Augusta.

22nd August.—Although the wind was strong from the north-west, the weather was not cold, so instead of rigging up the tent it was decided to use it as a top rug. At 5 a.m. in the morning the wind changed and we had a fall of rain. As our clothes were in the open a hasty scramble in the dark was made, and we were up and dressed as soon as it was light (6.30 a.m.). Fortunately there were no other falls of rain that day. After an early breakfast we explored the patch of

mallee, and left at 10 a.m. At the first gate, a half-mile on, the fence and the land for 25 feet on either side of the fence were covered with the dead "roly-poly." At 11 miles we reached Chilpenunda Tank, near to which was a belt of native pines. The road to this tank was good, but short rough bits were met with, which were caused by the limestone outcrops. Twenty miles on we met with sheoaks for the first time since leaving Port Augusta. The road thence on was good, over undulating country with patches of mallee and tea-tree, gradually getting devoid of all trees as we approached Streaky Bay. The wheat crops looked well. We reached Streaky Bay at 4.44 p.m. Distance motored, 35 miles. Three stoppages for 4.50 hours. We put up at the Flinders Hotel.

23rd August.—Up at 7 a.m., we left Streaky Bay at 9.28 a.m. The road now on was excellent, and in some places it went straight ahead for miles—one straight section was 13 miles, another one over five miles. We had intended to stop at Elliston for the night, but we learnt that there was a cricket carnival being held there and that we would be unable to get accommodation, so it was decided to make for Mt. Hope—130 miles. That, of course, did not give much time for observation on the way. The road is about a mile from the sea-shore in some places, but only occasional glimpses of the sea were obtained. Venus Bay was passed at 33 miles, the road being near to the water. We passed through Talia, Colton, and reached Elliston (81 miles) at 1.36 p.m. We had lunch just beyond Elliston, and, going on, passed through Way without noticing that we had done so. One house was visible about 100 yards off the road. The country we passed through was limestone, with mallee scrub, and with a few swamps and lakes. For six miles up to Sheringa the hills and land near the road were covered in limestones and with a few stunted trees. At 116 miles we reached Lake Hamilton. The road follows the eastern side of the Lake, at a distance of a few feet for nine miles. It is a very rough road, from the limestone outcrops. We reached Mt. Hope at 5.47 p.m. Distance motored, 130 miles. Five stoppages for 2.35 hours. We stopped at a farmhouse which was, in addition, the store, the post office, and the school.

24th August.—Up at 7.10 a.m. and walked around the country near the farm. The day was very windy. We left at 9 a.m., passed some swamps and were near Lake Greenly (16 miles) at 11.27 a.m. There were farms right along now, and we reached Warrow and then Coulta. At the latter place we were able to buy a tin of petrol from Mr. Horace Puckridge. The wind had now become a gale, and at 26 miles we stopped

amongst some big redgums for lunch. Going on we arrived at Wangary, which is near the Lake of the same name, at 35 miles. We went on about a mile and pitched our camp not far from Mr. George Puckridge's house. The road we travelled over was good; one straight stretch was over eight miles long. Short stunted mallee was chiefly at the sides of the road, with occasional sheoaks and tea-trees. We had a very fine view of Coffin's Bay just before we reached Wangary. Distance motored, 39 miles. Seven stoppages for 2.56 hours. A fox was heard calling near the camp at 8.55 p.m.

25th August.—Up at 6.45 a.m., and with Mr. George Puckridge as guide we left at 8.16 a.m. for Kellidie Bay. We went along the road to Port Lincoln for about seven miles, and then turned south, passing a few swamps, and reached the shore of the Bay (12 miles) at 9.15 a.m. Skirting the shore we went a further three miles to near the homestead of Coffin's Bay station of Mr. J. T. Mortlock. After some time we were able to get a dinghy and pulled off to Goat Island, about three-quarters of a mile out near the entrance to the Bay. We got on the island at 11.46 a.m. It is about an acre in extent and composed of limestone, and is about 12 feet high, flat on top, and covered in vegetation—chiefly King Island clover, with some kale and mesembryanthemum. There was one stunted mallee, about eight feet high, and a few low bushes. There were a few nests of Silver Gulls on the top of the island, and a thorough search was made in the caves and crevices formed by the fallen rocks for Rock-Parrot's nests, and we returned to the mainland at 1.41 p.m. Whilst we were on the island Mr. George Puckridge fished from the boat and caught 15 salmon trout, about 2-lb. weight each. Most of the Silver Gulls flew from the island as we approached it, and alighted on the water and kept up a continuous screeching. Whilst we were on the island three porpoises appeared and began fishing. Immediately they did so a number of Silver Gulls, two Pacific Gulls, and some Cormorants flew to the spot, evidently looking for scraps, and some of them were noticed eating small fish. Near the homestead there was a herd of 50 Angora goats, and we learned that the foxes are very partial to young Angora goats and keep the herd from increasing. After lunch we left for our camp by the same route, and reached it at 5.48 p.m. Distance motored, 32 miles. Eight stoppages for 5.13 hours.

26th August.—Up at 7.20 a.m., Mr. McGilp and I left with Mr. George Puckridge at 8.30 a.m. and went down the Wangary Creek for four miles amongst some very big redgums for Parrot's nests, and returned to camp at 11.34 a.m. After dinner with

Mr. and Mrs. George Puckridge we left for Port Lincoln at 1.58 p.m., and at 14 miles from Port Lincoln the rain, which had been threatening for some time, began to fall, and it continued right into Port Lincoln (26 miles), which we reached at 3.9 p.m. and put up at the Pier Hotel.

27th August.—Port Lincoln. The day was very windy, and was spent about the town whilst the motor was being overhauled. We went out in the morning amongst the scrub near the hospital, and in the afternoon in the mallee scrub east of the railway station, for 5 hours 23 minutes in all. It rained heavily during the night.

28th August.—We left Port Lincoln at 8.49 a.m., and met with light showers until after noon. At seven miles we passed through North Shields, and then at 11 miles we turned off the main road to visit the Tod River Reservoir, which was reached after going nine miles along a very hilly road, but with a good surface. The country about this part has scattered sheoaks. There are a few farms with crops growing and a few fruit trees. The Reservoir is a fine sheet of water, and at the time of our visit was half-full. The part which we could see from the embankment (which is 388 yards long) seemed to be three-quarters of a mile long by half a mile wide. The height of the embankment at the centre on the outside is 81 feet, and the width at the top is 20 feet. At the north-eastern corner there was a good stream of water running into the Reservoir. We reached the main road again at 10.57 a.m.; passed Tumby Bay at 11.50 a.m. (30 miles from Port Lincoln), the turn-off to Lipson (37 miles), the turn-off to Carrow (53 miles), Lady Kinnaird's Tanks (57 miles); thence on for some miles the road is a good one, made over sand-ridges. At 65 miles the scrub had been burnt for a distance of two miles. At 3.27 p.m. we reached Arno Bay (76 miles), and for a mile before we reached that town the road on the eastern side passes a dried samphire swamp. At 77 miles, just before the turn-off to Cleve, we came on saltbush again. We passed through Carpá and Elbow Hill, and arrived at Cowell at 5.12 p.m. Distance motored, 127 miles. Two stoppages, 1.14 hours. The country from Port Lincoln to Cowell is under cultivation, chiefly wheat, but there are patches of very stunted mallee in places. We put up at the Franklin Harbour Hotel.

29th August.—Up at 6.45 a.m. Disaster met us here. Just as we were about to leave the hotel it was ascertained that two ponies had got at the food in the motor-car and had eaten two and a half large loaves of bread, half of a large cake,

eight apples, and had bitten two oranges. We had to replenish our stock, and left Cowell at 9.18 a.m., entering mallee scrub shortly after leaving the town. We passed Warrayappa Station (16 miles), then two tanks at 18 miles, then through mallee and saltbush to a dam (25 miles), and after that met a patch of sand for a mile, where we passed two drovers with 100 head of cattle going to Whyalla. At 34 miles we were out of the mallee and into pine country, and at 37 miles we met myalls again, and reached the Moonabie Tanks (39 miles) at 12.54 p.m. Going on we passed a farmer's house and arrived at Randell's Tank (54 miles), but immediately we left that tank we came on two roads, so we went back to the farmer's house to inquire our correct course. At 4.6 p.m. we made camp not far from the Wertigo Dam. Distance travelled, 57 miles. Three stoppages, 3.17 hours.

30th August.—Up at 6.40 a.m. After breakfast we worked the country for 1.50 hours and left at 9.20 a.m. We arrived at the Roopena Woolshed at 10.20 a.m. (seven miles). We had a look over the shearing shed (not working), left at 10.49 a.m.; and at once crossed the Whyalla to Iron Knob narrow-gauge railway line. The country had saltbush and bluebush, with myall and sandalwood trees and bullock-bush. We stopped for lunch at 17 miles in a valley in the Middleback Range, and at 30 miles left Roopena Station and entered Lincoln Gap Station, and at 3.47 p.m. (33 miles) we rejoined the road, just opposite the Lincoln Gap homestead, along which we went on 8th August, and arrived at Port Augusta West at 4.41 p.m. After being ferried across we put up at the Great Northern Hotel. Distance motored, 48 miles. Seven stoppages for 3.52 hours.

31st August.—We left Port Augusta at 9.13 a.m., and proceeding by way of Horrocks Pass we stopped at the Rising Sun Hotel, Auburn, at 4.15 p.m. Distance motored, 141 miles.

1st September.—We left Auburn at 8.45 a.m., and reached North Adelaide (69 miles) at 11.44 a.m.

Time occupied in the trip was 27 days, and the distance motored 1,467 miles. A census of the birds observed was taken and the figures were—

Around Eyre Peninsula 123 native species with 9,581 individuals were noted, whilst 21 further native species were seen between Adelaide and Port Augusta, and 1,619 individuals of all the native birds were noted between those two places. The imported species observed on Eyre Peninsula were three (Goldfinch, Sparrow, and Starling), with 489 individuals. A list

of the native species, with particulars, is given herewith. The figures in brackets after the name represent the number noted. A few observations between Port Germein and Port Augusta have been inserted.

We have to express our thanks for the great hospitality shown to us during the trip by Mrs. H. Hall, of "Corunna"; Mr. and Mrs. John McTaggart and Messrs. Ian, Archibald, and Donald McTaggart, of "Nonning"; Mr. and Mrs. George Smith, of "Mt. Ivey"; Mr., Mrs., and Miss Bird, at "Yardea"; and Mr. and Mrs. George Puckridge, of Wangary.

Mention must also be made of the motor-car—a Hudson—which carried us safely on every journey; the only time it was not used was on the ferry at Port Augusta. Two punctures were sustained—one when a nail was picked up in the Coralbignie yard, and the other, a very small one, on our journey to Donald's Plain. Dr. Morgan and Mr. McGilp acted as drivers and divided the work into 50-mile stretches.

Dromaius novaehollandiae, Emu.

Not a bird was seen. Droppings were noted, containing quandong stones, under some myall trees in the Lincoln Gap, nine miles from Port Augusta West. At the Wipipippee Rocks, in the cleared space near the rockholes, two small feathers were picked up. A great many droppings were there, and all those seen contained quandong stones—one had 86, another 67, and a third 36; the rest of the droppings was composed of a dark gelatinous-looking mass. Fresh impressions of the feet of an Emu were seen in the sand in the same locality. Tracks of Emus were also noted in the mallee scrub seven miles from Wangary, near the road from that town to Port Lincoln.

Leipoa ocellata, Mallee Fowl. None was seen.

We went to a new nest about three miles from Coralbignie old homestead, which is 12 miles south-west of Nonning. The mound was situated up a small gully, about 50 feet from the crown of the hill in the range and about 200 feet up from the valley. The spot was fairly open, amongst some stunted mallee trees. The mound was circular in shape, and the loose soil had been scratched from amongst the stones, which were numerous. That soil was banked up at the top end about a foot in height, but at the lower side of the mound it was about two feet high. There were no stones in the soil of the mound itself, but there were a few on the surface of the mound at the lower side, and they had evidently been scratched out.

from the centre by the birds, as their scratchings were seen around a large stone nearly a foot in length at the bottom of the cavity. The measurements were—Width of cavity at the bottom, 3 feet by $2\frac{1}{2}$ feet; depth, 2 feet; diameter over all, 10 feet; circumference, 21 feet on the crown of the mound. The lower side of the mound had dead mallee leaves on it, but at the upper side a little grass was growing. The surrounding country was so stony that it was astonishing to see the amount of loose earth that the birds had scratched together. The marks of their nails were easily distinguishable amongst the stones in the gully adjacent to the nest. In an untenanted hut in which we slept the chimney front was festooned with 61 Mallee Fowls' eggs (15 of them being painted green), eight Kestrels' eggs, and 49 Fowl or Duck eggs; 13 Mallee Fowls' eggs were strung on the opposite wall, and two Ostrich eggs were on the mantelpiece!

1. *Geopelia placida*, Peaceful Dove (3).

Heard in and near Port Lincoln.

2. *Phaps chalcoptera*, Bronzewing (4).

One bird was seen at 7.50 a.m. at the Wipipippee Rocks coming in for a drink at the rockholes (two birds in all were noted there). On our way back to Scrubby Hill from those Rocks we flushed a bird from its nest. It contained two young having fawn-coloured down; tips of bills, white; underneath, very light fawn; wings, black; and all flesh dark coloured to head; eyes closed. Another bird was heard at 9.30 p.m., near the dam at Donald's Plain.

3. *Ocyphaps lophotes*, Crested Pigeon (37).

Noted at Baroota Creek near Port Germein, North Stirling, Nonning, Coralbignie, Wipipippee Rocks, Coralbignie Rocks, Mt. I've, Wertigo Camp, Roopena, and Horrocks Pass (Port Augusta side).

4. *Gallinula tenebrosa*, Black Moor-Hen (2).

They were seen on a large swamp 10 miles north of Sheringa.

5. *Porphyrio melanotus*, Eastern Swamp Hen (Bald Coot) (30).

Twenty-seven were seen on swamps near Kellidie Bay, and three on a swamp 14 miles before we reached Port Lincoln.

6. *Podiceps poliocephalus*, Hoary-headed Grebe (11).

Seen on Ucarro Dam, Angle Swamps, and Yannabie Dam in Nonning, and on the dam at Donald's Plain.

7. *Phalacrocorax varius*, Pied Cormorant (51).

Seen at Port Augusta (one bird there caught and swallowed a toad-fish), Streaky Bay, Kellidie Bay, Port Lincoln, and Cowell.

8. *Microcarbo melanoleucus*, Little Pied Cormorant (156).

Seen at Streaky Bay, Kellidie Bay, Port Lincoln, Cowell, Port Augusta, and one was sitting in a tree in the Tod River below the Reservoir.

9. *Pelecanus conspicillatus*, Australian Pelican (15).

All were seen at Venus Bay.

10. *Hydroprogne caspia*, Caspian Tern (3).

Two were seen on Kellidie Bay and one at Port Augusta.

11. *Sterna bergi*, Crested Tern (39).

Seen at Port Augusta, Venus Bay, Kellidie Bay, and Cowell.

12. *Larus novae-hollandiae*, Silver Gull (670).

Noted at Port Augusta, Angle Swamps (Nonning), Donald's Plain, Streaky Bay, Lake Greenly, Wangary, Kellidie Bay, Port Lincoln, and Cowell.

On Goat Island, Kellidie Bay, they were nesting. Five nests were found, four containing one egg each, and one with two eggs. Sixty-three birds were counted on and near that island. At Streaky Bay and Port Lincoln these birds are very tame indeed, and are to be seen in the streets, on the houses, and amongst the fowls in the fowl yards.

13. *Gabianus pacificus*, Pacific Gull (47).

Seen at Streaky Bay, Venus Bay, Elliston, Kellidie Bay, and Port Lincoln. Four immature birds were seen at Streaky Bay, and they settled on the roofs, chimneys, on the jetty, and hovered over the streets and yards in quest of food. At Elliston two birds were perched on a tank at the foot of a windmill. At Port Lincoln we watched for some time one bird soaring sideways, facing the wind, and it rarely flapped its wings.

14. *Haematopus ostralegus*, Pied Oyster-catcher (18).

Two were seen at Streaky Bay, five at Venus Bay, nine at Kellidie Bay, and two at Port Lincoln. The last named were feeding along the shore about 7 a.m., and flew away when an attempt was made to approach nearer, uttering their call of "Look out! Look out!"

15. *Haematopus unicolor*, Black Oyster-catcher (3).

They were sitting on a rock near our landing-place on Goat Island, Kellidie Bay, and flew away as we got near.

16. *Lobibyx novae-hollandiae*, Spur-winged Plover (14).

Two were noted at Donald's Plain, three near Lake Hamilton, one at Wangary, two at Kellidie Bay, four at Wangary Creek, and one near Tumby Bay. At Donald's Plain the birds called at 8.38 p.m. the first night, and from 7.30 p.m. to 10 p.m. on the second night of our stay there. At our Wangary Camp one bird called at 8.40 p.m. and kept it up for a short while.

17. *Zonifer tricolor*, Banded (Black-breasted) Plover (72).

Seen at Pandurra, Corunna, Uno, Siam, Nonning, Coralbignie, Angle Swamps (Nonning), Scrubby Hill, Coralbignie Rocks, Yannabie Dam, Donald's Plain, Narlaby Tanks, Weetarra Tanks, Carpa, Warrayappa, and Randell's Tank.

At Coralbignie and Nonning we saw a pair at each place, with a chick running beside them. On our arrival at Narlaby Tanks a pair of these birds were flushed, but one only went a little distance and crouched on the ground and spread its wings out. We stopped and searched the place, and Mr. McGilp found the nest about 50 yards from where we first saw the birds. It contained three eggs and was situated on an open plain, lightly grassed, 12 yards from the road and 71 yards from the tank. It was a cup in the ground amongst some horsedung. In the cup was rabbit-dung and very small sticks. Diameter of cup, $14\frac{1}{2}$ cm.; depth, $3\frac{1}{2}$ cm. Eggs, .8 incubation. At Weetarra Tanks and Randell's Tank a bird did the crouching act, but no nest or young could be found after careful search.

18. *Charadrius ruficapillus*, Red-capped Dotterel (29).

Seen at Angle Swamps (Nonning), Sheringa, Kellidie Bay, and Cowell.

At the Angle Swamps a nest of this bird was found about 30 feet from the water's edge and it contained two eggs.

19. *Charadrius melanops*, Black-fronted Dotterel (9).

One was seen on Ucarro Dam (Nonning), three at Coralbignie, five at Angle Swamps (Nonning).

20. *Cladorhynchus leucocephalus*, Banded Stilt (2,002).

Over 1,000 birds were seen on a shallow backwater near the southern end of Lake Hamilton. They were studded all

over the shallows and appeared to be feeding. Two birds were at the side of the causeway across an arm of the Lake. Over 1,000 were seen on Lake Greenly. They were about 100 yards from the shore in very shallow water, and were resting. They were standing thickly together over a distance estimated at 75 yards. In both those flocks the numbers given are much under-estimated.

21. *Recurvirostra novaehollandiae*, Red-necked Avocet (1).

One bird was seen on the second Angle Swamp in Nonning. It was walking about feeding near the shore, but would not allow a near approach. That was on 12th August, but on 14th August it was not on any of those swamps.

22. *Pisobia ruficollis*, Red-necked (Little) Stint (15).

The 15 were seen on the shore of Kellidie Bay. One specimen ♀ was taken. The length of the body was 14.5 cm., whereas the total wing spread was 30.75 cm.

23. *Burhinus magnirostris*, Southern Stone-Plover (3).

The call of a bird of this species was heard at three places—Coralbignie, Narlaby Tanks, and Wangary.

24. *Notophoyx novaehollandiae*, White-faced Heron (Blue Crane) (4).

Two were seen on swamps near Lake Greenly, one at Coulta, and one near Wangary.

25. *Demiegretta sacra*, Reef Heron (1).

One was seen feeding on the shore of Kellidie Bay.

26. *Chenopsis atrata*, Black Swan (37).

These birds were seen on swamps, six near Sheringa, 30 near Lake Greenly, and one near Wangary.

27. *Chenonetta jubata*, Maned Goose (Wood Duck) (1).

One was seen on the dam at Donald's Plain on 17/8/23, together with eight Teal and one Hoary-headed Grebe. They were still there at 6.45 a.m. on 18/8/23, but at 1.10 p.m. on 19/8/23 the Maned Goose, the Grebe, and one Teal had left, and at 6.5 p.m. on the same day the seven Teal had gone.

28. *Tadorna tadornoides*, Chestnut-breasted Shelduck (Mountain Duck) (6).

Four were seen on a large swamp near Sheringa, and two on a swamp near Port Lincoln.

29. *Anas superciliosa*, Black Duck (13).

Seen at Angle Swamps (Nonning), near Sheringa, Wangary Creek, and Goat Island (Kellidie Bay).

A nest of this species was found on Goat Island. The bird was flushed from the nest, which contained 10 eggs—five fresh and five with .9 incubation.

30. *Virago castanea*, Chestnut Teal (26).

The whole of these birds were seen in a bend of the Wangary Creek. Ten of them were males and were beautiful birds. They were very wary.

31. *Virago gibberifrons*, Grey Teal (168).

Seen on Ucarro Dam and Angle Swamps (Nonning), Donald's Plain, Punkey Plains Reservoir, near Sheringa, Lake Hamilton, near Kellidie Bay, and on Wangary Creek.

32. *Biziura lobata*, Musk Duck (7).

Two near Kellidie Bay, one near Wangary, and four on the Tod River Reservoir (the only water-birds seen on that Reservoir).

33. *Circus approximans*, Swamp Harrier (9).

One was seen at Lake Hamilton, seven were standing in the reeds in different parts of a swamp near Kellidie Bay, and one near Port Lincoln.

34. *Astur fasciatus*, Australian Goshawk (2).

Four miles before we reached Yantanaby a bird of this species flew across the road in front of the motor-car. In the mallee at Yantanaby another bird was seen, with a small bird in its talons.

35. *Accipiter cirrhocephalus*, Collared Sparrowhawk (2).

One flew off the nest in a big redgum on Wangary Creek. It was shot and was ♂. The nest was empty. The ♀ was in the same tree.

36. *Uroaetus audax*, Wedge-tailed Eagle (52).

Two were seen in the Lincoln Gap, two in Pandurra, two in Corunna, one near Ucarro Dam, three near Coralbignie, one at Nonning, one at Lake Gairdner, three near Wipipippee Rocks. Near Kolendo Station property on our way from Nonning we saw two Eagles, one of which was being attacked by three Crows.

Later on that day we saw four Eagles (one of which was being attacked by a White-backed Magpie), one in Thurlga, one at Donald's Plain, one at Punkey Plains Reservoir, one near Narlaby Tanks, two at Sheringa, one near Kellidie Bay, one at Wangary, one near Roopena Woolshed, three at five miles from the Woolshed, three at 10 miles, one at 12 miles attacked by a Crow. Then near a dam in the Roopena lambing paddock, 15 miles from the Woolshed, we saw 13 Eagles flying low, just above the timber, myall and sandalwood. Just beyond that place one Eagle was seen on a low dead tree, and at 16 miles one Eagle was attacked by a Crow (in all, 25 Eagles in "Roopena").

There were thus a fair number of this species seen, but war is waged against this bird by the station owners. We saw, one Eagle dead by the side of the track in Nonning. It was decapitated and was near a steel trap.

37. *Hieraetus morphnoides*, Little Eagle (4).

One was seen at Coralbignie, one at Fly Camp (Nonning) was being attacked by five Crows, one near Randell's Tank was attacked for some time by a Crow, and one five miles from Roopena Woolshed was flushed from its nest, which was built 35 feet from the ground in a sandalwood tree, and was constructed of large sticks, the mass measuring 2½ feet by 2 feet. It contained one egg—fresh. At the bottom of the Little Eagle's nest, at the south-east corner, a Yellow-tailed Thornbill's nest was built into it and contained one egg. On the north-west corner there was an old nest of a Yellow-tailed Thornbill. The Little Eagle was one of the light form, and did not leave the nest until Mr. McGilp clapped his hands when close to the tree.

38. *Haliastur sphenurus*, Whistling Eagle (6).

Seen at Nonning, Mt. Hope, Lake Greenly, Wangary Creek, and Port Lincoln.

39. *Ieracidea berigora*, Brown Hawk (23).

Seen in Pandurra, Corunna, Siam, near Ucarro Dam, Coralbignie, Nonning, near Lake Gairdner, Whipstick Creek (Nonning), Coralbignie Rocks, Thurlga, Narlaby Tanks, Weetara Tanks, Yantanaby, Kellidie Bay, in Roopena. (One of the light form was seen at Corunna.)

40. *Cerchneis cenchroides*, Kestrel (19).

Seen at Corunna, Coralbignie, Nonning, Wipipippee Rocks, near Elliston, Way, Sheringa, Lake Hamilton, Wangary, North

Shields, Wertigo Camp, in Roopena, Lincoln Gap, Port Augusta West.

41. *Ninox boobook*, Boobook Owl (4).

One was heard at Coralbignie Rocks, one at Donald's Plain, and one at Narlaby Tanks. One was flushed about 5 p.m. from a hollow in a tree when the tree was struck, one mile north of Narlaby Tanks.

42. *Trichoglossus moluccanus*, Blue Mountain Lorikeet (98).

Two were seen at Coulta, and five miles further on 59 were noted whilst we had lunch. The big redgums were in flower at this spot, and although the wind was a perfect gale the screechings of these birds could be easily heard. Twenty were seen near Wangary, 14 along Wangary Creek, one near Port Lincoln and two near the Tod River Reservoir. At Wangary Creek this species was found breeding in the big redgums. Two nests in hollows, about 18 feet from the ground, each contained two young.

43. *Glossopsitta porphyrocephala*, Purple-crowned Lorikeet (86).

Seen at Coralbignie, Weetara Tanks, Yarrama Tank, Yantanaby, near Coulta, Wangary, Wangary Creek, and Port Lincoln.

Nests.—A Lorikeet was noticed in a mallee 15 feet from our camp at Yantanaby. The hollow was 25 feet up, and after "Jim" had chopped the limb a few times the young Lorikeets began to call out. Prior to that they had not been heard. Three miles from Yantanaby camp we stopped and went into a belt of mallee and found five nests of this species—one with one egg, one with three eggs .5 incubation, one with three young just hatched, and two with three young each.

44. *Cacatua leadbeateri*, Pink Cockatoo (Major Mitchell) (52).

Three were seen at Ucarro Dam (Nonning), 20 at Coralbignie, eight at Nonning, 10 near Wipipippee Rocks, two at Whistick Creek (Nonning), two at Donald's Plain, three near Yardea, two near Narlaby Well, and two at Narlaby Tanks.

This species was generally found on the ground and feeding; when first disturbed the crest is erected.

45. *Cacatua roseicapilla*, Galah (36).

Three were seen at Coralbignie, two at Middle Tanks, and a flock of 31 were seen at Scrubby Hill (Nonning) feeding in the

grass amongst the bluebush. We were told at Nonning that it is only within recent years that this species has appeared on that station.

46. *Barnardius zonarius*, Port Lincoln Parrot (136).

Seen at Coralbignie, Nonning, Coralbignie Rocks, Mt. Ive, Thurlga, Donald's Plain, Yardea, Narlaby Tanks, Weetara Tanks, Yantanaby, Chilpenunda Tank, near Streaky Bay, Sheringa, Coulta, Wangary, Wangary Creek, near Port Lincoln, and near Warrayappa. The majority of the birds seen were in pairs, but generally we were too early for nesting. Two nests at Coralbignie, three at Donald's Plain, were ready for eggs. Three miles from Yantanaby a nest had three eggs, but the hollow was in too difficult a spot. A nest was found at Wangary Creek in a hollow in one of the big redgums with three eggs, fresh.

A specimen ♂ was taken in the mallee south of Coralbignie.

47. *Psephotus haematonotus*, Blue Bonnet (12).

One was seen at Lincoln Gap, three in Pandurra, one at Nonning, two at Fly Camp, two near Wipipippee Rocks, two near Wertigo Camp, one 10 miles on from Roopena Woolshed. In the last case the nest was found in a hollow where a limb had broken away from a black oak tree, $5\frac{1}{2}$ feet from the ground. There were a few feathers in the hollow, probably off the bird itself. Five eggs, four of them .5 incubation and one addled.

This species was very quiet and could be approached closely.

48. *Psephotus varius*, Varied Parrot (72).

Seen in Lincoln Gap, in Pandurra, near Coralbignie, in Nonning, near Wipipippee Rocks, Coralbignie Rocks, in Thurlga, in Yardea, Donald's Plain, Narlaby Tanks, Weetara Tanks, Yantanaby, near Chilpenunda Tank, Streaky Bay, Mt. Hope, Wangary, Kellidie Bay, Wangary Creek, and near Cowell.

A specimen ♂ was taken in Thurlga. This species could be approached closely. The scarlet shoulder of the female is very noticeable.

49. *Neophema petrophila*, Rock-Parrot (36).

All of those birds were seen on Goat Island, Kellidie Bay. They were nesting in the small caves, formed where the limestone rocks had fallen away, or in crevices amongst the fallen rocks. The nests are merely little cups excavated in the sand and only one had an egg in it. We were evidently too early for the general nesting. The birds when disturbed flew

a few yards away and settled on the rocks, or on a shrub, and they did not fly again until one was a few yards from them. The call is a sweet, tinny whistle.

50. *Podargus strigoides*, Tawny Frogmouth (1).

This bird was seen at Yantanaby. It was sitting on a nest in a mallee, 30 feet from the ground, which was built on top of an old stick nest of a Magpie. We did not climb to the nest. At 5.30 p.m. the bird was facing north, but on the following morning it was facing south, towards our camp, which was 30 yards away. The night was very windy, but once I heard a few calls of "Oom, oom, oom."

51. *Aegotheles cristata*, Owlet Nightjar (3).

At Whipstick Creek, Nonning, a bird was found in a dead hollow stub of mallee four feet from the ground. A description was taken. It was released and it flew away noiselessly. Iris, brown; legs and feet, pinkish grey; bill, black, inside mouth, white; back, grey; dull buffing at back of neck; tail, grey, barred with light grey; head, blackish line down centre of head, two broad bands of grey, then three encircled by a band of black; under chin, fulvous grey; breast, grey striped with light grey; abdomen, white; under tail coverts, white; thighs, dark grey striped with lighter grey. Near Weetara Tanks a bird was found in a two-pronged dead stub of a mallee four feet from the ground. The greyish marks on the head, and the eyes, were noticeable in the hollow, in which it was 18 inches from the mouth. It would not move with tapping on the outside, so a stick was poked in from a hole in the back and the bird flew out and away without the slightest sound. The third bird was seen at Wangary Creek. As a ladder was bumped against the bole of a big redgum the bird flew out of a hollow about 15 feet up. In the same tree a Port Lincoln Parrot's nest with three eggs was found.

52. *Dacelo gigas*, Laughing Kookaburra (4).

The first of this species seen on the trip was a pair at the side of the road seven miles before we arrived at Wangary. Two others were heard on the Wangary Creek.

53. *Cuculus pallidus*, Pallid Cuckoo (26).

Two were noted in Pandurra, one near Uno, two in Nonning, three near Coralbignie, three near Wipipippee Rocks, one at Angle Swamps, one at Coralbignie Rocks, one in Thurlga, one near Yartoo, one near Eurilla Hill (Yardea), one at Yan-

tanaby, one at Mt. Hope, two at Kellidie Bay, two at Arno-Bay, one near Carpa, one at Cowell; and two in Roopena.

A specimen ♂ was taken in Pandurra.

54. *Cacomantis flabelliformis*, Fan-tailed Cuckoo (7).

One was heard six miles south of Mt. Hope, one near Lake-Greenly, one near Kellidie Bay, one at Wangary Creek; three were seen five miles south-east of our camp at Wangary, and one of those, ♂, was taken. It was about 5.15 p.m. when we saw those three; two of them were calling the trill, whilst at times the whole three gave the one mournful-note call.

55. *Mesocalcius osculans*, Black-eared Cuckoo (15).

One was seen near Ucarro Dam, one at Coralbignie, three near Wipipippee Rocks, two at Nonning, one at Donald's Plain, one at Yartoo, one near Narlaby Tanks, one at Mt. Hope, one near Moonabie Tanks, one at Roopena Woolshed, and two further on in Roopena.

A specimen ♂ was taken at Wipipippee Rocks.

The call of this bird consists of two parts—the first not unlike the Narrow-billed, but not sharp and more like “Fee-ar” repeated three or four times, after that it utters some sharp quick squeaks like a bird being hurt or choked.

56. *Chalcites basalis*, Narrow-billed Bronze Cuckoo (36).

Two were noted in Pandurra, two near Uno, one in Siam, two at Coralbignie, one near Fly Camp, one near Angle Swamps, one near Scrubby Hill, five near Wipipippee Rocks, three near Yannabie Dam, one at Yardea, one near Eurilla Hill, one near Narlaby Well, one near Narlaby Tanks, one near Elliston, two at Mt. Hope, one at Kellidie Bay, one near Wangary, two at Port Lincoln; one near Cowell, two near Warrayappa, two near Wertigo Camp, and two in Roopena.

A specimen ♀ was taken in Pandurra.

At Mount Hope, shortly after 7 a.m., a Pallid Cuckoo, a Black-eared Cuckoo, and a Narrow-billed Bronze Cuckoo were calling simultaneously.

57. *Hirundo neoxena*, Welcome Swallow (168).

Noted everywhere, with the exception of the journey between Wertigo Camp and Lincoln Gap. They were usually met with near tanks, wells, dams, or swamps.

58. *Cheramoeca leucosternum*, White-backed Swallow (18).

Two were seen in Lincoln Gap, three near Corunna home-stead, one in Corunna, three near Ucarro Dam, one at Coral-

bignie, one in Nonning, two at Angle Swamps, one at Yartoo, and four at the first sand-ridge beyond Narlaby Tanks.

Ten holes in the bank of a dry watercourse in Lincoln Gap were examined, but there were no Swallows' nests. A Whiteface had commandeered one hole for a nest, and it contained two eggs.

59. *Hylochelidon nigricans*, Tree Martin (27).

Three were seen at Angle Swamps, nine at Donald's Plain, four near Streaky Bay and 11 at Wangary Creek.

60. *Hylochelidon ariel*, Fairy Martin (1).

One was seen near a dry watercourse in Lincoln Gap.

61. *Microeca fascinans*, Jacky Winter (23).

Seen at Ucarro Dam and Whipstick Creek (Nonning), Coralbignie Rocks, Thurlga, Donald's Plain, near Narlaby Tanks, and near Warrayappa.

In a specimen ♀ taken at Donald's Plain the outer feathers of the tail are tipped white (*M. assimilis*).

62. *Petroica goodenovii*, Red-capped Robin (116).

This species was seen everywhere except in these three sections—at Donald's Plain, Yantanaby to Streaky Bay, and Port Lincoln to Cowell.

Nests.—Two miles from Port Germein a nest was being built. In Pandurra—Nest with two Robin's eggs and one of *Chalcites basalis*. Near Wipipippee Rocks—Five nests found—one with three eggs, two with two eggs each, and two ready for eggs. At Yannabie Dam a nest with two young, almost fully fledged. Gape, yellow; inside mouth, yellow; throat, white, each feather finely tipped with black; breast, white streaked with grey; abdomen, white; under-tail coverts, quite white; flanks and thighs, white; wing, dull black edged on the outer web with grey; two lateral tail feathers, white, the others dull black tipped with white; the whole of the upper surface of the body, dark grey striped with light grey. In Thurlga—A nest with two eggs. Near Yartoo—A nest with two eggs. Lake Hamilton—A nest with one young one; nearly full grown.

63. *Melanodryas cucullata*, Hooded Robin (23).

Seen in Corunna, near Coralbignie, at Wipipippee Rocks, Coralbignie Rocks, Nonning, near Yannabie Dam, near Mt. Ive, in Thurlga, near Yartoo, Wangary and Wertigo Camp.

Nests.—Wipipippee Rocks—A nest ready for eggs; a nest with two eggs .5 incubation. Coralbignie Rocks—One ready for eggs. Near Yannabie Dam—Nest of usual construction in a two-pronged fork of a dead pinwood and two feet from the ground. One young bird in the nest, a Cuckoo, and probably a Pallid Cuckoo. The two Robins' eggs were heavily incubated (one was chipped) and had been pushed out of the nest and had fallen into a crevice in the larger limb forming part of the fork. Both Robins were flushed from near the nest, and both did the wounded-bird trick. We put the eggs back in the nest with the young Cuckoo, but that bird did not push them out whilst we were there.

A specimen ♂, breeding, was taken at Wipipippee Rocks.

64. *Rhipidura flabellifera*, Grey (White-shafted) Fantail (8).

Three were seen on Wangary Creek and five at Port Lincoln..

65. *Rhipidura leucophrys*, Willie Wagtail (108).

Seen in all sections but two—Corunna to Nonning, and Yardea to Narlaby Tanks.

A nest was found not far from Port Germein, ready for eggs.

66. *Seisura inquieta*, Restless Flycatcher (23).

Seen at Nonning, near Wipipippee Rocks, Whipstick Creek, Coralbignie Rocks, in Thurlga, Yardea, Mt. Hope, Kellidie Bay, Wangary, Wangary Creek, and near Cowell.

67. *Eopsaltria griseogularis*, Western Yellow Robin (25).

Five were seen at Whipstick Creek (Nonning), 18 at Donald's Plain, and two near Talia.

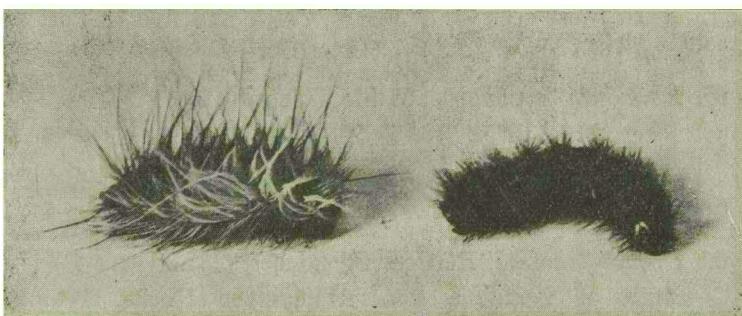
Nests.—One at Whipstick Creek contained one addled egg and one young bird with pin feathers—very dark skin; yellow gape; eyes closed; about a week old. At Donald's Plain a nest was found near our camp at 8.45 a.m. There was one egg in the nest. About 2.20 p.m. the same day we passed that way again and found two eggs in the nest. The bird sat on the nest until approached closely. Another nest was found at Donald's Plain, in course of construction.

A specimen ♂ was taken at Whipstick Creek. The call is one short note. The grey throat is very noticeable. The birds were very tame, and came within a few feet of one.

68. *Oreoica gutturalis*, Crested Bell-bird (106).

Noted everywhere but at Mt. Hope and Wangary.

Nests.—Coralbignie.—Nest seven feet from the ground in a dead large-leaved mistletoe in a myall tree. The male bird was flushed off the nest. Two eggs .3 incubation. There were 12 caterpillars alive, but stationary, on the rim of the nest; three dead caterpillars were inside the nest, whilst others, dead, seemed to be built into the nest. One of the live caterpillars had long grey hairs. Mr. A. M. Lea, F.E.S., of the S.A. Museum, identified the caterpillars as two species of *Teara*, or Tent Caterpillars, all but one having shed their hairs. Scrubby Hill.—Nest six feet from the ground in a pinwood tree and built on top of an old Babbler's nest. Eleven live cater-



THE BELL-BIRD'S CAMOUFLAGE.

Teara contraria, Tent Caterpillars.

The genus *Teara* is widely distributed in Australia, and contains species whose hairy larvae or caterpillars construct silken "tents," in which frequently 1,000 of them live together during the day, coming out at night to feed. The hairs of the caterpillar are intensely irritating to the human skin, and cattle mostly avoid the trees in which the tents are constructed. Nearly all birds avoid hairy caterpillars, but Cuckoos seem to prefer them to all other insects.

When fully grown the Tent Caterpillar is about an inch and a quarter in length.

In the above specimens the spirit in which they were preserved has darkened the bodies considerably.

pillars of two species were on the rim and the inside of the rim; several dead ones were at the bottom of the nest with the three eggs (.2 incubation); one dead one was worked into the nest. The female was on the nest, and did not move until a hand was put up. One of the live caterpillars had long grey hairs. The 11 were identified as *Teara*. Wipippee Rocks—Nest 10 feet from the ground in a broad-leaved mistletoe in a myall tree. Ready for eggs. Seven live caterpillars of one species were on the rim. Thurlga—Nest 10 feet from the ground in a live black oak and built on top of an old Babbler's nest. Six live caterpillars were on the rim and inside the rim of the nest—all had shed their hairs. The male bird was flushed off the nest. There were three young in the nest. Dark skin; underneath, quite bare; inside of mouth, mustard yellow; gape, yellow; eyes, closed; tufts of down on forehead, eyelids, back of head, middle of back, the hips, and shoulders. On looking down at the young from above the nest, the down on the middle of their backs looks exactly like one of the grey hairy caterpillars (mentioned as found in the first two nests). Thurlga—Another nest, seven feet from the ground, in a four-pronged fork of a black oak. It contained three young and had eight live caterpillars (hairs shed) on the rim and three dead caterpillars amongst the young. The female was flushed off the nest. Donald's Plain—Nest seven feet from the ground in a three-pronged fork of a mallee. It contained two fresh eggs, and had five live caterpillars on the rim. The female was flushed from the nest. The "Teara" build a fairly large nest. A fair number were seen during the trip, but I do not remember seeing any of their nests near the spots where the above Bell-Birds' nests were found. With the live caterpillars on the nests the back half appeared immovable, whilst the front half could be lifted up by the caterpillar in the air. The calls of the Bell-Birds were the usual ones, but at Donald's Plain I heard for the first time the call of one bird which sounded like "Ate-po" (with the ventriloquial ring), and kept up incessantly for about 10 minutes at a time. That call was heard a few times elsewhere.

69. *Pachycephala pectoralis*, Golden-breasted Whistler (6).

All the birds were noted at Port Lincoln in the scrub.

70. *Pachycephala rufiventris*, Rufous-breasted Whistler (17).

Noted at Coralbignie, Wipippee Rocks, Nonning, Coralbignie Rocks, Thurlga, near Yardea, Mt. Hope, and near Port Lincoln.

A specimen ♂, breeding, was taken in Thurlga. This species was very wary.

71. *Pachycephala inornata*, Gilbert-Whistler (60).

Noted at Nonning, Coralbignie, Wipipippee Rocks, Scrubby Hill, Coralbignie Rocks, Mt. Ive, Thurlga, Yardea, Donald's Plain, Narlaby Tanks, Yantanaby, near Chilpenunda Tank, Randell's Tank, near Roopena Woolshed, and in Roopena.

Nests.—Coralbignie—One ready for eggs. Wipipippee Rocks—A nest with four eggs .4 incubation. Near Cowell—One ready for eggs.

A specimen ♂ was taken in Nonning.

One call of this species is phonetically like "Chook, chook, chook" (12 times in all), then "Or whit, er whit, er whit, er whit." After those they usually break out into a song exactly like that of *P. rufiventris*. By imitating the preliminary calls a bird (or both birds) would approach one fairly close. At Coralbignie, Wipipippee Rocks, and Coralbignie Rocks birds of this species and *P. rufiventris* were seen and heard singing. The singing seemed to be in response to one another.

72. *Colluricincla rufiventris*, Western Shrike-Thrush (146).

This species was met with all through the trip. A specimen ♂ was taken in Pandurra.

Nests.—Wipipippee Rocks—One with one young, one with two young. Donald's Plain—Two ready for eggs, and one almost completed. Weetara Tanks—A nest with three young, primaries and secondaries showing pin feathers; dark brown down; gape, yellow. Another nest just completed. Near Cowell—Nest with two fresh eggs. In Roopena—Nest with one young. At Donald's Plain in two instances a bird was seen collecting nesting material. Both birds stopped at times on a branch and fluttered their wings as a young bird does whilst being fed. At the same place we saw four Thrushes, close to one another, and two of them uttered new calls (to me). They called, very loudly "Klang, klang, klang," and then a sweet, long-drawn-out call, not unlike one that is made by a Blackbird; after that they gave the usual calls of the species.

73. *Grauculus novae-hollandiae*, Black-faced Cuckoo-Shrike (60).

Seen in Corunna, Angle Swamps, Wipipippee Rocks, Nonning, Coralbignie Rocks, Mt. Ive, Donald's Plain, Yartoo, Narlaby Tanks, Yantanaby, Chilpenunda Tank, Lake Hamilton, Mt. Hope, Wangary, Kellidie Bay, Wangary Creek, Elbow Hill, near Cowell, and Roopena.

74. *Cinclosoma castanotum*, Chestnut-backed Ground-bird (12).

All these birds were seen at Donald's Plain in the mallee. They were found generally in pairs and allowed us to get fairly close. They seemed to me to progress slower than *C. punctatum* and their actions when feeding were just like Doves'. They had a very low call. One male was seen to feed a female twice. She ran to him and took the food from his beak.

A nest was found at the butt of a dead mallee tree with two fallen limbs between the nest and the butt. It was merely a cup in the ground lined with bark and a few mallee leaves. No eggs.

75. *Drymodes brunneopygia*, Southern Scrub-Robin (19).

Two were noted at Coralbignie; five 21 miles south-south-east of Streaky Bay; 11 five miles south-east of Wangary; and one near Kellidie Bay.

Nest.—Coralbignie, with one egg, fresh. A young bird was seen at the place south-south-east of Streaky Bay.

A specimen ♂ was taken near Wangary.

76. *Pomatostomus superciliosus*, White-browed Babbler (322).

This species was met with everywhere. Hundreds—one could say without exaggeration, thousands—of old nests of these birds were found on the trip.

Nests.—Pandurra—One, with two eggs and a young, one. Nonning—A nest with three eggs .4 incubation. Coralbignie—One, with one young, three parts fledged and with the white eyebrow very distinct. One, with three young. Wipipippee Rocks—Two nests ready for eggs, and one being built. Donald's Plain—One, with one egg. Yartoo—A nest with three young. Wertigo Camp—A nest with three eggs.

77. *Ephthianura albifrons*, White-fronted Chat (135).

Seen near Port Augusta West, Lincoln Gap, in Corunna Uno, Coralbignie, Nonning, Fly Camp, Angle Swamps, Wipipippee Rocks, Lake Gairdner, Scrubby Hill, near Yannabie Dam, Mt. Ivey, Thurlga, near Yartoo, Eurilla Hill, near Way, Sheringa, Lake Hamilton, Lake Greenly, Kellidie Bay, near Tod River Reservoir, Cowell, Moonabie Tanks, Wertigo Camp, and in Roopena.

Nests.—Coralbignie—One with four eggs—three .5 incubation and one infertile. Angle Swamps—One with three young in pin feathers and one infertile egg. The parent bird fluttered.

off the nest and did the "wounded bird" trick. One nest with four eggs and a young one. A nest being built. Mt. Ive—Two nests were found, one being built and from the other the young had left. Wertigo Camp—A nest containing four eggs, one of them being a Narrow-billed Bronze Cuckoo's, all in incubation. The male bird was flushed off the nest and did the "wounded bird" trick.

78. *Acanthiza hamiltoni*, Red-tailed Thornbill (47).

Seen near Ucarro Dam, Coralbignie, Wipipippee Rocks, Coralbignie Rocks, Mt. Ive, near Mt. Hope, near Lake Greenly, Kellidie Bay, Port Lincoln, and in Roopena.

A nest was found near Wipipippee Rocks, a foot from the ground near the butt of a dead myall, and supported by some dead small branches. It was made of grass and lined with fur. The nest looked as if it had been pulled about, probably by a fox.

A specimen ♀ was taken near Ucarro Dam; another, a ♂, near Wipipippee Rocks, and a third, ♂, near Mt. Hope.

79. *Geobasileus uropygialis*, Chestnut-tailed Thornbill (44).

Seen in Pandurra, Corunna, Siam, at Angle Swamps, Wipipippee Rocks, Warrayappa, near Randell's Tank, and in Roopena. Nests.—Near Port Germein—A nest with young. Siam—One ready for eggs. Wipipippee Rocks—One with three eggs in incubation. Angle Swamps—One with three young just hatched out, all yellowish-looking. Roopena—One with three eggs in incubation.

A specimen ♂ was taken in Siam.

80. *Geobasileus iredalei*, Small-billed Thornbill (8).

Three were seen at Coralbignie and two at Mt. Ive in the samphire on dried swamps; two near Wertigo Camp; and one near the eastern boundary of Roopena in saltbush and blue-bush. This species is very wary, and when the birds are flushed they fly low just about the tops, or dart in and out, of the shrubs they frequent.

A specimen ♂ was taken at Coralbignie.

81. *Geobasileus chrysorrheus*, Yellow-tailed Thornbill (115).

This species was not met with at Coralbignie, Donald's Plain, Narlaby Tanks to Yantanaby, Yantanaby to Streaky Bay, and Wertigo Camp to Port Augusta West.

Nests.—Near Port Germein—A nest with three eggs: two incubated, one infertile. A nest with two eggs. Siam—Nest with

three eggs: one of Narrow-billed Bronze Cuckoo, .2 incubated, two of this Thornbill, fresh. Wipippee Rocks—A nest with young in it. Coralginnie Rocks—A nest with three eggs, well advanced in incubation. Lake Hamilton—A nest, the young had left. Port Lincoln—One nest not completed, and one ready for eggs. Near Cowell—A nest ready for eggs and a nest with four young, which flew out of the nest as it was touched. The young are like the old birds, excepting that the spots on the forehead are not so defined nor so bright. (See also remarks under birds numbered 37 and 118.)

82. *Smicrornis brevirostris*, Southern Weebill (77).

Seen at Whipstick Creek, Coralginnie Rocks, Donald's Plain, Yartoo, Narlaby Tanks, Weetara Tanks, Chilpenunda Tank, near Streaky Bay, Venus Bay, Lake Greenly, Wangary Creek, Port Lincoln, North Shields, Arno Bay, Cowell, Warra-yappa, and Moonabie Tanks.

83. *Megalurus gramineus*, Little Grass-Bird (2).

On our way back from Kellidie Bay we stopped at a swamp fairly covered with reeds and cutting grass. The others waded in for nests without success. I walked around it, and on getting back to the car I heard the mournful three-note call of one of these birds. On imitating the call, a second bird also answered.

84. *Diaphorillas textilis*, Western Grass-Wren (3).

On our way to Wipippee Rocks and three-quarters of a mile from Nonning homestead one bird was flushed from a clump by the motor-car. It ran for about five yards parallel and close to the car and then turned off at right angles and continued to run for about 15 yards between the clumps and finally disappeared into one clump. We searched and trampled all over that clump, but did not flush the bird. The clumps were very prickly bushes about three to four feet high. As we were working the saltbush and bluebush close to our camp at Wertigo Mr. McGilp flushed one of this species and found the nest. (See special article by Dr. A. M. Morgan.) The third bird was flushed in saltbush and bluebush in Roopena seven miles from our Wertigo Camp.

85. *Cincloramphus cruralis*, Brown Song-Lark (8).

Seen in Lincoln Gap, in Uno, near Yartoo, at Randell's Tank, and at Wertigo Camp.

86. *Calamanthus campestris*, Rufous Field-Wren (5).

One was seen six miles from Corunna homestead. One was seen about two miles from Nonning homestead; that bird was flushed twice from some low prickly bushes, and Mr. McGilp found an incomplete nest. One was flushed in Mt. Ivey in a dried samphire swamp, and another bird was singing at the edge of that swamp. One was flushed in Roopena, 16 miles on from the Woolshed, amongst saltbush and bluebush near a dry watercourse.

87. *Pyrrholaemus brunneus*, Redthroat (4).

One, a male, was seen near Yannabie Dam in some saltbush. He then flew into a dead myall and began to sing prettily. I was only a few feet away, but on my calling to the other members the bird disappeared, and we could not flush him again. The other birds seen were females—two, five miles from Randell's Tank, and one close to our camp at Wertigo.

88. *Sericornis maculata*, Spotted Scrub-Wren (18).

Seen near Elliston, Lake Hamilton, Kellidie Bay, near Wangary Camp, Port Lincoln, and near the jetty at Cowell.

89. *Malurus cyaneus*, Blue-Wren (59).

Seen at Wangary Camp, on the way to and at Kellidie Bay, Wangary Creek, between Wangary and Port Lincoln, and at Port Lincoln.

90. *Malurus callainus*, Turquoise Wren (12).

Two near Ucarro Dam, ♂, ♀; the male was not in full plumage. Five at Coralbignie, four of them in a dried samphire swamp; one male in full plumage. Two at Coralbignie Rocks; the male not in full plumage. One (male in full plumage) near Randell's Tank, and two in Roopena.

91. *Malurus leuconotus*, White-winged Wren (25).

One near Port Augusta West, three in Pandurra, one in Corunna, three in Nonning, nine near Scrubby Hill, two near Wipipippee Rocks, one near Elbow Hill, five (including ♂, ♀, and two young) in Roopena.

Nests.—Corunna (near Lake Gillies Tank).—A nest ready for eggs. Roopena (16 miles on from the Woolshed)—A nest of the usual construction, two inches from the ground in a saltbush. It contained two young, just ready to leave the nest. Bills, grey; inside mouth, yellow; upper surface of body, greyish brown; under, white; legs and feet, pinkish brown. The female

ran from the nest in a mouse-like way with partly spread wings and tail depressed. The male bird was in full plumage and looked a beautiful bird.

92. *Malurus assimilis*, Purple-backed Wren (7).

Four were seen at Coralbignie, and three nine miles on from Cowell, one being a male in full plumage.

93. *Artamus cinereus*, Black-faced Wood-Swallow (123).

Seen near Port Augusta West, in Lincoln Gap, in Pandurra, in Corunna, at Coralbignie, Fly Camp, Angle Swamps, Scrubby Hill, Wipipippee Rocks, Yannabie Dam, near Eurilla Hill, Wertigo Camp, and in Roopena.

Nests.—Pandurra—One being built. Roopena—A nest with one egg. A nest with four eggs, fresh.

94. *Artamus cyanopterus*, Dusky (Sordid) Wood-Swallow (125).

Seen at Coralbignie, Nonning, Wipipippee Rocks, Scrubby Hill, Coralbignie Rocks, Thurlga, Yardea, Donald's Plain, near Eurilla Hill, near Weetara Tanks, Yarrama Tank, near Yantanaby, near Chilpenunda Tank, near Streaky Bay, Venus Bay, Sheringa, Mt. Hope, Wangary, Kellidie Bay, Wangary Creek, near Port Lincoln, North Shields, near Tumby Bay, Lady Kinnaird's Tanks, Elbow Hill, near Cowell and Warayappa.

95. *Grallina cyanoleuca*, Magpie-Lark (8).

Noted at Donald's Plain, near Yantanaby, near Mt. Hope, near Lake Greenly, and on Wangary Creek.

96. *Aphelocephala leucopsis*, Whiteface (266).

This species was met with everywhere excepting at Donald's Plain, Wangary to Port Lincoln (not seen at Port Lincoln), and between Port Lincoln and Cowell.

Nests.—Between Port Germien and Port Augusta, a nest with two eggs; a nest with three eggs slightly incubated, and a nest with four eggs, fresh. Lincoln Gap—A nest in a White-backed Swallow's burrow with two eggs. Nonning.—Two Whitefaces were building a nest in a quart pot, tilted at a slight angle, on a wire fence in the homestead yard and four feet from the ground. It was begun on 9th August. It was still incomplete on 11th, but some one had fixed the pot straight. The pot was placed at the original angle, and on 13th the nest was completed, the pot being full to the brim with dried grasses with a narrow passage at the top side to the nest proper near the bottom of the pot. Two Whitefaces were also building in the

top of the underground tank in the homestead yard. Coralbignie—Two Whitefaces were noticed collecting nesting material; and a nest was built inside the roof of the hut we slept in. The floor beneath the nest was littered with flock which had dropped from the nest. The flock was taken from a palliasse in the room. Thurlga—A nest ready for eggs; a nest with five young, with light-coloured skin, eyes closed, gape yellow; feather tracts—forhead, back of neck, middle of back, back of thighs, shoulders, forearms, side of abdomen, above eyes, and tail. Mt. Ive—A nest ready for eggs.

A specimen ♂ taken at Coralbignie in a dried samphire swamp. A specimen ♀ taken at Wertigo Camp in saltbush and bluebush. A specimen ♂ taken in Roopena in saltbush and bluebush. In each of those cases the bird was taken in mistake. The members of this species seen in those three spots were very wary and had habits similar to the *Geobasileus iredalei* (Bird No. 80). Usually this species could be approached very closely.

97. *Neositta pileata*, Black-capped Sittella (17).

Four were seen at Coralbignie, nine at Angle Swamps, and four at Wipipippee Rocks.

Nests.—Angle Swamps—A nest with three fresh eggs. Wipipippee Rocks—Nest being built, three birds were helping in its construction.

A specimen ♂ was taken near Wipipippee Rocks.

98. *Climacteris rufa*, Rufous Tree Creeper (33).

Three were seen near Coralbignie, one at Whipstick Creek, 18 at Donald's Plain, one near Middle Tanks, three near Weetara Tanks, six near Yantanaby, and one near Chilpenunda Tank.

Nests.—Donald's Plain—One ready for eggs. Near Weetara Tanks—A nest was found in a hollow spout in a mallee $6\frac{1}{2}$ feet from the ground. Many chops were made by Mr. McGilp, and the bird on the nest did not shift. Several feathers were pulled out of the bird, as he thought it was dead. Finally she flew out and called loudly. Three eggs, fresh. The nest was lined with rabbit-fur, grass, and bark, and filled at the bottom with horsedung. Near Chilpenunda Tank, a nest with two young, down a dull black colour.

A specimen ♀ was taken at Whipstick Creek.

The call of this species was a single squeak, not often uttered, and sounding like that from a young bird. The bird flushed off the nest near Weetara Tanks gave a repeated call—

a poor imitation of the Brown Tree Creeper—not so loud as the latter's "Pink, pink, pink."

99. *Climacteris superciliosa*, White-browed Tree Creeper (2).

These birds were seen near the Wipipippee Rocks.

100. *Zosterops lateralis*, Grey-backed Silver-eye (97).

Seen near Mt. Hope, Elliston, Lake Greenly, Wangary, Kellidie Bay, Port Lincoln, and near Cowell.

Nest near Mt. Hope with two eggs.

101. *Dicaeum hirundinaceum*, Mistletoe Bird. (19).

Two were seen in Pandurra, three at Coralbignie, seven at Wipipippee Rocks, one at Scrubby Hill, one at Coralbignie Rocks, and five near Yannabie Dam.

A specimen ♂ was taken in Pandurra.

102. *Pardalotus ornatus*, Red-tipped Pardalote (51).

Noted at Coralbignie, Whipstick Creek, Thurlga, Donald's Plain, Yartoo, Narlaby Tanks, Middle Tanks, Yantanaby, Chilpenunda Tank, Mt. Hopē, Coulta, Wangary Creek; Tod River Reservoir, and Cowell.

Nest.—Near Cowell—One being constructed.

A specimen ♂ was taken at Whipstick Creek, and the call of the species at that place was "Be quick," which Mr. McGilp says is the call of the birds about Moolawatana (Lake Frome District).

103. *Pardalotus xanthopygus*, Yellow-tailed Pardalote (6).

Four were seen at 21 miles south-south-east of Streaky Bay, and two, nine miles past Cowell.

104. *Melithreptus brevirostris*, Brown-headed Honey-eater (12).

Seven were seen in the mallee south of Coralbignie and five at Donald's Plain.

105. *Glyciphila melanops*, Tawny-crowned Honey-eater (6).

One 5½ miles north of Wangary, one near Kellidie Bay, two near Wangary Camp, and two at Port Lincoln.

106. *Glyciphila albifrons*, White-fronted Honey-eater (17).

Seen at Nonning, Coralbignie, Wipipippee Rocks, Scrubby Hill, Coralbignie Rocks, Yannabie Dam, Yardea, Yantanaby, and Wertigo Camp.

107. *Meliphaga virescens*, Singing Honey-eater (200).

Met with in all places excepting Donald's Plain, Yantanaby to Streaky Bay, and Wangary to Port Lincoln.

Nests.—Fly Camp—One ready for eggs. Wipipippee Rocks—A nest with one young, pin feathers showing; a nest ready for eggs. Angle Swamps—A nest almost completed. Roopena—A nest with one egg, fresh.

108. *Meliphaga leucotis*, White-eared Honey-eater (1).

One was seen 13 miles north of Cowell.

109. *Meliphaga cratitia*, Purple-gaped Honey-eater (26).

Seven 21 miles south-south-east of Streaky Bay, two near Venus Bay, seven, four miles north-west of Talia, and 10, six miles south-east of Mt. Hope.

A specimen ♂ was taken at the place, 21 miles from Streaky Bay.

110. *Meliphaga ornata*, Yellow-plumed Honey-eater (658).

This was easily the most numerous species of Honey-eater met with on the trip. At Donald's Plain especially they were in great numbers. They were noted at Ucarro Dam, Coralbignie, Nonning, Wipipippee Rocks, Whipstick Creek, Coralbignie Rocks, Mt. Ive, Yardea, Donald's Plain, Narlaby Tanks, Middle Tanks, Weetara Tanks, Yarrama Tank, Yantanaby, Chilpenunda Tank, Streaky Bay, Venus Bay, Talia, Mt. Hope, Coulta, Port Lincoln, Cowell, and Warrayappa.

Nests.—Ucarro Dam—One with two eggs, 1 incubation. Whipstick Creek—One being built. Coralbignie Rocks—One being built. Donald's Plain—At our camp and six feet from where the motor-car was stopped a nest was being built at a height of $4\frac{1}{2}$ feet from the ground. It was suspended and close to the trunk of a young mallee. It was of the usual construction—pieces of wool, green grasses, and spiders' cocoons. The bird kept on at the building, despite our proximity, and when we left Donald's Plain the nest was complete. Weetara Tanks—One with two eggs, fresh. Near Streaky Bay—One with two young.

A specimen ♀ was taken at Ucarro Dam, and another ♀ south of Coralbignie.

This species has various calls, some very like the White-plumed Honey-eater. One call—a sustained trill—was new to me.

111. *Meliphaga plumula*, Yellow-fronted Honey-eater (2).

The two birds were seen at Wipipippee Rocks and a specimen ♂ was taken.

This species is like *M. ornata*, but has no striping on the under parts, and there is a black mark just above the golden plume.

112. *Meliornis novae-hollandiae*, Yellow-winged (New Holland) Honey-eater (198).

First met with at two miles north of Elliston, then at Elliston, near Way, Mt. Hope, Coulta, Wangary, Kellidie Bay, Wangary Creek, on the way to Port Lincoln, at Port Lincoln, and near Tumby Bay.

Nests.—Near Mt. Hope—One nearly completed. Port Lincoln—One with two eggs; one with two eggs; one with two young nearly able to fly. They showed the white eyebrow and the yellow marking on the outer edge of the secondaries.

113. *Myzantha flavigula*, Yellow-throated Miner (97).

Seen at Lincoln Gap, Pandurra, Uno, Siam, near Coralbignie, Nonning, Wipipippee Rocks, Scrubby Hill, Angle Swamps, Coralbignie Rocks, Yannabie Dam, Mt. I've, Thurlga, Yardea, Yartoo, Narlaby Tanks, Yarrama Tank, Chilpenunda Tank, near Streaky Bay, Venus Bay, Wangary Creek, Arno Bay, Wertigo Camp, and in Roopena.

Nests.—Wipipippee Rocks—One just commenced. Wertigo Camp—Three young had just left the nest, and both parents were with them.

A specimen ♂ was taken in Pandurra.

114. *Anthochaera carunculata*, Red Wattle-Bird (180).

First met with at Donald's Plain, then at Narlaby Tanks, Yantanaby, Chilpenunda Tank, Streaky Bay, Venus Bay, Talia, Elliston, Way, Sheringa, Mt. Hope, Lake Greenly, Warrow, Coulta, Wangary, Kellidie Bay, Wangary Creek, Port Lincoln, near Tod River Reservoir, near Lipson, and last heard five miles on from Arno Bay.

Nests.—Yantanaby—One beside our camp; one with two eggs, heavily incubated. Chilpenunda Tank—Nest ready for eggs. Elliston—One with two eggs, 2 incubation. Wangary Camp—Just prior to leaving a nest was found in the mallee 10 feet from our tent door and that distance from the ground. Two young fluttered out of the nest. They were three-parts grown, yellow on abdomen well marked; gape, yellow; bill, brown; slight brown down on sides and back of head, back, and rump; feet, light yellowish brown.

A specimen ♂ was taken at Donald's Plain.

Their call was slightly different from the birds near Adelaide. I did not hear "What's that," but the final was "Kuk, kuk, kuk," very loud.

115. *Acanthagenys rufogularis*, Spiny-cheeked Honey-eater (315).

Common, but not seen between Corunna and Nonning, Narlaby Tanks and Yantanaby, Streaky Bay to Mt. Hope, Wangary to Port Lincoln, or at Port Lincoln.

Nests.—Wipipippee Rocks—One ready for eggs. Yan-nabie Dam—One with two eggs.

At Donald's Plain one of the calls of this species was "Peter, Peter," a little louder than that made by Jacky Winter.

116. *Anthus australis*, Australian Pipit (Ground-Lark) (237).

Met with everywhere.

117. *Mirafra horsfieldi*, Bush-Lark (1).

At a spot four miles on from Tumby Bay this bird flew across from the left side of the road into a wheat crop on the opposite side.

118. *Corvus cecilae*, Australian Crow (403).

Seen everywhere we went.

Nests.—Lincoln Gap—One with four eggs, slightly incubated; one with two eggs. Wertigo Camp—Nest in a sandalwood tree, 30 feet from the ground. The Crow was sitting on the nest, which was built of sticks and was 2 feet x $1\frac{1}{2}$ feet. At the south-eastern corner of the Crow's nest was the nest of a Yellow-tailed Thornbill (*G. chrysorrheus*), and two of the latter birds were near that nest. Roopena—A nest in a sandalwood, made up of longish sticks and lined with bits of rag, string, Miners and other birds' feathers, a bit of rope, sheep's wool, and pieces of bark, six eggs .1 incubation.

119. *Corcorax melanorhamphus*, Chough (99).

First met with at Donald's Plain, then at Narlaby, Yantanaby, near Chilpenunda Tank, near Streaky Bay, Venus Bay, near Talia, Lake Hamilton, near Mt. Hope, Lake Greenly, Wangary Creek, and last at 13 miles north-west of Port Lincoln.

Nests.—Yantanaby—One with two fresh eggs; one ready for eggs. Wangary Creek—One with three eggs, fresh; one in a big redgum. A bird flew on the latter nest and spread out its wings, and shortly afterwards a second bird flew to the tree with

food—it looked like a mantis—in its beak. A little further on a Chough was seen collecting mud in its beak. Four old nests were seen at Donald's Plain and one near Yardea.

120. *Strepera versicolor*, Grey Bell-Magpie (9).

Seven seen at Port Lincoln and two near Warrayappa. Also seven birds, species not identified—two at Narlaby Tanks; two near Mt. Hope, one near Coulta, and two at Wangary Creek. We stopped on each of these occasions, but we could not get anywhere near the birds in order to identify the species. At Port Lincoln we got within 50 yards of the seven birds on two occasions.

121. *Cracticus torquatus*, Grey Butcher-Bird (34).

Seen at Coralbignie, Angle Swamps, Wipipippee Rocks, Coralbignie Rocks, Mt. Ive, Narlaby Tanks, Yantanaby, Chilpenunda Tank, Streaky Bay, Elliston, Mt. Hope, Wangary, near Arno Bay, Cowell, Wertigo Camp, and in Roopena. The two birds near Mt. Ive were attacked and chased away by three Yellow-throated Miners.

122. *Gymnorhina tibicen*, Black-backed Magpie (19).

Two were seen at 19 miles from Port Augusta West, just clear of the Lincoln Gap, four in Corunna, one in Uno, one in Siam, nine in Nonning, and one near Scrubby Hill.

Nests.—In Siam—One with four eggs. Nonning—One bird seen at a nest.

123. *Gymnorhina hypoleuca*—White-backed Magpie (218).

Seen in Siam, Nonning, Mt. Ive, Warner's Well, Yardea, Donald's Plain, Yartoo, Narlaby Tanks, Yarrama Tank, Yantanaby, Chilpenunda Tank, Streaky Bay, Venus Bay, Talia, Colton, Sheringa, Lake Hamilton, Mt. Hope, Warrow, Coulta, Wangary, Kellidie Bay, Wangary Creek, on the way from Wangary to Port Lincoln, Port Lincoln, Tod River Reservoir, Tumby Bay, near Lipson, Carrow, Arno Bay, Carpa, Elbow Hill, Cowell, Warrayappa, Moonabie Tanks, and in Roopena.

Nest.—Yantanaby—A nest in a big mallee near our camp. One Magpie drove out every bird venturing to fly into that tree.

Between Adelaide and Port Augusta, the following additional species (21) were noted:—

124. *Phalacrocorax carbo*, Cormorant (1).

Sitting at the top of a dead tree on the Rocky River between Melrose and Murraytown.

125. *Circus assimilis*, Spotted Harrier (1).

Near North Stirling, on the coast of the Gulf, and attacked by a Magpie.

126. *Falco longipennis*, Little Falcon (2).

Between Stone Hut and Wirrabara—nearer to the latter town.

127. *Glossopsitta concinna*, Musk Lórikeet (12).

Five near Bungaree Station (Clare), five near Stanley Flat, two near Watervale.

128. *Cacatua galerita*, White Cockatoo (5).

Three five miles south of Melrose, and two two miles north of Wirrabara.

129. *Cacatua sanguinea*, Little Corella (Bare-eyed Cockatoo) (7).

At six miles south of Melrose.

130. *Platycercus elegans*, Crimson Rosella (13).

At Sevenhills, Bungaree, in Horrocks Pass, and Undalya.

131. *Barnardius barnardi*, Ring-neck (Mallee) Parrot (16).

Seen near Yacka, Baroota Creek, and Stanley Flat.

132. *Psephotus haematonotus*, Red-backed Parrot (191).

Seventy-eight of them in the Telowie Gorge..

133. *Petroica multicolor*, Scarlet Robin (4)..

At Rhynie and Undalya.

134. *Falcunculus frontatus*, Eastern Shrike-Tit (1).

In the Telowie Gorge.

135. *Colluricincla harmonica*, Grey Shrike-Thrush (8).

At Giles Corner, Rochester, Port Germein, Baroota Creek, Melrose, and Seven Hills.

136. *Acrocephalus australis*, Australian Reed-Warbler (1).
In the reeds near the bridge over the Rocky River at Wirrabara on 31st August. It did not appear to be there on 6th August.
137. *Cincloramphus mathewsi*, Rufous Song-Lark (2).
Near Port Germein and Wirrabara.
138. *Climacteris picumna*, Brown Tree Creeper (4).
Three in the Telowie Gorge, one in Horrocks Pass.
139. *Melithreptus lunulatus*, White-naped Honey-eater (1).
Near Bungaree, Clare.
140. *Zanthomiza phrygia*, Regent Honey-eater (2).
At Bungaree Station and being chased by Noisy Miners.
141. *Meliphaga penicillata*, White-plumed Honey-eater (61).
142. *Myzomela garrula*, Noisy Miner (15).
At Giles Corner, Watervale, Sevenhills, Bungaree, and Smithfield.
143. *Zosterops guttatus*, Diamond Firetail (Spotted-sided Finch) (12).
In the Telowie Gorge, Horrocks Pass, Melrose, and Giles Corner.
144. *Taeniopygia castanotis*, Chestnut-eared Finch (59).
At Salisbury, Rhynie, Stone Hut, Gulnare, Rochester, Auburn, Linwood; and Templers.
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