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Esler, N. 1989. Aust. Avicult. 43: 254-5. Ford, H.A., & D.C. Paton. 1975. Emu 75: 155-6. & R. Howe, 1980. S. Aust. Orn. 28: 85-9. Ford, J. 1978. Emu 78: 25-35. et al. 1980. Sunbird 11: 58-70. Frith, H.I. 1969. Birds of the Australian High Country. Reed, Sydney. & S.J.J.F. Davies. 1961. Emu 61: 97-111. Fuller, C.O. 1964. Emu 63: 449-50. Garnett, S. 1988. Birds of the Townsville Town Common. Author, Townsville, Old. & R. Bredl. 1985. Sunbird 15: 6-23. Gill, H.B. 1970. Emu 70: 105-16. Green, R.H., & A.M. McGarvie. 1971. Rec. Queen Vict. Mus. 40: 1-42. Haines, L.C. 1943. Emu 42: 252. Harrison, C.J.O. 1965. Avicult. Mag. 71: 176-84. 1968. Avicult. Mag. 74: 7-10. 1973. Avicult. Mag. 79: 136-9. Hodson, J. 1990. Bird Keeping Aust. 33: 136-9. Howe, F.E. 1928. Emu 27: 252-65. Hyem, E.L. 1936. Emu 36: 109-27. Johnson, H.R., & N. Hooper. 1973. Aust. Bird Watcher 5: 80-95. Lavery, H.J., et al. 1968. Emu 68: 133-47. Leach, G.J. 1988. Sunbird 18: 55-75. Long, J.L. 1981. Introduced Birds of the World. Reed, Sydney. Longmore, N.W. 1978. Sunbird 9: 25-53. Lord, E.A.R. 1956. Emu 56: 100-28. Loyn, R.H. 1980. Emu 80: 145-56. MacDonald, J.D. 1973. Birds of Australia. Reed, Sydney. Martin, G. 1971. Aust. Avicult. 25: 68. McCance, N. 1962, Aust. Avicult. Aug. 1962: 105. McFarland, D. 1988. Emu 88: 249-57. McKean, J.L. 1985. Aust. Bird Watcher 11: 114-30. Miller, R.S. 1938. Emu 37: 285-99. Morris, A.K. 1975. Aust. Birds 9: 37-76. - 1976. Aust. Birds 10: 54-6. et al. 1981. Handlist of Birds in New South Wales. NSW Field

-, et al. 1981. Handlist of Birds in New South Wales. NSW Field Ornith. Club, Sydney.

- O'Gorman, B. 1982. Aust. Avicult. 36: 276-9.
- O'Grady, G.Y., & T. Lindsey. 1979. Australian Birds and their Young. Cassell, Australia.
- Payne, H.W. 1931. Emu 30: 228-32.
- Pedler, L.P. 1975. S. Aust. Orn. 27: 3-5.
- Quinn, D.J. 1969. Aust. Bird Watcher 3: 176-7.
- In prep. The King Quail Coturnix chinensis on French Island, Victoria. Aust. Bird Watcher.
- Reid, A.J., et al. 1975. Birds of Victoria. Gould League of Victoria, Melbourne.
- Roberts, G.J., & G.J. Ingram. 1976. Sunbird 7: 1-20.
- Roff, C. 1967. Emu 66: 273-8.
- Rolls, E. 1979. Aust. Birds 14: 37-8.
- Rose, A.B. 1973. Emu 73: 177-83.
- Ryan, C.S. 1906. Emu 5: 110-19.
- Schodde, R. 1976. Surv. Fauna Lower McArthur R. Region, North. Territ.: Birds. Unpubl. CSIRO Rep. Mimets Develop.
- Scott, W.G. 1951. Aust. Avicult. 5: 7.
- Sharp. M. 1982. Aust. Avicult. 36: 7-8.
- Sharrock, R.E. 1981. Aust. Bird Watcher 9: 110-23.
- Shephard, M. 1989. Aviculture in Australia. Cockatoo Press, Melbourne.
- Skyllas, J. 1986. Aust. Avicult. 40: 167-9
- Storr, G.M. 1967. Spec. Publs West Aust. Mus. 4.
- 1973. Spec. Publs West. Aust. Mus. 5.
- -1977. Spec. Publs West. Aust. Mus. 7.
- ----, et al. 1975. Wildl. Res. Bull. West. Aust. 3: 75-83.
- Tarr, H.E. 1948. Emu 48: 103-6.
- Thompson, D.F. 1935. Birds of Cape York Peninsula. Govt Printer, Melbourne.
- Thompson, H.A.F., & D.K. Goodfellow. In prep. Annotated List of the Birds of the Top End.
- Trounson, D., & M. Trounson. 1989. Australian Birds. PR Books, Sydney.
- Wade, P. (Ed.) 1975. Every Australian Bird Illustrated. Rigby, Adelaide.

Sponsors: Mr C & Mrs S Madden

Failed introductions of Galliformes

Many gallinaceous species have been introduced to Aust. and NZ (Long 1981; Westerskov 1990); most have failed to establish self-sustaining feral populations. Those that have are treated above in the normal way; those that apparently have not are as follows:

Phasianidae

Alectoris barbara Barbary Partridge

Aust. Unknown number said to have been introduced to Vic. in 1873 (Long 1981).

NZ Two birds imported by Auckland Acclimatization Society in 1868, but no subsequent records. In 1892, 19 imported by Wellington Acclimatization Society; six died soon after arrival; the rest liberated on Kapiti I. Nine birds recorded there in 1894 (Thomson 1922; Westerskov 1990). No subsequent records (Long 1981).

Alectoris rufa Red-legged Partridge

Aust. Unknown number released at Colac (McCance 1962), probably in 1860s or 1870s (Long 1981). Nine may have been released near Melbourne in 1873 (Ryan 1906; Long 1981).

NZ Several introductions before 1897, but few details

available from records of Acclimatization Societies. Two birds imported by Canterbury Acclimatization Society in 1867. In 1897 apparently established and increasing in number round Rangitikei. In 1899, 18 were unsuccessfully released on Stewart I. By 1915, said to be 'in several parts of the Dominion' (Thomson 1922) but not established (Williams 1950).

Since 1984, a program of introductions has been carried out, mainly in Auckland and n. Canterbury districts (Westerskov 1990; NZCL); following information supplied by P.J. Howard. Auckland Acclimatization Society imported 1500 eggs from Britain on 28 July 1980; 100 were damaged in transit; 580 eggs were fertile, producing 150 chicks of which 98 survived to Mar. 1981, when breeding program began. Another 638 eggs were imported from Britain on 3 July 1981, producing 53 chicks for the breeding program. Releases began in ne. Waikato Valley in Apr. 1984. By Apr. 1992, c. 15,000 Partridges had been released within Auckland Acclimatization Society District from Helensville in N to Taumarunui in S; most released in ne. Waikato Valley, w. foothills of Hapuakohe Ra. and Hangawera Hills bordering the Hauraki Plains, and in Franklin District. Breeding success apparently low at most sites and few chicks survived. Broods were observed in Waerenga Valley, ne. Waikato, and Tapora Pen. on e. shore of Kaipara Harbour.

Other releases have been, or continue to be, made in NI and SI, bred from stock imported by Auckland Acclimatization Society. Bay of Plenty-Volcanic Plateau: releases began after 1983; early sites included Waikite and Pongakawa Valleys; also released Tauranga foothills of Kaimai Ra. and Waimana-Taneatua districts (J. Holloway). East Coast: Mahia Pen.: 500 released 1990-91; 300 released, spring 1991; 67 subadults with parental stock May 1992; also released Young Nicks Head (J. Holloway). Hawke's Bay: 500 released at C. Kidnapper's, where still present; also recorded Ocean Beach and Raupunga (W. Spooner). Nelson: c. 800 released between 1986 and 1991 in Upper Moutere Valley; few subsequent reports. Marlborough: c. 1600 released in Lower Waihopai Valley; have spread to Fairhall and Omaka Valleys (R. Frost). Canterbury: released round L. Ellesmere with smaller releases N of Rakaia R.; to Sept. 1992, 460 released S of Timaru, where breeding recorded, though have stayed within 30-km radius of site of release (G. McClintoch).

Perdix perdix Grey Partridge

Aust. Vic. Partridges liberated on Phillip I. and at Gembrook in 1871–72 came from India, Sri Lanka and China and cannot have been this species (Long 1981). Tas. All liberations unsuccessful (Tarr 1950). Introduced before 1902 (Littler 1902). In 1936, 110 birds imported and released at Marrawah, Garden I., Whitefoord and Colebrook. Temporarily established and bred at Marrawah, but subsequently disappeared (Sharland 1958). WA Partridges, 'probably this species', were introduced to WA between 1897 and 1912 (Long 1981).

NZ Information from records of former Southland Acclimatization Society, provided by R.R. Sutton, and from Westerskov (1990). From before 1864 to 1909, hundreds were imported and widely released in Auckland, Waikato, Taranaki, Wellington, Wairarapa, Nelson, Canterbury, Otago and Southland regions; soon most died out (Thomson 1922). Between 1959 and 1970, as part of a national program to establish Grey Partridges in NZ, some 28,000 Partridges were liberated in many parts of NI and SI (Westerskov 1990). Average size of coveys observed was 9.4 birds (4–20; 74); average clutch-size was 16.2 (10–20; 41) (Westerskov 1990).

Between 1961 and 1968, the Southland Acclimatization Society hand-reared and released c. 5300 birds in 13 localities in Southland, from the coastal zone, inland, as far N as Lowther. Breeding stock came from eggs that were imported from Denmark in about 1959. Field observations in Southland following releases in autumn showed that many hand-reared birds survived and tried to breed the following summer. However, survival of chicks was generally poor. There is some evidence that wild Partridges subsequently bred but breeding in wild apparently declined after releases of hand-reared birds stopped.

After releases were stopped in 1968, reports of wild birds declined over several years and then stopped (NZ Atlas; NZCL; R.R. Sutton). Reason for failure of releases not known but perhaps combination of inadequate supply of food and changeable summer weather at chick-rearing stage were major causes.

Coturnix coturnix Common Quail

Aust. Twelve 'Madagascar Quail' were imported into Vic.

in 1862 (McCance 1962). The identity and fate of these birds are unknown (Long 1981).

NZ Unknown number of 'Egyptian Quail' released on Kinlock Estate by Canterbury Acclimatization Society before 1883. Small number escaped round Auckland in 1914, but not seen again (Thomson 1922).

Lophophorus impejanus Himalayan Monal

Aust. Unknown number released at Gembrook, Vic., in 1871; four birds released on Phillip I. (McCance 1962).

Gallus varius Green Junglefowl

Cocos-Keeling Is Introduced, from Java, before 1879 by Clunies-Ross family (Forbes 1885); not recorded by Wood-Jones (1912) though probably present. In 1941, fewer than 200 adults recorded on Pulo Panjang (West 1.) 'nominally preserved' or 'protected' for benefit of owners of the island; considered to be breeding but no nests were found (Gibson-Hill 1949, 1950). No recent reports (Stokes *et al.* 1984).

Lophura nycthemera Silver Pheasant

Aust. Vic. Unknown number imported 1858, but not known whether released (Balmford 1978). Tas. Unknown number released, date not known; possibly on King I. (Sharland 1958). WA About five feral birds became established in Porongorup Ra. in about 1973; by 1976, numbers increased to 15– 20; extirpated by June 1977 (Long 1981, 1988).

NZ Several imported between 1868 and 1873, but no records of releases (Thomson 1922).

Lophura ignita Crested Fireback

Aust. Unknown number released at Gembrook, Vic., in 1871 (McCance 1962).

Syrmaticus reevesii Reeves's Pheasant

NZ The Wellington Acclimatization Society and other societies, introduced nine birds in 1897, though no details available. Several specimens (possibly same birds as above) imported by Wanganui Acclimatization Society in about 1899; all but two released on Wanganui R., but no subsequent records (Thomson 1922).

Tetraonidae

Lagopus lagopus Willow Grouse

NZ In 1870, Auckland Acclimatization Society imported five birds (subspecies *scoticus* [K. E.Westerskov]), but only one survived the voyage from London. In 1871, an abortive attempt to import the species was made by the Otago Acclimatization Society. In 1872, 33 more birds shipped from London; only one pair survived to be released at Matamata. Another pair released at Matamata in 1873; recorded for some time afterwards (Thomson 1922).

Tetrao tetrix Black Grouse

NZ Abortive attempt to import the species by Auckland Acclimatization Society in 1873. In 1879, ten liberated by Otago Acclimatization Society; in 1882, single recorded near mouth of Tuapeka R. and a pair at Waitahuna R. No further records. Three birds liberated at Leithan and Pomahaka Runs near Dunedin in 1900; recorded again in 1901, but not subsequently (Thomson 1922).

Tympanuchus phasianellus Sharp-tailed Grouse

NZ Auckland Acclimatization Society released 22 birds at Piako in 1876. No further records (Thomson 1922).

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Tympanuchus cupido Greater Prairie Chicken

NZ In 1879, Canterbury Acclimatization Society imported and released 17 birds at Mt Thomas. About 12 recorded at N. Loburn in 1885, but not recorded since. Auckland Acclimatization Society imported 20 birds in 1881 and 40 more in 1882; 30 sent to Otago for liberation (release not recorded) and rest apparently stolen (Thomson 1922).

Numididae

Numida meleagris Helmeted Guineafowl

Introduced widely in Aust. and NZ; summarized in Long (1981). No good evidence for feral populations in Aust. or NZ; probably occur in many places at farms and homesteads where they are maintained in a semi-domesticated state; thus it is difficult to recognize truly feral populations.

Aust. Qld A few birds introduced to Heron I. between 1960 and 1970 (possibly in 1950s) and breeding recorded; completely eliminated in 1970s (Kikkawa & Boles 1976; Long 1981; J. Kikkawa; P. Ogilvie). NSW Unconfirmed record of four, Nelson's Plains, Sept. 1987. No prior reports of feral populations in NSW (NSW Bird Rep. 1987). Vic. About 170 released at Gembrook in 1870-71 (Ryan 1906); also at C. Liptrap, Lilydale and elsewhere, but not established (Long 1981). SA Kept in captivity on Kangaroo I. in 1920s; disappeared about 1930. Single pair re-introduced in late 1970s; breeding recorded; present semidomestic population, 15 (Lashmar 1988). WA Introduced from stock imported before 1912 (Long 1981); young kept in semicaptivity in hope of becoming established. Though reported to thrive in some coastal regions in 1920s, failed to become established (Long 1981); also unsuccessfully introduced to Rottnest I. (Storr 1965). Populations reported near Broome.

Cocos-Keeling Is Apparently feral pair has lived on island for some years (Stokes *et al.* 1984).

NZ First introduced, Bay of Islands, about 1864; 23 subsequently released in Otago, 1867, but failed to become established. Introduced Raoul I., 1906; last reported 1909 (Oliver). Probably liberated at several locations in NI or abandoned when homesteads deserted (Oliver). Though may become temporarily established, no feral populations exist in NZ (NZRD). Reported Northland, Waikato and inland Wanganui (Oliver; NZRD), and on private shooting estate in Bay of Plenty, 1988 (K. E. Westerskov).

Odontophoridae

Oreortyx pictus Mountain Quail

NZ In 1876, the Auckland Acclimatization Society introduced three birds (out of 29 shipped). In 1877, a further nine were released at Matamata. In 1881, 40 released near L. Omapere, 40 in the upper Thames district and c. 120 kept in the gardens of the Auckland Acclimatization Society. In 1882, many more released in Auckland region; did not become established (Thomson 1922). A total of 122 birds introduced by the Otago Acclimatization Society in 1881; 61 released at Gladbrook, Strath-Taieri and 61 at Mataura Bridge and Venlaw Stn. In 1882, 64 released at Rock and Pillar Ra. No further records (Thomson 1922).

Colinus virginianus Northern Bobwhite

NZ History of introductions and releases summarized by Thomson (1922) and Westerskov (1956). Nearly 1100 released in all regions in summer 1899-1900 (not 1898; Westerskov 1956 contra Thomson 1922); a shipment of 192 received by East Coast Acclimatization Society in Aug. 1902 and released at Potutu, Waimata Valley and Te Arai. Despite becoming tenuously established in some local areas, most had disappeared by 1909. However, some persisted round Waingaro, S. Auckland, in 1922 and at Wairoa in 1952 (McKenzie 1953; Westerskov 1956; Oliver). Unconfirmed sightings near Wairoa till about 1970 (NZCL). In 1947, 400 eggs were imported to Dunedin, from California, and incubated; only 64 chicks hatched and none survived (Gurr 1953; Westerskov 1956). Observed Ruapapa Road, Wairoa, 1952: three pairs flushed and a fresh egg found; specimens were identified as subspecies taylori (Westerskov 1957). A covey of 20 recorded, Ohuka Valley, May 1952 (Westerskov 1956).

REFERENCES

- Balmford, R. 1978. Aust. Bird Watcher 7: 237-48.
- Forbes, H.O. 1885. A Naturalist's Wanderings in the Eastern Archipelago. Lond.
- Gibson-Hill, C.A. 1949. Ibis 91: 221-43.
- Gurr, L. 1953. Notornis 5: 164.
- Kikkawa, J., & W. Boles. 1976. Aust. Bird Bander 14: 3-6.
- Lashmar, A.F.C. 1988. S. Aust. Orn. 30: 154-5.
- Littler, F.M. 1902. Emu 1: 121-4.
- Long, J.L. 1981. Introduced Birds of the World. Reed, Sydney.
- -1988. Agric. Protect. Board West. Aust. Tech. Ser. 1.
- McCance, N. 1962. Aust. Avicult. Aug.: 105-106.
- McKenzie, H.R. 1953. Notornis 5: 123.
- Ryan, C.S. 1906. Emu 5: 110-19.
- Sharland, M. 1958. Tasmanian Birds. Angus & Robertson, Sydney.
- Stokes, T., et al. 1984. Emu 84: 23-8.
- Storr, G.M. 1965. Emu 64: 172-80.
- Tarr, H.E. 1950. Emu 49: 189-98.
- Thomson, G.M. 1922. The Naturalisation of Animals and Plants in New Zealand. Cambridge Univ. Press, Cambridge.
- Westerskov, K.E. 1956. NZ Outdoor 21(10): 12–14, 35–6. — 1957. Notomis 7: 95–8.
- 1990. Proc. Perdix V: Gray Partridge and Ring-necked Pheasant Workshop: 47–62.
- Williams, G.R. 1950. NZ Sci. Rev. 20: 2-6.
- Wood-Jones, F. 1912. Corals and Atolls. Lond.

Plate 35

Buff-breasted Button-quail *Turnix olivei* (page 445) 1 Adult male; 2 Adult female; 3 Adult male; 4 Adult female

Chestnut-backed Button-quail Turnix castanota (page 441)

- 5 Adult male; 6 Adult female, breeding;
- 7 Adult female, non-breeding; 8 Immature female;
- 9, 10 Adult male; 11 Adult female