

Moult Scheme Report 2008

The New Zealand moult scheme: an opportunity for further study

The physiologically demanding process of moult keeps the plumage of birds in good condition and is an important aspect of the avian life-cycle. The first step in understanding patterns of moult is to obtain basic information on the seasonality, extent and duration of moult in a given bird species. While these days we know much about the general patterns of moult in various groups of birds, there is still a need for detailed information on individual species. In New Zealand, for instance, we can ask questions about the moulting pattern of endemic passerine birds. We know these species may have characteristic patterns of breeding, given our relatively mild climatic regime. But how does their pattern of moult compare with passerines elsewhere? Again, we have introduced species from the Northern Hemisphere now established in New Zealand. Clearly their moult seasons will be out-of-sync with the Northern Hemisphere as they adjust to our Southern Hemisphere seasons, but are there more subtle changes in the length and pattern of their moult?

When the Moult Recording Scheme was first launched (*OSNZ News* 19), the moulting patterns of many New Zealand birds were not well known. Now we have a total of 3167 moult records for 130 species (Table 1). This adds a further 461 records since the full moult records were last summarised in 2005 (*Southern Bird* 24, pp. 14-16). Half of them are for birds in active moult, the rest are for non-moulting birds. Most of the records (63%) are from live birds. While we have now accumulated 3167 records of moult information, many come from introduced species (Table 1). We still need many more records, especially for New Zealand endemic species, and there are frequent opportunities to contribute to the scheme, e.g. banders, beach patrollers, conservation officers, museum workers or ornithologists in general. Two species stand well ahead of others in the data set: the House Sparrow with 554 records and the Silvereye with 481 records. Next in order are Greenfinch (99), Chaffinch (94), Kaka (88), Fairy Prion (87) and Bar-tailed Godwit (85). Table 1 presents a summary of records received up to 15 April 2009, listed alphabetically.

Table 1. Summary of moult records received to date

<i>Species</i>	<i>In moult</i>	<i>Not in moult</i>	<i>Alive</i>	<i>Dead</i>	<i>Total</i>
Bellbird	13	6	19	0	19
Bittern, Australasian	0	1	0	1	1
Blackbird	32	33	54	11	65
Bunting, Cirl	3	2	5	0	5
Chaffinch	42	52	92	2	94
Creeper, Brown	1	0	1	0	1
Cuckoo, Long-tailed	0	7	2	5	7
Cuckoo, Oriental	1	1	0	2	2
Cuckoo, Pallid	0	1	0	1	1
Cuckoo, Shining	0	8	0	8	8
Curlew, Bristle-thighed	0	3	0	3	3
Curlew, Eastern	2	1	0	3	3

Dotterel, Banded	23	43	0	66	66
Dotterel, New Zealand	5	13	1	17	18
Dove, Spotted	3	0	0	3	3
Duck, Grey	2	0	2	0	2
Dunnock	20	18	36	2	38
Falcon, New Zealand	8	8	0	16	16
Fantail	26	33	56	3	59
Fernbird	1	0	0	1	1
Gannet, Australasian	37	1	6	32	38
Godwit, Bar-tailed	13	72	1	84	85
Godwit, Black-tailed	0	1	0	1	1
Godwit, Hudsonian	0	3	0	3	3
Goldfinch	21	14	24	11	35
Greenfinch	64	35	96	3	99
Gull, Black-backed	17	3	2	18	20
Gull, Black-billed	4	1	2	3	5
Gull, Red-billed	47	1	37	11	48
Harrier, Australasian	39	10	1	48	49
Heron, Great White	0	1	1	0	1
Heron, White-faced	3	1	1	3	4
Kaka	13	75	76	12	88
Kea	1	0	0	1	1
Kingfisher, New Zealand	12	8	10	10	20
Knot, Lesser	9	49	1	57	58
Magpie, Australian	48	6	44	10	54
Mallard	15	13	27	1	28
Mollymawk, Black-browed	2	36	0	38	38
Mollymawk, Shy	5	26	0	31	31
Morepork	1	11	3	9	12
Myna, Common	17	0	2	15	17
Noddy, White-capped	1	0	0	1	1
Owl, Little	1	0	0	1	1
Oystercatcher, Pied	4	0	0	4	4
Oystercatcher, Variable	2	0	2	0	2
Parakeet, Red-crowned	5	2	6	1	7
Parakeet, Yellow-crowned	1	1	0	2	2
Penguin, Blue	4	2	2	4	6
Petrel, Black	0	2	0	2	2
Petrel, Blue	0	4	0	4	4
Petrel, Common Diving	3	5	0	8	8
Petrel, Cook's	0	2	0	2	2
Petrel, Grey-backed Storm	0	10	10	0	10
Petrel, Grey-faced	1	1	0	2	2
Petrel, Kerguelen	1	3	0	4	4
Petrel, Westland Black	0	1	0	1	1
Petrel, White-faced Storm	2	3	0	5	5
Petrel, White-headed	4	0	0	4	4
Phalarope, Grey	0	1	0	1	1
Pheasant	4	3	4	3	7
Pigeon, Cape (Cape Petrel)	0	2	0	2	2
Pigeon, Chatham Island	1	0	0	1	1
Pigeon, Feral (Rock Dove)	47	12	53	6	59
Pigeon, New Zealand (Kereru)	36	5	9	32	41

Pipit, New Zealand	0	1	0	1	1
Plover, Pacific Golden	20	47	0	67	67
Plover, Shore	8	23	0	31	31
Plover, Spur-winged	1	14	0	15	15
Pratincole, Oriental	0	2	0	2	2
Prion, Antarctic	1	0	0	1	1
Prion, Broad-billed	1	1	2	0	2
Prion, Fairy	0	87	0	87	87
Prion, Lesser Broad-billed	1	0	0	1	1
Prion, Salvin's	1	0	0	1	1
Pukeko	0	3	1	2	3
Quail, Brown	1	1	0	2	2
Rail, Banded	0	5	4	1	5
Redpoll	16	43	59	0	59
Robin	20	30	48	2	50
Rosella, Eastern	1	1	0	2	2
Saddleback (Tieke)	2	1	1	2	3
Sanderling	2	0	0	2	2
Sandpiper, Curlew	2	4	0	6	6
Sandpiper, Pectoral	4	12	0	16	16
Sandpiper, Sharp-tailed	1	9	0	10	10
Shag, Little	0	1	1	0	1
Shag, Pied	1	1	0	2	2
Shag, Spotted	6	1	0	7	7
Shearwater, Flesh-footed	0	2	0	2	2
Shearwater, Fluttering	11	0	0	11	11
Shearwater, Hutton's	2	1	1	2	3
Shearwater, Short-tailed	0	1	0	1	1
Silvereeye	240	241	468	13	481
Skua, Arctic	2	0	0	2	2
Skua, Brown	1	0	0	1	1
Skua, Long-tailed	2	0	0	2	2
Sparrow, House	380	174	550	4	554
Spoonbill, Royal	2	0	0	2	2
Starling	19	17	29	7	36
Stilt, Black	5	4	0	9	9
Stilt, Pied	7	27	0	34	34
Stint, Red-necked	2	12	0	14	14
Stitchbird (hihi)	24	7	31	0	31
Swallow, Welcome	1	1	0	2	2
Taiko, Chatham Island	0	3	3	0	3
Tattler, Siberian	1	0	1	0	1
Tattler, Wandering	2	8	0	10	10
Teal, Brown (Pateke)	9	28	2	35	37
Teal, Campbell Island	2	11	13	0	13
Teal, Grey	0	1	1	0	1
Tern, Black-fronted	3	1	0	4	4
Tern, Caspian	2	0	0	2	2
Tern, Fairy	1	0	0	1	1
Tern, Little	2	0	0	2	2
Tern, White	2	0	0	2	2
Tern, White-fronted	10	6	0	16	16
Tern, White-winged Black	2	0	0	2	2

Thrush, Song	12	14	18	8	26
Tit, Black	4	2	6	0	6
Tomtit	10	1	11	0	11
Tui	8	18	21	5	26
Turnstone	11	18	0	29	29
Warbler, Grey	26	3	28	1	29
Weka	2	1	3	0	3
Whimbrel	1	3	0	4	4
Whimbrel, Little	3	2	0	5	5
Whitehead	4	0	4	0	4
Wrybill	9	34	1	42	43
Yellowhammer	2	1	2	1	3
TOTALS	1582	1585	1997	1170	3167

The following observers have made contributions to the scheme since the last report (*Southern Bird* 28, p.10): Ros Batcheler (136), the Central Passerine Banding Group (94), Monica Awasthy (37), Ralph Powlesland (2), Raewyn Empson (3) and Matt Robertson (1).

A reminder that the *N.Z. Moulting Card* is used for recording data on birds in *active moult*, while for birds *not* in moult the *Summary Form for Birds Not in Moult* is used. Non-moulting birds include both those in old plumage (worn and faded) and those in new plumage (fresh without wear) and the state of plumage ('old' or 'new') needs to be stated on the card or record form. Write to me if you need supplies of the *N.Z. Moulting Card* and the *Summary Form for Birds Not in Moult*, or contact your Regional Representative. Remember that you can record useful moult information on birds *at any time of year - and potentially from every bird you handle (live or dead)!* We need more data on many New Zealand species so please contribute records if you can! In the meantime, I shall be reviewing alternative or supplementary ways of entering moult data into our scheme, given the new opportunities that computing technology now provides.

I thank all those observers who have sent in moult records, and especially moulters in Wellington who have made such a marked contribution over recent years. If you have moult records ready to send in, then I look forward to receiving them soon.

BEN BELL / MAY 2009