

PRELIMINARY LIST OF BIRDS OF THE ROTORUA ACCLIMATISATION DISTRICT.

By W. J. Phillipps and C. J. Lindsay.

Ornithologically, the Rotorua district is one of the most interesting in New Zealand as there is a wide diversity of country ranging from extensive native and exotic forest areas to bracken, manuka and swamp lands, farming settlements, many lakes, some of large size, and coastal areas in the Bay of Plenty and Hawke's Bay. It is not surprising, therefore, that the district supports a good variety of bird life. One of the most interesting features of bird-life is the breeding there of both the red-billed (*Larus novaehollandiae*) and black-billed gulls (*L. bulleri*). Other notable inhabitants include the kiwi (*Apteryx australis mantelli*), North Island crow (*Callaeas cinerea wilsoni*), robin (*Miro australis longipes*), fern-bird (*Bowdleria punctata*), and dabchick (*Poliocephalus rufpectus*).

The Rotorua Acclimatisation District is a large area which commences at Ohinepanea, in the Bay of Plenty, running more or less due south through Otane-wai-nuku and continuing in a south-westerly direction to cross the Mamaku Range between Ngatira and Mamaku. After this the western boundary continues over Whakatutu on to the Wanganui River near Maungaku trig station, thence in roughly the same direction to Para-te-taitonga. From here the line runs due east to the sea coast of Hawke's Bay, and continues north up the coast to Paritu, a few miles north of Mahia. From here the boundary runs west to Maungapohatu trig station near Lake Waikaremoana and then on north-east to Waihou Bay, near Cape Runaway. The boundary now runs westerly in the Bay of Plenty to the point of commencement. Towns included in the area are: Whakatane, Opotiki, Rotorua, Wairoa (H.B.), Taupo, Tokaanu and Ruatahuna.

In the years 1918-1920 under the direction of the Department of Internal Affairs, one of us (W.J.P.) spent some months in the Rotorua and Taupo areas undertaking a general survey of conditions affecting the well being of trout acclimatisation in the district. Whenever possible birds were noted and a list with notes on the birds was compiled. In this work W.J.P. was fortunate in having the assistance of Mr. W. Cobeldick, to whom belated thanks are due.

The present notes are based on the original list, added to, and brought up to date with notes supplied by officers of the Internal Affairs Department and others as well as records from official files here published by kind permission of the Under-Secretary of the above-mentioned Department.

In September, 1946, we visited the district and added considerably to our knowledge of bird life in general, our observations being carried out chiefly in the Rotorua-Rotoiti area. In January, 1947, W.J.P. visited Whakatane, Opotiki, Rotorua, Taupo and Tokaanu, and received much valuable information from Mr. K. E. Francis, Whakatane, Messrs. S. A. McNamara and R. Dickinson, Rotorua, Mr. G. G. Potts, Taupo and Mr. J. K. Murphy, Tokaanu. We are indebted to the "List of the Birds of N.Z.," 1946, by Professor B. J. Marples, for the nomenclature used. Our best thanks are due to Messrs. G. F. Yerex and S. A. McNamara for providing us with the necessary transport throughout the area.

A complete record of the birds of the district is a matter of considerable importance. Successful conservation and control cannot eventuate until a comprehensive list of species and their relative abundance is available.

This list supplies new information on the birds of the district and for the most part does not include already published material, though brief mention is made of references to certain species in the district, already published in "N.Z. Bird Notes," these being indicated by the letters N.Z.B.N.

The following abbreviations have been used of those supplying information:—W.C., W. Cobeldick; G.G.P., G. G. Potts; V.C.B., V. C. Barton; K.E.F., K. E. Francis; A.K., A. Kean; J.B., J. Bennett; L.C.B., L. C. Bell; J.M.J., J. M. Jessop; H.F., H. Frame; G.F., G. Flight; G.F.Y., G. F. Yerex; R.D., R. Dickinson; F.J.H., F. J. Hill; J.K.M., J. K. Murphy; A.C.C., A. C. Christophers; S.A.McN., S. A. McNamara; J.S.A., Dr. J. S. Armstrong; R.H.D.S., R. H. D. Stidolph; P.H.C., P. H. Castleton; W.R.B.O., Dr. W. R. B. Oliver.

Kiwi (*Apteryx australis mantelli*).—Probably breeding. Heard calling near Whakarewarewa, Jan. 8, 1931, and at Mamaku, Jan. 10, 1931.—R.H.D.S. Recorded headwaters of the Tongariro River and on Kaimanawa Ranges, March 19, 1932. Two seen and about a dozen others heard headwaters of Repier River, April 9, 1932.—G.G.P. Headwaters of Whakatane and Waimana rivers, June, 1940.—V.C.B.

Dabchick or Wewia (*Polioccephalus rufopectus*).—Numerous in places breeding. Small numbers on Lake Taupo, Aug., 1936.—K.E.F. Five on Lake Rotoma, Dec. 28, 1946; two on Edgecumbe lagoons, Nov., 1946.—K.E.F. Dabchick teaching young to dive, Lake Rotoiti, 1941.—A.K. and J.B. Twelve counted at Otaramarae, Sept., 1946, Lake Rotoiti.—Authors. Few at Waikaremoana; plentiful at Tokaanu.—R.D. Rare Taupo end of lake.—G.G.P. Increasing at Tokaanu with rise in lake level.—F.J.H. Dabchicks on decrease generally owing to drainage and settlement.—K.E.F. Lake Rotoiti area, numerous.—N.Z.B.N. Major Buddle, Emu, Vol. 39, pp 77-84, 1939, has described its breeding habits in the Rotorua district.

Black Shag or Kawau (*Phalacrocorax carbo*).—Generally distributed; breeding. Rarer at Taupo than for the past twenty years.—G.G.P. Five or six birds flying overhead at Tokaanu, Jan., 1947.—Authors. Flocks 15 to 20 relatively common at Tokaanu.—J.K.M. Stomachs of shags examined at Tauranga-Taupo generally contain carp remains.—G.F. Eggs and young in Taupo area, early in August.—G.G.P. Early in May, black shags collect in flocks over Lake Taupo, pair and disappear after a few weeks. Possibly now rarer because of bush fires, 1945.—G.G.P.

White-throated Shag or Kawau-paka (*Phalacrocorax melanoleucos*). Generally distributed; breeding. A small white-breasted shag recorded by Mr. Potts on Lake Taupo is probably the pied form of this species. It breeds in the Taupo area in September and October.—G.G.P.

Grey Duck or Parera (*Anas poicilorhyncha*).—Generally distributed; breeding. Numerous at Lake Rotoaira in 1936.—K.E.F. Not decreasing, Whakatane area, 1937.—R.D. Three hundred counted at Hamurana, April, 1939.—A.C.C. Two at Hauparu Bay, Rotoiti; two at Otaramarae, Sept., 1946.—Authors. Grey duck on the decrease.—S.A.McN. Now flocks are 10 to 15, lower Waikato and up to 20 at Lake Rotokaua, where five years ago it was possible to see 200. Rats appear to be main enemies.—G.G.P. In Bay of Plenty greatest concentration of grey duck is in the Rangitaiki swamps. Estimated number 1000 birds seen at one time, but drainage and settlement have reduced numbers.—K.E.F. Stomachs of 30-40 grey duck taken in an arm of Ohiwa Harbour, all contained small fresh water molluscs, May, 1944.—A.C.C.

Paradise Duck or Putangitangi (*Tadorna variegata*).—Introduced to Lake Rotomahana some years before 1936.—W.R.B.O. Widely distributed; common in many localities in 1918. Seen at Rotomahana, Jan., 1937.—C.J.L. Forty counted at Rotomahana, March, 1940.—L.C.B. Ten at Lake Rerewhakaitu, Oct., 1938.—V.C.B. Not plentiful in any of the Rotorua series of lakes.—A.C.C. In the Bay of Plenty, in Nov., 1946, four noted in the Rangitaiki swamps and two in lagoons adjacent Tarawera River near Onepu Springs. Two seen upper reaches of the Whakatane above Ruatoki, Aug., 1946.—K.E.F. At Tokaanu species on increase, 29 counted, Nov. 27, 1946.—S.A.McN. A flock of 60 lived on the Waitahanui Swamp; all were shot in 1945-46.—G.G.P.

Grey Teal or Tete (*Anas gibberifrons*).—Not common. Recorded from Lake Rotorua and Rotomahana.—W.R.B.O., "N.Z. Birds." Two

pairs seen, 1942, at Broadlands.G.G.P. Pair noted in April, 1946, flying along the Horomaunga River, Galatea Estate; also single female on sand bank at junction of Horomaunga and Rangitaiki rivers.—J.M.J. Reported several localities near Rotorua.—N.Z.B.N.

Shoveller or Kuruwhegi (*Anas rhynchos*).—Not common. Fifty reported at Braemar Lagoon, Bay of Plenty, Aug., 1940.—V.C.B. Twenty recently shot at Tokaanu.—K.E.F. Decreasing both at Taupo and Waikaremoana; few shot every season in Rotorua district; four pairs on Matata Lagoon, May 5, 1946.—K.E.F. Two pairs on Rangitaiki Swamp at Matata.—K.E.F. and J.M.J.

Black Teal or Papango (*Aythya novaeseelandiae*).—Not common except in one or two restricted areas. Fourteen counted at Hamurana, Feb., 1939.—A.C.C. Black teal tame at Otaramarae, where birds are fed by Major R. Vercoe; we counted 36, Sept., 1946.—Authors. One hundred counted, Hauparu Bay, Rotoiti, 1946.—Authors. In 1945, 60 counted on Rotokaua Lake.—G.G.P. In September, 1946, at Hamurana, 157 counted; in January, 1947, all except 30 had departed.—G.F.Y. and S.A.McN. Rotorua-Rotoiti area, April and May, 1939, over 400.—N.Z.B.N.

Blue Duck or Whio (*Hymenolaimus malacorhynchus*).—Occurs in mountain streams; scarce. Recorded in the Rangitaiki River and the Otamatea Stream, Jan., 1939.—F.C.V. Three reported in Kaituna River, Rotoiti, Oct., 1939.—L.C.B. Common in high country at Waikaremoana.—R.D. Not common in Upper Tongariro River; two specimens seen recently.—S.A.McN. In Pakahi River, Opotiki, four pairs recorded Oct., 1946; now mostly confined to remote gorgy headwaters of rivers.—K.E.F.

Caspian Tern or Taranui (*Hydroprogne caspia*).—Scarce; breeding at Rotorua. Unpopular with anglers and probably fired on at the delta, Turangi, Lake Taupo.—K.E.F. Three soaring overhead relatively close to ground, the Gardens, Rotorua, Sept., 1946.—Authors. Caspian tern dive to take trout in Lake Rotorua, generally near mouths of streams; at Waititi Stream fish taken are 6 to 7 inches; most birds dive early in morning, remain below not longer than 4 seconds.—A.C.C. Caspian tern come over Lake Taupo when it is stormy at sea, generally singly.—G.G.P. Breeding recorded, Rotorua.—N.Z.B.N.

Black-backed Gull or Karoro (*Larus dominicanus*).—Generally distributed; breeds in Taupo area. A black-backed gull diving off Ngongotaha, about 100 yards from shore, only fore part of body submerged; apparently feeding on larval smelts (*Retropinna*), Jan. 1947.—W.J.P. Eight pairs nest each year on rocky island off Karangahake Cliffs, Taupo, while two pairs nest on the rock, Milne Bay, Taupo.—G.G.P.

Red-billed Gull or Tarapunga (*Larus novae-hollandiae*).—Numerous in places; breeds. In past four or five years this gull has become scarcer each year.—G.G.P. (Taupo). At Tokaanu, generally two or three are seen at intervals; plentiful at Taupo, 1935; in Jan., 1935, commenced to appear in small flocks, becoming more plentiful up to March, various flocks of 20 being counted.—J.K.M. and G.G.P. Breeding recorded at Rotorua and Waiotapu; winter flocks, May, 1945, over 1000.—N.Z.B.N.

Black-billed Gull (*Larus bulleri*).—Numerous in places; breeds. Recorded at Ohau Channel, Feb., 1940.—L.C.B. One pair on the south-eastern shore of Lake Rotoiti, Sept., 1946.—The Authors. Eleven specimens on Lake Rotorua off Ngongotaha diving continuously, apparently to take larval smelts; species appears to have increased with the population of Rotorua town; feeds in neighbourhood of sewage outfall.—A.C.C. and W.J.P. Species appears to breed on island in Lake Taupo—J.S.A. As many as 20 diving on the Lake near Tokaanu.—F.J.H. On a two-storey building roof in the main street, Whakatane, over 40 counted; they rested a short period then flew seawards, Jan. 12, 1947.—W.J.P. Breeding recorded, Rotorua.—N.Z.B.N.

North Island Oystercatcher (*Haematopus reischeki*).—Not common, Bay of Plenty.—K.E.F.

Banded Dotterel or Tuturiwhatu (*Charadrius bicinctus*).—Occurs in suitable areas; breeds. Breeding at Lakes Tarawera and Rotorua, early summer, 1918.—W.C. and W.J.P. In Taupo area banded dotterel usually to be seen in spring and summer at Oheke Pa, between Waitapu and Taupo, where is largest breeding ground in district, a large bare sandy basin with a blow-hole in the centre where birds are said to breed on warm earth.—G.G.P. Still breeding, Rotorua.—N.Z.B.N.

Bar-tailed Godwit or Kuaka (*Limosa lapponica baueri*).—In March, 1940, about 2000 recorded at Ohiwa Harbour; in February each year common at Whakatane.—R.D. None seen at Taupo.—G.G.P. Recorded at Lake Rotorua.—W.R.B.O. Seen at Wairoa (H.B.).—R.D.

White-headed Stilt or Poaka (*Himantopus himantopus*).—In suitable localities scarce. Usually called pied stilt by observers in the district. Small flocks observed on shores of Lake Rotoiti, 1918 (summer).—W.J.P. Two pairs at western end of Lake Rotoiti, Sept., 1946.—Authors. Reasonably common, Bay of Plenty.—K.E.F. A noisy species not in large numbers around Lake Rotorua.—A.C.C. As far back as 1934, birds recorded nesting at Taupo Lake; young reached the lake, 9/1/34—J.S.A. Breeding, Rotorua.—N.Z.B.N.

Banded Rail or Moho-pereru (*Hypotaenidia philippensis*).—Scarce. One on road at Kutarere, Sept., 1937.—R.D. Odd specimens seen in past ten years, vicinity Taupo.—G.G.P. In 1946 single bird seen in Taupo area.—A.C.C.

Spotless Crane (*Porzana tabuensis*).—Probable occurrence, Te Whaiti, 1944.—N.Z.B.N.

Marsh Crane (*P. pusilla*).—One recorded, Lake Rotomahana, 1945.—N.Z.B.N.

Swamp Hen or Pukeko (*Porphyrio porphyrio*).—Common in some areas. Plentiful, Bay of Plenty, Whakatane and Opotiki areas; troublesome and numerous at Tokaanu and on banks of Waikato, Aug. and Dec., 1937.—K.E.F. Young at Waitahanui observed by J.S.A., described in his diary as "little black balls with long legs and white tips to the wings." Adult with dark-brown chick at Otaramarae, Sept., 1946.—Authors. Fairly common, Taupo.—G.G.P.

White Heron or Kotuku (*Casmerodius alba*).—Rare visitor. Specimen appeared on lake shore at Taupo, April 27, 1936; seen again on swamp on Waikato River.—G.G.P. Occasionally reported from Matata.—R.D. One recorded in 1945.—K.E.F. (Whakatane).

Reef Heron or Matuku-moana (*Demigretta sacra*).—Found in coastal areas. Recorded in Ohiwa Harbour, Aug. 1, 1940.—V.C.B. Two on Ohiwa Harbour, Jan. 2, 1947.—K.E.F.

Heron (?) possibly white-faced (*Notophox novaeseelandiae*).—Four solitary birds seen at Taupo during past eleven years.—G.G.P.

Bittern or Matuku-kurepo (*Botaurus poiciloptilus*).—In swampy areas; common. Common around Lakes Rotorua and Rotoiti, 1918-1920.—W.J.P. Common, Tokaanu area, May, 1936.—K.E.F. Plentiful at Tokaanu, 1946.—S.A.McN. Numerous at Taupo twenty years ago, gradually decreased for many years, now slightly on increase.—G.G.P. In Bay of Plenty not uncommon swamps and lagoons, in particular often seen in Rangitaiki swamps.—K.E.F. Very common around Lake Rotoehu.—A.C.C.

Pigeon or Kereru (*Hemiphaga novaeseelandiae*).—Generally distributed in bush areas. During 1918-20 not uncommon for pigeons to be surreptitiously shot in bush at north end of Lake Okataina, Tikitapu Bush and on north side of Lake Rotoaira. In Nov., 1936, pigeons reported as plentiful at Tuai, near Waikaremoana.—H.F. At Mamaku, 28 counted and at Manginui 32, May, 1939.—F.C.V. Pigeons decreasing in proportion to bush felled, Rotorua district.—A.C.C. Species scattered generally in main bush near miro and hinau stands of timber at Tara-

wera, Urewera and Waioeka.—K.E.F. Plentiful, not decreasing, eastern portion of Kaimanawa Range.—S.A.McN.

Falcon or Karearae (*Falco novaeseelandiae*).—Found in suitable localities. Bush hawks observed on plains feeding on larks and other small birds, Taupo.—G.G.P. Bush hawk observed working pigeon out of bush by flying beneath it; once in open, pigeon was killed.—G.G.P. Bush hawks common in patches, Rotorua district; at Murupara, July, 1946, 12 observed; last one shot was eating a yellow-hammer.—A.C.C. Falcons live in high country in vicinity of Mts. Tarawera and Edgecumbe.—K.E.F.

Harrier or Kahu (*Circus approximans*).—Generally distributed. Three harriers overhead near Whakarewarewa, Sept., 1946.—Authors. Common, Bay of Plenty; but not so plentiful as in Tokaanu area.—K.E.F. Very common, Ngongotaha Valley.—J.K.M. and A.C.C. In Taupo area largest harrier populations are in vicinity of lower Waikato and in Reporoa area.—G.G.P.

Morepork or Ruru (*Ninox novaeseelandiae*).—Distributed in bush areas. Abundant in bush around Tarawera, 1918-20.—W.J.P. Small numbers in most bush areas, Bay of Plenty.—K.E.F. Pair live near Fairy Springs, seen among pine trees, flowering gums, fruit trees, etc.—A.C.C. Common at Waikaremoana.—R.D. Less common at Taupo than formerly.—G.G.P.

Kaka (*Nestor meridionalis septentrionalis*).—Scarce. Appeared to be increasing at Tuai, Nov., 1936.—H.F. Three seen in Mamaku Bush, July and August, 1941.—L.C.B. Three seen at Ruatahuna, 19/11/46; not common at Waikaremoana.—A.C.C. Recorded near source of Waitotara Stream, Tokaanu.—R.D. Four seen in 1940 in bush at Beggs Falls, Tongariro.—G.G.P. One pair in bush near Fenton's mill, Tarawera; found in larger bush tracts, Bay of Plenty.—K.E.F.

Parrakeet or Kakariki (*Cyanoramphus* spp.).—In bush areas, scarce. Said to be on increase in Waikaremoana district, Nov., 1936.—H.F. Parrakeets found in Opa Bush and at Beggs Falls, Taupo.—G.G.P. Small colony in bush near upper reaches of Tongariro River.—S.A.McN. Both red-fronted (*C. novaeseelandiae*) and yellow-fronted (*C. auriceps*) recorded Lake Taupo area.—N.Z.B.N.

Shining Cuckoo or Pipiwarauroa (*Chalcites lucidus*).—Migrant; not uncommon in season. At buried village of Wairoa, in 1944, in bushes overhead were two shining cuckoos associated with two grey warblers and a young cuckoo.—A.K. and W.J.P. Recorded at Waikaremoana, Oct., 1939.—H.F. Uncommon Bay of Plenty; one seen, Nov., 1945, Waimana, between Whakatane and Opotiki.—K.E.F. Few at Taupo early summer.—J.S.A. Plentiful at Tokaanu.—J.K.M. Large numbers seen at Pihanga.—S.A.McN.

Long-tailed Cuckoo or Koekoea (*Eudynamis taitensis*).—Migrant, not uncommon. Recorded at Waimara Valley, March, 1939.—V.C.B. Fairly common in most bush but not in large numbers, Bay of Plenty.—K.E.F. Not uncommon near Paradise; believed to be enemy of other birds; reputed to eat eggs.—A.C.C. Maoris of both Rotorua and Taupo agree in the belief that the egg of this bird is laid in a hollow log. It hatches into a lizard which later sheds its skin and emerges a long-tailed cuckoo. The lizard character is maintained as it sits along a branch and hides as does the green lizard.—W.J.P. Pair noted at Tokaanu trout hatchery, Jan., 1947; they glide across open spaces, then throw themselves into the branches, screeching as they do so; call heard both by day and by night is deceptive to the observer.—F.J.H.

Kingfisher or Kotare (*Halcyon sanctus*).—Generally distributed. Plentiful at Rotoiti, Nov., 1939.—L.C.B. Kingfishers became rare at Taupo about 1940; still rare.—G.G.P. From Cape Runaway throughout coastal belt to Matata and inland up the Tarawera, Rangitaiki, Whakatane and Waioeka rivers, kingfishers are reasonably plentiful; scarcer inland.—K.E.F. Six counted between Ohiwa Harbour and Opotiki, 12/1/47.—W.J.P.

Rifleman or Titi-pounamu (*Acanthisitta chloris*).—Occurs in bush areas. Waikaremoana numerous, 6/1/31; Hongi's Track, 16/1/35.—R.H.D.S.

Pipit or Pihoihoi (*Anthus novaeseelandiae*).—Numerous in suitable localities, 1931 and 1935.—R.H.D.S.

Fernbird or Matata (*Bowdleria punctata*).—Occurs in suitable localities, not uncommon. Single bird recorded western end of Lake Okareka, early summer, 1918.—W.J.P. Scattered specimens seen, Taupo area.—G.G.P. When shooting pheasants in 1930, fern birds would rise from bracken and go ahead alarming the pheasants; seen as many as four or five at one time.—J.S.A. (Taupo). Small number of fernbirds still found northern lower slopes of Mt. Pihanga.—S.A.McN. Recorded several localities, Waiotapu, Kaingaroa area.—N.Z.B.N.

Grey Warbler or Riroriro (*Pseudogerygone igata*).—Generally distributed. Wairoa, 1944.—W.J.P. An elusive bird, seen in patches.—A.C.C. Number seen in Tokaanu district; found mostly in taller belts of timber.—S.A.McN.

White-eye or Tauhou (*Zosterops lateralis*).—Widely distributed. At Taupo 11 white-eyes bathing in pool on lawn of Mr. G. G. Potts's home, Jan., 1947.—W.J.P. Mrs. Potts states birds eat fruit just before it is ripe, both Sturmer apples and peaches. At Tokaanu congregate in flocks during hay harvesting season, Dec.-Jan.—J.K.M.

White-breasted Tit or Miromiro (*Petroica macrocephala toitoi*).—Not uncommon, has colonised exotic forests. Common in bush around Lake Rotoiti, 1918.—W.J.P. Species has become known as "The Bushman's Friend"; bushmen were accustomed to turn over logs when these birds were near, so supplying them with food; current legend states that any Maori or pakeha lost in the bush will be guided out by these birds.—A.C.C. At Taupo fairly common in tall manuka and bush.—G.G.P. Found only in main bush, particularly to the west of Tarawera area.—K.E.F. (Bay of Plenty). Recorded well established in introduced pine forests.—N.Z.B.N.

North Island Robin or Toutouwai (*Miro australis longipes*).—In restricted areas, also in portions of exotic forests. Robins reported Mamaku bush, Oct., 1939.—L.C.B. Two pairs in upper reaches of Waitahanui River; one pair between Taupo and Atiamuri.—G.G.P. Not seen, Bay of Plenty.—K.E.F. Other records, Mamaku.—N.Z.B.N.

Pied Fantail or Piwakawaka (*Rhipidura fuliginosa*).—Generally distributed. Fairly common near Lake Rotoiti, Sept., 1946.—Authors. In summer of 1945, 20 seen on Stanley Track, Whakatane-Opotiki area; plentiful Bay of Plenty in area extending from Tarawera River to Motu River.—K.E.F. Numerous Taupo township; at end of April each year some thirty or forty fantails congregate in vicinity of Taupo wharf.—G.G.P.

Whitehead or Popokatea (*Mohoua albicilla*).—Occurs in forest areas, including exotic plantations. Waikaremoana, Te Whaiti, 6/1/31; Tikitapu Bush, 9/1/31; Lakes Rotoiti and Rotoma, 12/1/31; Mamaku, 10/1/31 and 17/1/35; Hongi's Track, Lake Okataina, 16/1/35.—R.H.D.S.

Tui (*Prosthemadera novaeseelandiae*).—Generally distributed. Tuis were relatively common in bush around Green and Blue lakes; less common around Lake Tarawera, 1918.—W.J.P. In Bay of Plenty common in main bush areas, small numbers coming back into second growth areas.—K.E.F. Fair numbers in all large areas of unmolested bush; but otherwise becoming rarer, Taupo area.—G.G.P. Common, Tokaanu.—F.J.H.

Bell Bird or Korimako (*Anthornis melanura*).—Recorded in most forest areas, including exotic plantations. Found in bush around Blue and Green lakes, but not common as tui, 1918.—W.J.P. At present at Taupo, bell bird increasing at faster rate than any bird in district. Now common in most parts of district.—G.G.P. Exists in fair numbers in

large bush tracts and in adult second-growth areas; not so common as tui in Bay of Plenty.—K.E.F. Bell birds plentiful at Tokaanu, more abundant than tuis.—F.J.H.

Blue-wattled Crow or Kokako (*Callaeas cinerea wilsoni*).—Occurs in restricted forested areas; scarce. Recorded "four miles in the bush at the south-east end of Rotoiti Lake," Oct., 1939; also in March, 1940, three seen in the Waione Block, Rotoiti.—L.C.B. Specimens in Mamaku Bush, Oct., 1939.—L.C.B. Five seen in bush at the back of Rotoehu.—R.D. Specimens recorded about 1936, some little distance from Trout Hatchery, Paradise; this is real N.Z. bell bird.—A.C.C. Heard its ringing note on Mt. Pihanga.—J.K.M. Not recorded Bay of Plenty or Taupo areas. Other records, Mamaku.—N.Z.B.N.

INTRODUCED BIRDS.

Mallard Duck (*Anas platyrhynchos*).—Does not increase in wild state; rats, stoats and ferrets take chicks.—A.C.C. Watched a rat steal an egg from under mallard; it held egg in front paws until another rat appeared and dragged away rat, still holding egg, by the tail.—P.H.C. Paradise Springs. Various liberations made, the largest being 56 at Lake Rotokaua, Mar., 1941.—G.G.P.

Black Swan (*Cygnus atratus*).—Six to 10 black swans constantly on Lake Ngahiwa, near Waitapu, 1918-20; in 1918 few black swans near eastern end of Lake Tarawera.—W.J.P. In June, 1939, 182 counted at Hamurana.—A.C.C. From Lake Rotorua, 70 reported in June, 1941; in Rangitaiki Swamp, two flocks of 50 recorded, Oct., 1946; latter locality an important Bay of Plenty breeding ground; species also seen on Matata Lagoon, 50 noted in winter of 1946; also noted Edgecombe Lagoons.—K.E.F. Odd pairs seen at Taupo.—G.G.P. Large flocks on Lake Rotokaua, common at Tokaanu.—W.J.P.

Pheasant (*Phasianus colchicus* x *P. torquatus*).—Plentiful in Bay of Plenty; also in areas from Cape Runaway to Rotoma bush edge; does not penetrate larger bush tracts.—K.E.F. A perceptible increase in numbers around Rotorua.—R.D. Decreasing at Taupo.—G.G.P. Few at Tokaanu, not increasing.—J.H.M.

Californian Quail (*Lophortyx californicus*).—Common, 1936.—R.D. and V.C.B. Now increasing in the Taupo area.—G.F.Y. Decreased in Bay of Plenty in recent years, particularly in areas affected by fires and pollard poisoning.—K.E.F. Found eating broom seeds; nests as early as end of Oct., and on to Dec.; hen will not leave nest or young, so many hundreds perished in Taupo fires of 1945.—J.S.A. Common many parts of Tokaanu district.—J.K.M.

Australian Quail (*Syncoicus ypsilophorus*).—Plentiful at Whakatane and in Bay of Plenty area, Nov., 1940.—R.D. and V.C.B. In general, species has decreased rapidly in past five years.—R.D. This decrease due fires and pollard poisoning.—K.E.F. At Taupo, decrease is largely due to manuka replacing grass land; has found food to consist of grass seeds, snails and clover leaves and a certain black slug not found in manuka areas.—J.S.A.

Greenfinch (*Chloris chloris*).—Ohiwa and Opotiki, 12-13/1/31; Kati-kati, 15/1/35.—R.H.D.S.

Goldfinch (*Carduelis carduelis*).—In settled areas, Bay of Plenty, fairly common; generally seen in small flocks.—K.E.F. Flocks of 10 to 15 not uncommon, Taupo.—G.G.P.

Chaffinch (*Fringilla coelebs*).—Present in fair numbers, Rotorua district, Sept., 1946.—Authors. Plentiful, settled areas, Bay of Plenty.—K.E.F. Plentiful, Rotorua area.—R.D. Very few seen at Taupo.—G.G.P. Comparatively rare, Tokaanu.—J.K.M.

Lesser Redpoll (*Carduelis cabaret*).—Recorded from Rotorua golf links; also single specimen from mouth of Waihaha River, Western Bay, Lake Taupo, Dec., 1941.—A.K. From 20 to 30 to be seen in Taupo township some years ago; in winter they come into town from hills.—J.S.A. At present odd specimens seen on lawn at house, Taupo.—G.G.P.

House Sparrow (*Passer domesticus*).—Common most settled areas.

Yellowhammer (*Emberiza citrinella*).—Very common, Tokaanu village, 1918; said to have recently arrived in that locality.—W.J.P. In Bay of Plenty a scattered species, does not penetrate into bush; one or two seen at a time.—K.E.F. Common at Taupo.—G.G.P. Twelve feeding on grass seed, 23/10/29.—J.S.A. Now rarer at Tokaanu.—W.J.P.

Blackbird (*Turdus merula*).—Common throughout most rural areas, in manuka and scrub country; remarkable increase in the past twenty years in Rotorua area.—W.J.P.

Hedge Sparrow (*Prunella modularis*).—Species increased in past ten years.—R.D. Often caught by cats in Taupo township.—G.G.P.

Thrush (*Turdus ericetorum*).—In country areas species not so common as blackbird, Sept., 1946.—Authors. In Bay of Plenty, thrush most common, settled areas, near cultivations.—K.E.F. Same appears true at Tokaanu.—W.J.P.

Skylark (*Alauda arvensis*).—Common open country most parts of district. Rare in fern country in Bay of Plenty and Tokaanu.—K.E.F.

Starling (*Sturnus vulgaris*).—Common settled areas not far from habitations of man. At Taupo, feeds on grass grubs in large numbers making hole in ground to secure grub.—G.G.P.

Indian Myna (*Acridotheres tristis*).—One turns up at Taupo every few years, but does not stay; only one seen 1931.—J.S.A. Two at Ohau Channel, Nov., 1946.—R.D.

White-backed Magpie (*Gymnorhina hypoleuca*).—Three appeared in Whakatane neighbourhood, 1946.—K.E.F. First magpie recorded, Taupo district, July 21, 1946.—G.G.P.

Several papers which make reference to the bird life of the Rotorua district have appeared in "The Emu." These are:—1931, "Holiday Jaunts in New Zealand," by R. H. D. Stidolph; vol. 31, pp. 17-19. 1936, "Paradise Duck," by W. R. B. Oliver; vol. 36, pp. 69-72. 1939, "Notes on Breeding Habits of Dabchick," by G. A. Buddle; vol. 39, pp. 77-84. 1940, "State Secretary's Report, New Zealand," W. R. B. Oliver; vol. 39, p. 187. 1941, "State Secretary's Report, New Zealand," W. R. B. Oliver; vol. 40, p. 392.

THE APPEAL FOR DONATIONS.—As a result of the recent appeal for donations to the general or illustrations funds forty members have contributed £22 0s 7d. to date. Sincere thanks are offered to the following donors:—M. J. S. Black 10/-, A. A. Boulton 10/-, J. Bradbury 5/-, L. A. Brewster 8/7, Miss F. Bridge 5/-, W. J. Burns 10/-, G. A. Buddle 10/-, J. L. Cameron 5/-, S. Chambers 5/-, T. A. Cunningham 5/-, K. W. Dalrymple 5/-, C. W. Dover £1, Dunedin Naturalists' Field Club £2/2/-, T. C. Fraser 10/-, N. M. Gleeson £1, D. H. Graham 10/-, Mrs. M. Hansen 5/-, Miss A. G. Henderson £1, M. K. Jones 5/-, G. N. Lawless 10/-, W. A. Lindsay 5/-, J. Mitchell 5/-, G. J. H. Moon £1, L. W. McCaskill £1, Miss B. McDougall 10/-, D. MacMillan 10/-, H. R. McKenzie 10/-, R. McKenzie 5/-, Mrs. C. W. McLatchie 2/6, J. Middleditch 10/-, W. R. B. Oliver 10/-, W. J. Phillipps 10/-, J. W. St. Paul 10/-, D. N. Strang 15/-, Mrs. H. M. Simpson 10/-, B. Sladden £1, A. H. Watt 7/6, W. K. Welch £1, W. A. Williamson 10/-, Mrs. P. R. Woodhouse 10/-. In addition, donations received since the last list was published in July, 1947, and prior to the present appeal, are as follows. The majority of these were included in the 1947-8 financial statement: A. E. Brookes 5/-, T. E. C. Bridge 10/-, V. I. Clarke £1/1/-, J. M. Cunningham 10/-, S. Edwards 10/-, C. A. Fleming £2/7/-, £2/10/-, W. F. I. Hunt 5/-, B. Iorns 5/-, Mrs. R. F. Lenz £1, Miss B. McDougall 10/-, W. J. Phillipps 10/-, F. H. Robertson 3/9, E. G. Turbott 10/-, Anonymous £3.

Mr. H.-R. McKenzie, of Clevedon, has been appointed by the Committee as recorder.