The Birds of Port Phillip.

(PART I.)

BY ROBERT HALL, F.L.S., C.M.Z.S., Hobart.

THE outer suburbs of Melbourne have three types of birds, due to an equal number of different physical features and with three distinctly peculiar feeding grounds. They are not small affairs. That of the South brings in the species of the Southern Ocean; the eastern fringe gives us the northern Bassian forms, while that of the west provides Eyrean or plain birds.

Port Phillip is altogether a changed condition from its former self. Then it was a land surface with the Saltwater River, Dandenong Creek and Little River coursing through it. That meant the birds of the Bassian sub-region in the direction of the old bed of the Woori Yalloak were given free access to the Otway Forest, which contains many interesting remnants of the bird fauna of that day. Troubles accumulated when Mt. Macedon erupted its lava over the Silurian forest west of Melbourne, to form a basaltic plain.

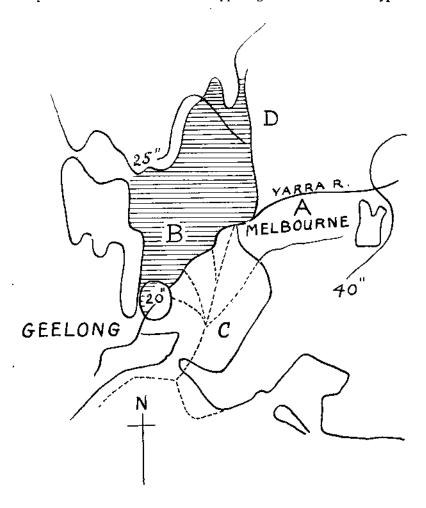
After that, Melbourne as we know it now had its bird fauna clearly divided by receiving Eyrean birds and displacing Bassian. In other words, the dry country species of the north-west of Victoria came closer in to the Melbourne basin with the opportunity of a new feeding ground in a rich basaltic treeless surface. It had shallow catchments to hold the fresh water crustacean life that also came along. Food was provided by an entirely new vegetation on and adjacent the plains we know as Keilor and Werribee, with others just beyond. The mallee eucalypt came on to the edge of the western plateau. This encouraged the birds of the mallee and continues to do so, as is easily seen, e.g., at Melton. Though these western birds came nearer to Melbourne they were originally the offspring of the the western stock. In viewing that nearest granitic area to Melbourne, and one isolated from the lava bed, another type of vegetation found ground suitable to itself, the red gum (Eucalyptus rostrata) growing fine and beautiful. Casuarinas, with their natural love of rocks, arrived as well. Sections of the lava overlying the Silurian rocks are seen in fine scale in the Merri Creek at Coburg.

On the eastern or Silurian side of Melbourne most handsome black wattles (Acacia mollissima) occupy the richer feeding grounds while the stringy-bark (Eucalyptus obliqua) covers the poorer ground. Fortunately for the honey-eating birds of the future, the forests of stringy-bark are self-supporting. They naturally supply their own nurseries and keep up the supply of trees from flower food. The axeman are his fire may devastate one forest for a period but it will arise again an its own initiative, and later, in every second year, allow the birds to harvest their crops. In northern Tasmania the stringy-bark is a fine furniture wood, resembling the English oak, and finds serious inroads into its forests every year.

The features about Melbourne are:

- a. The Silurian ridge, bounded on the east by the middle Yarra basin (Woori Yalloak).
- b. The basaltic plains westward to the Ballarat plateau and south westward to Geelong.
- c. The Great Valley of Victoria, in particular that portion of it with its old rivers the Saltwater, Dandenong and Werribee, all betrunked or drowned.
- d. The Plenty Range to Melbourne along the Plenty River, being the boundary of the lava flow on its eastern edge.

These features are indicated by A, B, C, D, in the accompanying map. Looking from the surrounding suburbs of Melbourne one expects and finds the birds to have opposing characters: of three types.



In A, the Silurian, among such creeks as Olinda, the Yellow Robin (Eopsaltria australis) is perhaps the most numerous species. Such a form in feathers would be out of place on the basaltic plains. Centuries have given it habit and food not compatible with life on the plains. It loves the hazel (Pomaderris) and sassafras (Atherosperma). In the Fern-thrush ((Oreocincla lunulata) we have another type of life preferring and insisting on living in such country, where grow the musk (Aster) and blackwood (Acacia melanoxylon). These again need humid, densely-wooded gullies. As a third type we may take the Whip-bird (Psophodes olivaceus) a bird found mostly in residence within the Melaleuca scrub. Other birds as the Lyre-bird (Menura novaehollandiae) and the Helmeted Honeyeater (Meliphaga leadbeateri) are purely eastern and do not extend to the western gullies, e.g., the Grampians, by skipping or skirting the plains, as some birds do, e.g., Yellow Robin.

In B, the newer lava plains, we mostly find the Banded Piover (Zonifer tricolor) and rarely the Plain Turkey (Eupodotis australis) or the Plain Wanderer (Pedionomus torquatus).

In C, a submerged district showing dead blackwood (Acacia) in its mud to indicate its past, and Myoporums along its margins to indicate its present, we have Red-capped Dotterels (Charadrius ruficapillus), White-faced Storm Petrels (Pelagodroma marina) and White-capped Albatrosses (Diomedea cauta). The seagrass Halophila provides food for Godwits (Limosa).

In D, the open or lightly timbered, birds interchange between A and B.

A large number of the birds of the Basaltic plains, B, and the Silurian tract, A, are common to each other, but each side of Melbourne has its own distinctive types, which are representative of a thousand miles of country north-east and north-west of Melbourne. To the south the life of the bay may be found cruising a thousand miles away.

The junction of A, B, C, on a radius of twenty miles is the meeting ground of three characteristic Australian faunas: A, the Bassian, moist country; B, the Eyrean tract, dry country; C, a bay and ocean fauna.

One should not expect at any time of the day to meet with some or all of the leading types, but they are there.

In certain seasons the wooded portions of the plains, B, are visited by north-western birds such as the White-winged Chough (Corcorax melanorhamphus) Crested Bell-bird (Oreoica gutturalis), and Grey Jumper (Struthidea cinerea), genera that would not dream of penetrating far into A. They will stay and nest.

In addition, we have in B irregular migration, even a sporadic immigration, as with the Grass Owl (Tyto longimembris) and Masked Wood-swallow (Artamus personatus). This depends on the mouse and grass-hopper plagues. Nomadic birds, as Quails, pass to and fro.

With C, in a year like 1919-20, the sporadic immigration of Cormorants is most marked, with several thousands, not nesting. Terns come annually unless a failure of fish-migration sets in.

On the plains between Werribee and Geelong the annual average rainfall is 20", while that of the Dandenong Range is 40", and all the country immediately beyond 50". This tends to different vegetation and helps to decide which species of birds will live in the east of Port Phillip and which in the west, giving us zoological sub-regions.

One is safe in putting down the following seven birds separately as characteristic of A, B, C, and the genera common to D, as under:

- A. Powerful Owl (Ninox strenua).

 Whip-bird (Psophodes olivaceus),
 Bell-miner (Manorhina melanophrys),
 Lyre-bird (Menura novae-hollandiae),
 Helmeted Honeycater (Meliphaga leadbeateri),
 Crimson Parrot (Platycercus elegans),
 Pilot-bird (Pycnoptilus floccosus).
- B. Plain-wanderer (Pedionomus torquatus),
 Bustard (Eupodotis australis),
 Regent Honeyeater (Zanthomiza phrygia),
 Striped Honeyeater (Plectorhyncha lanceolata),
 Grass Parrot (Neophema elegans),
 Grass Owl (Tyto longimembris),
 Banded Stilt (Cladorhynchus leucocephalus).
- C. Black-tailed Godwit (Limosa limosa),
 Little Penguin (Eudyptula minor),
 Redcapped Dotterel (Charadius ruficapillus),
 Gannet (Sula serrator),
 Crested Tern (Sterna bergii),
 Silver Gull (Larus novae-hollandiae),
 Pacific Gull (Gabianus pacificus).
- D. Black-and-white Fantail (Rhipidura leucophrys),
 Blue Wren (Malurus cyaneus),
 Red Wattle-bird (Anthochæra carunculata),
 Rosella (Platycercus eximius),
 Kookaburra (Dacelo gigas),
 Pipit (Anthus australia),
 Welcome Swallow (Hirundo neoxena).

The Port Phillip birds, apart from their distribution, are more than interesting. The smaller part is easily seen, while the larger engages in its daily round in the quiet of the closer timber. A few are solitary,

and friendly when properly approached. Geographically, we find no end of feather variation, just as we see changes in their ways according to location. The Magpie and Butcher-bird, considered by some naturalists as one and the same genus, have their likenesses, the latter being a replica of the former. One hops, the other runs. The mind of the Butcher-bird (Cracticus) is more wicked, though the bird is brave. I am thinking of the many young birds it deliberately drags from their nests and if too large to drag away, it will, under the eyes of the parents, just tear them to pieces. As an onlooker I often feel that grubs and smaller game would better suit the purpose of civilisation, as these young are the offspring of insectivorous birds. The Grey Thrush (Colluricincla) is such another bird, more uniformly clad in grey. I am remembering a hedge with six nests, each filled with young Gold-finches. Up and down the length of that hedge this grey bird flew and flew with a guilty eye. In that week all young disappeared.

The Butcher-bird and the Magpie appear to have a truce. So long as the former leaves alone the young of the latter it gets a free hand.

The Port Phillip Cuckoos sacrifice the young of birds in another way without the question of food. Crows are not quite so sneaky in their killing, while Hawks are better sports.

There are the interesting silent birds; those of the timber of the outer suburbs. Take, for example, the Speckled Warbler (Chthonicola), of Ringwood district. It is content to live its life in the quiet of the bush—the "jungle peace"—keeping to the ground, nesting and feeding there in full content. It is the unusual owner of chocolate coloured eggs, carefully hidden in a dome-shaped nest upon, or partly hidden within, the ground. A bird of a still rarer type that comes into the eastern suburbs only, and that occasionally, is the Helmeted Honeyeater (Meliphaga leadbeateri). Both the Speckled Warbler and the Helmeted Honeyeater have limited distribution, keeping only to the country marked A in map. The Warbler traverses the littoral from South Australia to South Queensland, while the Honeyeater is in that part of A, south-east of Melbourne, in Victoria.

Of all these birds the voice of the Butcher-bird is best in the open and light of day, while that of the Grey Thrush is the finest in the early morning and in the close. The Butcher-bird is contralto, uncommon amongst birds. In chorus the Magpie is the best. The most human vocal touch we find in the Noisy Miner (Myzantha garrula) when he sits back and just says he wants badly to talk to somebody, the request lasting a minute or two. It reminds me of the Indian Grackle. Our Pipit has little to say for itself, musically, but the Mirafra or Bush Lark, so much like it in the field, has a wonderful voice, hovering and singing at midnight well in the heavens if the moon is good. It is fairly numerous in suitable country having long grass or corn.

Two of the rarer species are the Pilot-bird (Pycnoptilus) and Bristle-bird (Dasyornis). The first comes in from the close forest to the outer margin of the eastern suburbs, the second to the suburbs of Geelong on the opposite side. Though not to be classed as musical they have distinctive voices. The Pycnoptilus calls "Guinea-a-week;" the Dasyornis is likened to the working of a cart-wheel, being locally known as the "Cartwheel-bird." Both keep to the inner temple of the forest, where few sounds are heard and where few species or birds frequent. Their home is the land of planarian worm and excess of rain.

Associated with the Pilot-bird we find the Lyre-bird (Menura novæ-hollandiæ). If not a song bird, it is by inheritance a remarkable mimic.* In the same dense timber we find the Whip-bird (Psophodes olivaceus) with a powerful crack resounding within the forest. In the sweeter areas of the same heavy scrub we can hear, more sweetly and more gently, the voice of the Golden Whistler (Pachycephala pectoralis). It is the minor whip-crack. In the similar country of the Dandenongs in A, but in the higher branches, the running and ringing note of the Bell-miner (Melanorhina melanophrys) is heard.

On the Basaltic side of Melbourne, B, we find wading in the shallow swamps the Banded Stilt, a handsome bird with a bugle-like call. About these same swamps in the night one may hear the weird "Weloo" of the Southern Stone-plover (Burhinus magnirostris) or the crackle of the Spurwing (Lobibyx novæ-hollandiæ). These are the voices of the moonlight or the dark. In the same dark hours, strangely enough, one hears the calling of the Black-and-white Fantail (Rhipidura leucophrys), the "Sweet-pretty-creature" so well-known to every country child. Over the same plains in the summer day the Raven (Corvus coronoides) sounds the call of the scavenger; discordant surely! It is a voice gone to pieces. If the Mirafra is the gentle bird that sweetly sings at Heaven's gate, we find the larger Song-lark of the genus Cinclorhamphus has a correspondingly stronger voice; a day song.

The Brown Song-lark ascends and continuously calls "Pitch-a-paddle, pitch-a-paddle," described by A. J. Campbell forty years ago.

Port Phillip is not empty of native songs and poets might well be full of their wonder; alteration by reason of geographical range and local condition. This is a study we might well, with every faith, leave to the student of the field, the man of leisure with the hearing ear, the seeing eye and the understanding mind.

^{*}Is the Lyre-bird (or any other bird), really a mimic "by inheritance"? This is a point that could be discussed with profit.—EDITOR.