

Appendix 1. Contributors.

The following surveyors carried out timed visits in four or more tetrads:

Philip Abram, Ken Abram, PD Asher, Tony Baker, John Bannon, Chris Batty, David Beattie, Alan Bedford, Dave Bickerton, Mark Breaks, Kevin Briggs, David Broome, Steve Bullen, Richard Burkmar, Andrew Cadman, Paul Cammack, Russell Carter, Graham Clarkson, Derek Cook, Tony Cooper, Gerry Cotter, SP Coyle, Pete Crooks, Steve Cross, Andrew Dearden, Chris Derri, Roger Dewhurst, Kenny Dummigan, Stephen Dunstan, Andy Eccleston, Mark Farrar, Jonathan Fenton, Dave Fletcher, Mark Garner, Paul Green, Allan Greenwood, Ian Hartley, David Holland, Peter Hornby, John Houseman, Jeff Howarth, Graham Hulme, Robert Ives, Antony Johnson, Chris Johnson, Derek Langslow, KJ Lawson, Charlie Liggett, Kevin Lister, Simon Mair, Pete Marsh, Steve Martin, Barry McCarthy, Gareth Morgan, Pat Morris, Jeffery Neale, Jim Ormerod, Stuart Piner, John Plackett, Jean Roberts, John Sawyer, Chris Sharratt, Paul Slater, Neil Southworth, Eddie Sutcliffe, Keith Sutton, Frank Walsh, Jean Wardle, Mike Watson, Steve White, John Wilson, Robert Wilson, Rob Yates.

The following surveyors carried out timed visits in at least one tetrad:

Lee Aaron, Malcolm Alderton, John Almond, PD Asher, Robert Ashworth, Roy Baker, Don Baldwin, John Ball, Mark Ballantyne, Liz Bateman, Eddy Bayton, Jim Beattie, Daniel Bennett, Sue Bletcher, Mark Boyd, Ian Brady, Rosie Briggs, Mike Brown, James Burke, Colin Bushell, Jeff Butcher, A Carroll, Jennifer Connelly, V Connelly, Ian Corbett, David Cording, Paul Corner, G Cotter, SP Coyle, Kevin Curran, Thom Dallimore, Tim Davie, Mary Dean, R Dewhurst, John Dransfield, Tony Duckels, Barry Dyson, Seumus Eaves, Roy Ekins, Paul Ellis, Gill Ellison, Alex Fenton, Dan Flenley, Steve Flynn, Robin Foster, Daniel Foy, D Gaskell, John Gaskell, D Gathercole, Graham Gavaghan, Carolyn Gethings, Nick Godden, Peter Golborn, Nik Grounds, Bob Harris, K Harrison, Roger Hayes, Alan Heaton, Craig Higson, Zac Hinchcliffe, RD Hind, David Hindle, RL Hockin, William Honeywell, Janet Hopkinson, JE Houseman, Brian Hugo, Ron Jackson, Rick Johnson, Maurice Jones, Steve Jones, Phil Kirk, Ray Knapman, Mark Lavan, KJ Lawson, Sophie Leadsom, Gerald Light, Phil Lillywhite, Keith Marshall, DS Martin, Pauline McGough, Mike McKavett, Keith McLennan, Andy McWilliam, Jill Mills, Tony Moreton, Steve Morris, Clive Morton, Monty Myerscough, David Nuttall, Peter Olson, Ernest Ormand, Dave Owen, P Pacey, David Pack, Sheila Parsons, John Patterson, JW Perry, Lucy Pickup, D Pollard, Aidan Power, G Powley, Bob Pyefinch, Christopher Rae, Simon Rahilly, Peter Rhind, Tony Riden, Maureen Rimmer, Pat Rishton, Mike Roberts, Melissa Sagar, Gary Savill, Gary Sharples, Peter Sharples, Jim Sines, P Slade, Ed Smith, Gideon Smith, Ina Smith, Judith Smith, Michael Smith, Richard Spencer, Dave Stanley, Ted Stevens, Dave Thexton, Carol Thistlethwaite, Paul Thomas, Paul Thomason, Barbara Thompson, Sarah Thompson, Brian Tollitt, Chris Tomlinson, Steve Tomlinson, James Tookey, B Townson, Allen Turner, S Ward, M Wessels, Nora West, Maurice Wilby, Anne Wilkinson, Barbara Wilkinson, Barry Willcock, Derek Williams, Doug Windle, D Winnard, K Woan, Les Wolstenholme, John Wood, Pete Woodruff, Stephen Wren, David Wright, David Wymer,

Appendix 2. Changes in breeding distribution between 1997-2000 and 2008-2011.

Species	Records assessed	2011 tetrads	2000 tetrads	Change
Arctic Tern	All breeding records	5	6	-16.67%
Avocet	All breeding records	17	0	New
Bar-headed Goose	All breeding records	2	0	New
Barn Owl	Probable/proven only	195	103	89.32%
Barnacle Goose	All breeding records	6	4	50.00%
Bearded Tit	All breeding records	2	2	0.00%
Bittern	All breeding records	2	2	0.00%
Black Grouse	All breeding records	1	1	0.00%
Black Guillemot	All breeding records	1	0	New
Black Redstart	All breeding records	5	4	25.00%
Black Swan	All breeding records	2	0	New
Blackbird	All breeding records	887	870	1.95%
Blackcap	All breeding records	729	651	11.98%
Black-headed Gull	Proven only	14	28	-50.00%
Black-tailed Godwit	All breeding records	1	1	0.00%
Blue Tit	All breeding records	873	873	0.00%
Bullfinch	All breeding records	436	287	51.92%
Buzzard	Probable/proven only	311	59	427.12%
Canada Goose	Probable/proven only	276	147	87.76%
Carrion Crow	All breeding records	906	862	5.10%
Cetti's Warbler	All breeding records	3	0	New
Chaffinch	All breeding records	891	885	0.68%
Chiffchaff	All breeding records	662	474	39.66%
Coal Tit	All breeding records	679	483	40.58%
Collared Dove	All breeding records	771	689	11.90%
Common Crossbill	Probable/proven only	10	7	42.86%
Common Sandpiper	All breeding records	131	141	-7.09%

Species	Records assessed	2011 tetrads	2000 tetrads	Change
Common Tern	All breeding records	11	9	22.22%
Coot	All breeding records	348	329	5.78%
Corn Bunting	All breeding records	144	176	-18.18%
Cuckoo	All breeding records	209	346	-39.60%
Curlew	Probable/proven only	430	449	-0.04
Dipper	All breeding records	218	177	23.16%
Dunlin	Probable/proven only	11	17	-35.29%
Dunnock	All breeding records	873	826	5.69%
Eagle Owl	All breeding records	8	0	New
Eider	All breeding records	18	5	260.00%
Feral Pigeon	All breeding records	551	450	22.44%
Gadwall	All breeding records	38	23	65.22%
Garden Warbler	All breeding records	286	297	-3.70%
Garganey	All breeding records	5	10	-50.00%
Goldcrest	All breeding records	466	401	16.21%
Golden Plover	All breeding records	61	53	15.09%
Goldeneye	All breeding records	0	1	-100.00%
Goldfinch	All breeding records	886	783	13.15%
Goosander	All breeding records	118	86	37.21%
Goshawk	All breeding records	13	11	18.18%
Grasshopper Warbler	All breeding records	192	89	115.73%
Great B-backed Gull	All breeding records	13	9	44.44%
Great Crested Grebe	Probable/proven only	81	66	22.73%
G S Woodpecker	All breeding records	722	579	24.70%
Great Tit	All breeding records	868	823	5.47%
Green Woodpecker	All breeding records	228	172	32.56%
Greenfinch	All breeding records	813	785	3.57%
Grey Heron	Proven only	48	31	54.84%
Grey Partridge	All breeding records	308	491	-37.27%
Grey Wagtail	All breeding records	387	345	12.17%
Greylag Goose	Probable/proven only	82	21	290.48%

Species	Records assessed	2011 tetrads	2000 tetrads	Change	Species	Records assessed	2011 tetrads	2000 tetrads	Change
Harris's Hawk	All breeding records	2	0	New	Merlin	Probable/proven only	17	14	21.43%
Hawfinch	All breeding records	5	7	-28.57%	Mistle Thrush	All breeding records	770	770	0.00%
Hen Harrier	Proven only	8	4	100.00%	Moorhen	All breeding records	671	644	4.19%
Herring Gull	Probable/proven only	54	30	80.00%	Mute Swan	Probable/proven only	190	146	30.14%
Hobby	Probable/proven only	8	3	166.67%	Nightjar	All breeding records	1	4	-75.00%
House Martin	Probable/proven only	429	542	-20.85%	Nuthatch	All breeding records	436	207	110.63%
House Sparrow	All breeding records	821	793	3.53%	Oystercatcher	All breeding records	564	501	12.57%
Jackdaw	Probable/proven only	485	380	27.63%	Peregrine	Probable/proven only	57	31	83.87%
Jay	All breeding records	566	446	26.91%	Pheasant	All breeding records	766	673	13.82%
Kestrel	Probable/proven only	364	423	-13.95%	Pied Flycatcher	All breeding records	66	60	10.00%
Kingfisher	Probable/proven only	86	62	38.71%	Pied Wagtail	All breeding records	808	773	4.53%
Kingfisher	All breeding records	187	136	37.50%	Pintail	All breeding records	0	1	-100.00%
Kittiwake	All breeding records	2	1	100.00%	Pochard	Probable/proven only	7	6	16.67%
Lapwing	All breeding records	692	745	-7.11%	Quail	All breeding records	56	45	24.44%
Lesser B-backed Gull	Probable/proven only	48	30	60.00%	Raven	Probable/proven only	34	13	161.54%
Lesser Redpoll	All breeding records	217	102	112.75%	Red Grouse	All breeding records	154	131	17.56%
LS Woodpecker	All breeding records	3	54	-94.44%	Red-b Merganser	Probable/proven only	5	5	0.00%
Lesser Whitethroat	All breeding records	216	152	42.11%	Red-l Partridge	All breeding records	316	158	100.00%
Linnet	All breeding records	619	634	-2.37%	Redshank	Probable/proven only	126	161	-21.74%
Little Grebe	Probable/proven only	78	57	36.84%	Redstart	All breeding records	184	184	0.00%
Little Owl	All breeding records	332	400	-17.00%	Reed Bunting	All breeding records	627	478	31.17%
Little Ringed Plover	Probable/proven only	57	38	50.00%	Reed Warbler	All breeding records	109	61	78.69%
Long-eared Owl	All breeding records	58	38	52.63%	Ring Ouzel	Probable/proven only	17	24	-29.17%
Long-tailed Tit	All breeding records	722	588	22.79%	Ringed Plover	Probable/proven only	28	33	-15.15%
Magpie	All breeding records	856	826	3.63%	Ring-n Parakeet	All breeding records	7	1	600.00%
Mallard	Probable/proven only	745	750	-0.67%	Robin	All breeding records	892	880	1.36%
Mandarin Duck	Probable/proven only	11	2	450.00%	Rook	Probable/proven only	207	195	6.15%
Marsh Harrier	Probable/proven only	6	2	200.00%	Roseate Tern	All breeding records	1	0	New
Marsh Tit	All breeding records	34	49	-30.61%	Ruddy Duck	Probable/proven only	7	17	-58.82%
Meadow Pipit	All breeding records	470	528	-10.98%	Ruff	Probable/proven only	3	2	50.00%
Mediterranean Gull	All breeding records	6	3	100.00%	Sand Martin	Probable/proven only	96	100	-4.00%

Species	Records assessed	2011 tetrads	2000 tetrads	Change	Species	Records assessed	2011 tetrads	2000 tetrads	Change
Sedge Warbler	All breeding records	286	286	0.00%	Wood Warbler	All breeding records	36	64	-43.75%
Shelduck	Probable/proven only	181	174	4.02%	Woodcock	All breeding records	120	146	-17.81%
Short-eared Owl	All breeding records	61	62	-1.61%	Woodpigeon	All breeding records	893	861	3.72%
Shoveler	Probable/proven only	15	12	25.00%	Wren	All breeding records	922	903	2.10%
Siskin	All breeding records	111	72	54.17%	Yellow Wagtail	Probable/proven only	27	43	-37.21%
Skylark	All breeding records	573	694	-17.44%	Yellowhammer	All breeding records	188	232	-18.97%
Snipe	Probable/proven only	100	114	-12.28%					
Song Thrush	All breeding records	825	782	5.50%					
Sparrowhawk	Probable/proven only	229	272	-15.81%					
Spoonbill	All breeding records	0	1	-100.00%					
Spotted Flycatcher	Probable/proven only	207	275	-24.73%					
Starling	All breeding records	839	847	-0.94%					
Stock Dove	All breeding records	550	422	30.33%					
Stonechat	Probable/proven only	141	46	206.52%					
Swallow	Probable/proven only	718	753	-4.65%					
Swift	Probable/proven only	205	313	-34.50%					
Tawny Owl	All breeding records	517	479	7.93%					
Teal	Probable/proven only	17	21	-19.05%					
Tree Pipit	Probable/proven only	29	55	-47.27%					
Tree Sparrow	All breeding records	255	157	62.42%					
Treecreeper	All breeding records	433	381	13.65%					
Tufted Duck	Probable/proven only	88	56	57.14%					
Turtle Dove	All breeding records	0	8	-100.00%					
Twite	Probable/proven only	4	26	-84.62%					
Water Rail	All breeding records	20	12	66.67%					
Wheatear	All breeding records	154	182	-15.38%					
Whinchat	Probable/proven only	24	58	-58.62%					
Whitethroat	Probable/proven only	457	460	-0.65%					
Willow Tit	All breeding records	36	70	-48.57%					
Willow Warbler	All breeding records	797	808	-1.36%					
Wood Duck	All breeding records	1	0	New					

Appendix 3. Population estimates (breeding pairs) in 2008-2011 and 1997-2000, showing the accuracy of the estimate and the proportion of the total number of breeding birds in Lancashire and North Merseyside during 2008-2011 for each species

Species	2011 estimate	Accuracy	2011 % all spp.	2000 estimate
Arctic Tern	10	Good		4
Avocet	162	Good	0.03	0
Bar-headed Goose	2	Good	/	0
Barn Owl	275	Good	0.05	130
Barnacle Goose	10	Moderate	/	4
Bearded Tit	32	Good	0.01	100
Bittern	1	Good	/	3
Black Redstart	2	Good	/	3
Blackbird	35000	Poor	6.48	45000
Blackcap	8000	Moderate	1.48	8000
Black-headed Gull	16000	Good	2.96	
Black-tailed Godwit	2	Good	/	2
Blue Tit	34000	Poor	6.3	40000
Bullfinch	2000	Moderate	0.37	2000
Buzzard	450	Moderate	0.08	70
Canada Goose	600	Poor	0.11	400
Carrion Crow	9000	Poor	1.67	12000
Cetti's Warbler	5	Good	/	0
Chaffinch	20000	Poor	3.71	60000
Chiffchaff	3500	Moderate	0.65	5000
Coal Tit	5500	Moderate	1.02	5000
Collared Dove	5000	Moderate	0.93	3250
Common Crossbill	10	Moderate	/	5
Common Sandpiper	200	Good	0.04	250
Common Tern	650	Good	0.12	300
Coot	1000	Moderate	0.19	1000

Species	2011 estimate	Accuracy	2011 % all spp.	2000 estimate
Corn Bunting	700	Good	0.13	1200
Cuckoo	110	Moderate	0.02	250
Curlew	3000	Moderate	0.56	4500
Dipper	270	Good	0.05	200
Dunlin	25	Good	/	50
Dunnock	10500	Poor	1.95	30000
Eagle Owl	2	Good	/	0
Eider	25	Good	/	10
Feral Pigeon	15000	Poor	2.78	10000
Gadwall	75	Good	0.01	25
Garden Warbler	850	Moderate	0.16	2000
Garganey	2	Good	/	2
Goldcrest	2750	Poor	0.51	5000
Golden Plover	100	Moderate	0.02	130
Goldfinch	9500	Poor	1.76	3500
Goosander	150	Good	0.03	100
Goshawk	10	Moderate	/	10
Grasshopper Warbler	350	Moderate	0.06	150
Great Black-backed Gull	25	Good	/	20
Great Crested Grebe	150	Good	0.03	140
Great Spot. Woodpecker	1800	Poor	0.33	900
Great Tit	20000	Poor	3.71	20000
Green Woodpecker	350	Good	0.06	200
Greenfinch	10000	Poor	1.85	12000
Grey Heron	750	Good	0.14	350
Grey Partridge	1250	Good	0.23	2500
Grey Wagtail	650	Good	0.12	500
Greylag Goose	100	Poor	0.02	40
Harris's Hawk	2	Good	/	0
Hawfinch	5	Good	/	10
Hen Harrier	10	Good	/	10
Herring Gull	1800	Good	0.33	1300

Species	2011 estimate	Accuracy	2011 % all spp.	2000 estimate	Species	2011 estimate	Accuracy	2011 % all spp.	2000 estimate
Hobby	15	Moderate	/	3	Peregrine	50	Good	0.01	35
House Martin	4250	Moderate	0.79	4000	Pheasant	12500	Poor	2.32	10000
House Sparrow	35000	Moderate	6.48	35000	Pied Flycatcher	150	Good	0.03	100
Jackdaw	6000	Moderate	1.11	5000	Pied Wagtail	3200	Moderate	0.59	4000
Jay	1750	Moderate	0.32	2000	Pochard	25	Good	/	15
Kestrel	600	Moderate	0.11	750	Quail	87	Good	0.02	5
Kingfisher	125	Good	0.02	100	Raven	100	Good	0.02	20
Kittiwake	230	Good	0.04	2	Red Grouse	6000	Good	1.11	3000
Lapwing	6500	Good	1.2	7000	Red-breasted Merganser	7	Good	/	4
Lesser Black-backed Gull	15000	Good	2.78	21000	Red-legged Partridge	1500	Poor	0.28	300
Lesser Redpoll	700	Good	0.13	700	Redshank	750	Good	0.14	850
Lesser Spot. Woodpecker	2	Good	/	40	Redstart	550	Good	0.1	800
Lesser Whitethroat	300	Good	0.06	250	Reed Bunting	3000	Good	0.56	2000
Linnet	4200	Good	0.78	5000	Reed Warbler	650	Good	0.12	450
Little Grebe	135	Good	0.03	125	Ring Ouzel	20	Good	/	35
Little Owl	430	Poor	0.08	400	Ringed Plover	50	Good	0.01	80
Little Ringed Plover	100	Good	0.02	50	Ring-necked Parakeet	2	Good	/	0
Long-eared Owl	75	Moderate	0.01	30	Robin	35000	Poor	6.48	50000
Long-tailed Tit	5000	Poor	0.93	3000	Rook	7000	Moderate	1.3	10000
Magpie	10000	Poor	1.85	12000	Ruddy Duck	1	Good	/	30
Mallard	3500	Poor	0.65	3500	Ruff	2	Good	/	2
Mandarin Duck	10	Good	/	2	Sand Martin	3200	Moderate	0.59	3500
Marsh Harrier	7	Good	/	3	Sedge Warbler	1500	Moderate	0.28	3000
Marsh Tit	200	Good	0.04	375	Shelduck	400	Good	0.07	400
Meadow Pipit	10000	Poor	1.85	16000	Short-eared Owl	75	Good	0.01	30
Mediterranean Gull	25	Good	/	2	Shoveler	70	Good	0.01	35
Merlin	25	Moderate	/	25	Siskin	350	Moderate	0.06	200
Mistle Thrush	3400	Moderate	0.63	3000	Skylark	7000	Moderate	1.3	8000
Moorhen	2500	Moderate	0.46	3500	Snipe	375	Moderate	0.07	450
Mute Swan	275	Good	0.05	200	Song Thrush	6000	Moderate	1.11	10000
Nuthatch	1600	Moderate	0.3	500	Sparrowhawk	600	Moderate	0.11	750
Oystercatcher	2200	Moderate	0.41	2500	Spotted Flycatcher	300	Moderate	0.06	600

Species	2011 estimate	Accuracy	2011 % all spp.	2000 estimate
Starling	12000	Poor	2.22	15000
Stock Dove	1700	Moderate	0.31	850
Stonechat	275	Good	0.05	60
Swallow	9000	Poor	1.67	10000
Swift	1200	Poor	0.22	2000
Tawny Owl	1000	Moderate	0.19	1000
Teal	20	Good	/	25
Tree Pipit	60	Good	0.01	100
Tree Sparrow	2000	Good	0.37	600
Treecreeper	1500	Moderate	0.28	1500
Tufted Duck	200	Poor	0.04	125
Twite	20	Good	/	40
Water Rail	200	Good	0.04	125
Wheatear	300	Moderate	0.06	375
Whinchat	30	Good	0.01	150
Whitethroat	3500	Good	0.65	5000
Willow Tit	50	Good	0.01	100
Willow Warbler	8000	Poor	1.48	20000
Wood Warbler	25	Good	/	100
Woodcock	200	Poor	0.04	300
Woodpigeon	22000	Moderate	4.08	25000
Wren	40000	Poor	7.41	75000
Yellow Wagtail	40	Good	0.01	70
Yellowhammer	700	Good	0.13	1000

Appendix 4. Population estimates of wintering birds in Lancashire and North Merseyside during 2007/08-2010/11, showing the accuracy of the estimate and the proportion of the total number of birds in Lancashire and North Merseyside during 2007/08-2010/11 for each species.

Species	Population Estimate	Accuracy	% all spp.
American Golden Plover	< 5	Good	/
American Wigeon	< 5	Good	/
Arctic Skua	< 5	Good	/
Arctic Tern	< 5	Good	/
Avocet	< 5	Good	/
Bar-headed Goose	< 5	Good	/
Barn Owl	700	Good	0.03
Barnacle Goose (feral)	250	Good	0.01
Barred Warbler	< 5	Good	/
Bar-tailed Godwit	12000	Good	0.52
Bean Goose	5	Good	/
Bearded Tit	100	Good	/
Bewick's Swan	100	Good	/
Bittern	10	Good	/
Black Grouse	< 5	Good	/
Black Guillemot	< 5	Good	/
Black Redstart	< 10	Good	/
Black Swan	10	Good	/
Black Tern	< 5	Good	/
Blackbird	100000	Poor	4.32
Blackcap	150	Moderate	0.01
Black-headed Gull	30000	Moderate	1.3
Black-necked Grebe	< 5	Good	/
Black-tailed Godwit	5241	Good	0.23

Species	Population Estimate	Accuracy	% all spp.
Black-throated Diver	< 5	Good	/
Blue Tit	100000	Poor	4.32
Brambling	1500	Moderate	0.06
Brent Goose	< 10	Good	/
Bullfinch	4750	Moderate	0.21
Buzzard	1800	Moderate	0.08
Canada Goose	3000	Moderate	0.13
Carrion Crow	28000	Poor	1.21
Caspian Gull	< 5	Good	/
Cattle Egret	< 5	Good	/
Cetti's Warbler	15	Good	/
Chaffinch	150000	Poor	6.48
Chiffchaff	20	Good	/
Chough	< 5	Good	/
Coal Tit	15000	Poor	0.65
Collared Dove	15000	Poor	0.65
Common Crossbill	20	Moderate	/
Common Gull	30000	Poor	1.3
Common Redpoll	< 5	Good	/
Common Rosefinch	< 5	Good	/
Common Sandpiper	< 5	Good	/
Common Scoter	40000	Good	1.73
Coot	6000	Poor	0.26
Cormorant	2000	Good	0.09
Corn Bunting	2100	Moderate	0.09
Curlew	10500	Good	0.45
Curlew Sandpiper	< 5	Good	/
Dipper	800	Moderate	0.03
Dunlin	39000	Good	1.69
Dunnock	21500	Poor	0.93

Species	Population Estimate	Accuracy	% all spp.	Species	Population Estimate	Accuracy	% all spp.
Eagle Owl	< 5	Good	/	Green Woodpecker	1000	Moderate	0.04
Egyptian Goose	< 5	Good	/	Greenfinch	30000	Poor	1.3
Eider	500	Good	0.02	Greenshank	< 5	Good	/
European Storm-petrel	< 5	Good	/	Green-winged Teal	< 5	Good	/
Feral Pigeon	50000	Poor	2.16	Grey Heron	1250	Moderate	0.05
Fieldfare	20000	Poor	0.86	Grey Partridge	4000	Moderate	0.17
Firecrest	< 5	Poor	/	Grey Phalarope	< 5	Good	/
Fulmar	< 5	Poor	/	Grey Plover	5000	Good	0.22
Gadwall	250	Good	0.01	Grey Wagtail	2300	Moderate	0.1
Gannet	< 5	Good	/	Greylag Goose	5000	Poor	0.22
Garden Warbler	< 5	Good	/	Guillemot	10	Poor	/
Garganey	< 5	Good	/	Harris's Hawk	< 5	Good	/
Glaucous Gull	< 5	Good	/	Hawfinch	20	Moderate	/
Glossy Ibis	< 5	Good	/	Hen Harrier	30	Moderate	/
Goldcrest	8000	Poor	0.35	Herring Gull	50000	Moderate	2.16
Golden Pheasant	< 5	Good	/	Hooded Crow	< 5	Good	/
Golden Plover	8500	Good	0.37	House Sparrow	100000	Moderate	4.32
Goldeneye	300	Good	0.01	Iceland Gull	10	Good	/
Goldfinch	25000	Poor	1.08	Jack Snipe	350	Poor	0.02
Goosander	450	Moderate	0.02	Jackdaw	12000	Poor	0.52
Goshawk	10	Moderate	/	Jay	5000	Poor	0.22
Great Black-backed Gull	1000	Good	0.04	Kestrel	2000	Poor	0.09
Great Crested Grebe	400	Good	0.02	Kingfisher	450	Good	0.02
Great Grey Shrike	< 5	Good	/	Kittiwake	100	Moderate	/
Great Northern Diver	< 5	Good	/	Knot	85000	Good	3.67
Great Skua	< 5	Good	/	Lady Amherst's Pheasant	< 5	Good	/
Great Spotted Woodpecker	5500	Moderate	0.24	Lapland Bunting	< 5	Good	/
Great Tit	60000	Poor	2.59	Lapwing	35000	Moderate	1.51
Great White Egret	5	Good	/	Leach's Storm-petrel	< 5	Good	/
Green Sandpiper	20	Good	/	Lesser Black-backed Gull	2000	Moderate	0.09

Species	Population Estimate	Accuracy	% all spp.	Species	Population Estimate	Accuracy	% all spp.
Lesser Redpoll	1800	Moderate	0.08	Pheasant	30000	Poor	1.3
Lesser Spotted Woodpecker	< 5	Good	/	Pied Wagtail	3000	Poor	0.13
Linnet	12000	Moderate	0.52	Pink-footed Goose	50000	Good	2.16
Little Auk	< 5	Good	/	Pintail	3900	Good	0.17
Little Bunting	< 5	Good	/	Pochard	1000	Good	0.04
Little Egret	200	Good	0.01	Pomarine Skua	< 5	Good	/
Little Grebe	350	Poor	0.02	Purple Sandpiper	5	Good	/
Little Gull	500	Moderate	0.02	Raven	350	Moderate	0.02
Little Owl	1200	Poor	0.05	Razorbill	20	Poor	/
Little Stint	< 5	Poor	/	Red Grouse	18000	Poor	0.78
Long-billed Dowitcher	< 5	Good	/	Red Kite	< 5	Good	/
Long-eared Owl	225	Moderate	0.01	Red-breasted Goose	< 5	Good	/
Long-tailed Duck	5	Good	/	Red-breasted Merganser	200	Good	0.01
Long-tailed Tit	20000	Moderate	0.86	Red-legged Partridge	5000	Poor	0.22
Magpie	26000	Poor	1.12	Red-necked Grebe	< 5	Good	/
Mallard	12000	Poor	0.52	Redshank	10000	Good	0.43
Mandarin Duck	20	Good	/	Red-throated Diver	300	Good	0.01
Marsh Harrier	5	Good	/	Redwing	12000	Poor	0.52
Marsh Tit	600	Moderate	0.03	Reed Bunting	5000	Moderate	0.22
Meadow Pipit	9000	Poor	0.39	Richard's Pipit	< 5	Good	/
Mediterranean Gull	10	Good	/	Ring Ouzel	< 5	Good	/
Merlin	50	Poor	/	Ring-billed Gull	< 5	Good	/
Mistle Thrush	10000	Moderate	0.43	Ringed Plover	200	Good	0.01
Moorhen	7500	Moderate	0.32	Ring-necked Duck	< 5	Good	/
Muscovy Duck	< 5	Good	/	Ring-necked Parakeet	20	Good	/
Mute Swan	1000	Good	0.04	Robin	100000	Poor	4.32
Night Heron	< 5	Good	/	Rock Pipit	50	Good	/
Nuthatch	4800	Moderate	0.21	Rook	21000	Moderate	0.91
Oystercatcher	47000	Good	2.03	Rough-legged Buzzard	< 5	Good	/
Peregrine	150	Poor	0.01	Ruddy Duck	10	Good	/

Species	Population Estimate	Accuracy	% all spp.	Species	Population Estimate	Accuracy	% all spp.
Ruff	100	Good	/	Twite	250	Good	0.01
Sanderling	5050	Good	0.22	Velvet Scoter	5	Good	/
Scaup	50	Good	/	Water Pipit	10	Good	/
Shag	10	Good	/	Water Rail	600	Moderate	0.03
Shelduck	7700	Good	0.33	Waxwing	1000	Moderate	0.04
Shore Lark	< 5	Good	/	Wheatear		Good	/
Short-eared Owl	30	Poor	/	White-fronted Goose	50	Good	/
Shoveler	500	Good	0.02	Whooper Swan	2500	Good	0.11
Siskin	7500	Moderate	0.32	Wigeon	84000	Good	3.63
Skylark	25000	Poor	1.08	Willow Tit	150	Moderate	0.01
Slavonian Grebe	< 5	Good	/	Wood Duck	< 5	Good	/
Smew	< 5	Good	/	Woodcock	2000	Poor	0.09
Snipe	8500	Moderate	0.37	Woodpigeon	100000	Poor	4.32
Snow Bunting	25	Moderate	/	Wren	120000	Poor	5.19
Snow Goose	< 5	Good	/	Yellow-browed Warbler	< 5	Good	/
Song Thrush	18000	Moderate	0.78	Yellowhammer	2500	Moderate	0.11
Sparrowhawk	1500	Poor	0.06	Yellow-legged Gull	10	Good	/
Spoonbill	< 5	Good	/				
Spotted Redshank	8	Good	/				
Starling	300000	Moderate	12.97				
Stock Dove	6000	Moderate	0.26				
Stonechat	500	Poor	0.02				
Surf Scoter	< 5	Good	/				
Swallow	< 5	Good	/				
Tawny Owl	3000	Moderate	0.13				
Teal	10000	Good	0.43				
Tree Sparrow	6000	Moderate	0.26				
Treecreeper	4500	Moderate	0.19				
Tufted Duck	1500	Good	0.06				
Turnstone	895	Good	0.04				

Appendix 5. Total number of species recorded in each 10km square during summer 2008-2011 and winter 2007/08-2010/11.

Tetrad name	Tetrad	Breeding	Winter
Formby Dunes	SD20	73	130
Ainsdale Dunes	SD21	54	80
Great Altcar & Maghull Mosses	SD30	94	122
Birkdale & Southport Mosses	SD31	99	145
Ribble Marshes & Lytham St. Anne's	SD32	95	154
Blackpool & South-West Fylde	SD33	93	157
Fleetwood & North-West Fylde	SD34	88	168
Pilling Sands	SD35	43	109
Rainford, Kirkby & Ormskirk Mosses	SD40	93	88
Martin Mere & South-West Chorley Mosses	SD41	102	139
Hesketh, Longton & Freckleton Marshes	SD42	98	143
Kirkham & Inskip	SD43	82	106
Garstang and Wyre Mosses	SD44	87	129
Cockerham and Heysham NR	SD45	96	144
Heysham, Morecambe & Lancaster	SD46	87	137
Silverdale	SD47	109	146
Skelmersdale	SD50	76	84
Chorley	SD51	87	102
Preston South	SD52	89	104
Preston North	SD53	90	117
Oakenclough and South-West Bowland	SD54	101	88
Abbeystead	SD55	104	98
North-West Bowland	SD56	98	104
Arkolme and Lune Valley	SD57	98	116
Rivington, Belmont and W. Pennine Moors	SD61	109	120
Blackburn	SD62	95	111
Alston and Ribchester	SD63	89	108
Chipping	SD64	101	91

Tetrad name	Tetrad	Breeding	Winter
Dunsop Bridge & Central Bowland	SD65	106	82
North-East Bowland	SD66	97	88
Upper Lune Valley	SD67	92	89
Central West Pennine Moors	SD71	96	89
Accrington and Haslingden	SD72	101	111
Great Harwood & Calder Valley	SD73	92	120
Clitheroe	SD74	97	103
Slaidburn & Stocks Reservoir	SD75	106	112
Scout Moor	SD81	80	83
Bacup & Crawshawbooth	SD82	94	94
Burnley	SD83	88	102
Foulridge & Barnoldswick	SD84	99	109
Paythorne	SD85	73	60
Trawden & Laneshaw Bridge	SD92, 93 & 94	92	73
South Liverpool	SJ38	59	89
North Liverpool & Crosby	SJ39	81	141
Halewood & Speke	SJ48	77	98
Knowsley & South Rainford	SJ49	98	129
St. Helens	SJ59	87	104

Appendix 6. Total number of species recorded in each tetrad during summer 2008-2011 and winter 2007/08-2010/11.

Tetrad name	Tetrad	Winter 2007-2011	Breeding 2008-2011
Ravenmeols LNR	SD20S	51	38
Formby Point South	SD20T	81	45
National Trust, Formby Point	SD20U	79	51
Blundellsands Dunes	SD20V	50	33
Hightown Dunes/Altmouth	SD20W	73	39
Altcar Rifle Ranges/Cabin Hill NNR	SD20X	86	68
Formby Town	SD20Y	50	47
Freshfield Dune Heath/Fish' mans Path	SD20Z	60	56
Ainsdale Shore South	SD21Q	19	/
Ainsdale NNR	SD21V	68	50
Ainsdale-on-Sea	SD21W	65	27
Ainsdale LNR offshore	SD21X	21	/
Little Crosby	SD30A	78	63
Flea Moss Wood, Hightown	SD30B	73	65
Alt Bridge, Formby	SD30C	58	46
Formby Moss	SD30D	65	47
Formby Hall	SD30E	79	54
Crosby Hall	SD30F	66	51
Ince Blundell	SD30G	56	51
Altcar Withins	SD30H	60	48
Great Altcar	SD30I	71	55
Fine Jane's Pumping Station	SD30J	91	54
Sefton Meadows & Roughley's Wood	SD30K	61	53
Lunt Meadows	SD30L	76	65
Carr Wood, Great Altcar	SD30M	63	57
Downholland Hall	SD30N	72	51
Downholland Moss East	SD30P	101	64
Netherton	SD30Q	51	43

Tetrad name	Tetrad	Winter 2007-2011	Breeding 2008-2011
Maghull North	SD30R	40	41
Lydiate	SD30S	62	48
Downholland Cross	SD30T	63	52
Halsall South	SD30U	50	50
Melling	SD30V	47	65
Maghull East	SD30W	51	54
Aughton	SD30X	41	37
Clieves Hills	SD30Y	58	61
Cut Lane Farm, Ormskirk	SD30Z	43	47
Woodvale	SD31A	60	61
Ainsdale Sands Lake	SD31B	85	57
Royal Birkdale Golf Course	SD31C	79	55
Birkdale Sands	SD31D	47	18
Plex Moss	SD31F	66	43
Halsall Moss	SD31G	58	49
Birkdale village	SD31H	55	43
Southport Marine Lake south	SD31I	73	47
Southport Marine Lake north	SD31J	75	23
Gettern Mere Farm	SD31K	65	44
New Cut Lane	SD31L	50	47
Blowick Moss	SD31M	68	47
Blowick	SD31N	38	37
Hesketh Golf Course	SD31P	94	67
Halsall	SD31Q	41	54
Shirdley Hill	SD31R	47	59
Southport Crematorium	SD31S	63	52
Southport Old Links Golf Course	SD31T	80	61
Churchtown	SD31U	61	55
Hurlston	SD31V	49	42
Scarisbrick Hall	SD31W	55	50
Scarisbrick Moss	SD31X	58	44

Tetrad name	Tetrad	Winter 2007- 2011	Breeding 2008- 2011	Tetrad name	Tetrad	Winter 2007- 2011	Breeding 2008- 2011
Wyke House Farm	SD31Y	54	51	Staining	SD33N	58	43
Churchtown Moss	SD31Z	56	48	Poulton-le-Fylde	SD33P	55	42
St. Anne's Beach	SD32E	64	25	Ballam	SD33Q	58	44
Fairhaven Dunes	SD32I	92	41	Staining Wood Farm	SD33R	63	43
St. Anne's	SD32J	61	32	Ream Hills	SD33S	71	47
Marshside north/Crossens inner	SD32K	114	62	Todderstaffe Hall	SD33T	78	50
Fairhaven Lake	SD32N	102	54	Little Singleton	SD33U	104	58
Lytham Crematorium	SD32P	91	59	Westby	SD33V	46	45
Crossens Out Marsh	SD32Q	86	43	Great Plumpton	SD33W	54	40
Crossens Pool	SD32R	44	19	Weeton	SD33X	55	53
Banks Sands	SD32S	24	/	Weeton Camp	SD33Y	76	51
Lytham	SD32T	66	47	Singleton	SD33Z	88	56
Green Drive	SD32U	61	57	Bispham	SD34A	48	30
Banks Village	SD32V	61	36	Cleveleys	SD34B	50	16
Old Hollow	SD32W	60	53	Rossall School	SD34C	74	37
Banks Marsh	SD32X	30	16	Rossall Point	SD34D	87	36
Lytham Marsh	SD32Y	99	50	Fleetwood Promenade	SD34E	58	8
Warton Hall	SD32Z	54	51	Bispham Marsh	SD34F	70	51
Lytham St. Anne's Nature Reserve	SD33A	92	25	Thornton Cleveleys	SD34G	47	31
Blackpool South Shore	SD33B	72	30	Fleetwood Farm	SD34H	94	52
Blackpool Central	SD33C	43	28	Fleetwood Marsh Nature Park	SD34I	87	54
Blackpool North Shore	SD33D	42	21	Fleetwood Marine Lakes	SD34J	80	25
Warbreck Hill	SD33E	67	41	Skippool Creek	SD34K	82	49
Blackpool Airport	SD33F	58	43	Stanah	SD34L	83	48
Marton Moss Side	SD33G	41	32	Burrow's Marsh	SD34M	102	52
Stanley Park, Blackpool	SD33H	106	59	Barnaby's Sands	SD34N	95	57
Layton	SD33I	65	56	Knott End	SD34P	111	41
Carleton Crematorium	SD33J	67	49	Shard Bridge	SD34Q	87	44
Lytham Moss	SD33K	86	60	Hambleton	SD34R	79	49
Peel Corner	SD33L	61	41	Stalmine	SD34S	70	53
Marton Mere	SD33M	120	73	Preesall	SD34T	94	65

Tetrad name	Tetrad	Winter 2007- 2011	Breeding 2008- 2011	Tetrad name	Tetrad	Winter 2007- 2011	Breeding 2008- 2011
Pilling Lane	SD34U	114	47	Holiday Moss	SD40V	67	64
Waterside Farm	SD34V	80	54	Holland Moss	SD40W	36	49
Hambleton Moss Side	SD34W	53	39	Digmoor	SD40X	55	53
Stalmine Moss Side	SD34X	61	44	Skelmersdale	SD40Y	36	41
Head Dyke Lane	SD34Y	62	52	Dalton	SD40Z	51	56
Fluke Hall	SD34Z	107	61	Heatons Bridge	SD41A	43	47
Wyre Light	SD35F	3	/	Drummersdale	SD41B	42	51
Preesall Sands	SD35Q	28	9	Bescar Lane	SD41C	57	53
Pilling Sands	SD35V	93	32	Mere Brow Leisure Lakes	SD41D	70	66
Heysham South Jetty	SD35Z	43	15	Boundary Farm	SD41E	53	47
North Round Head	SD36V	9	8	Langleys Brook Farm	SD41F	51	48
Tower Hill, Kirkby	SD40A	45	41	New Lane	SD41G	71	63
Cunscough Hall	SD40B	36	48	Martin Mere	SD41H	129	78
Town Green	SD40C	40	52	Holmeswood	SD41I	63	63
Aughton	SD40D	54	46	Mere Brow	SD41J	52	46
Ormskirk	SD40E	43	38	Burscough	SD41K	69	62
Graysons Farm, Simonswood	SD40F	48	56	Burscough Bridge	SD41L	82	55
Bickerstaffe Moss	SD40G	44	54	Mere Sands Wood	SD41M	101	72
Byer's Plantation	SD40H	40	46	Rufford Park	SD41N	81	57
Scarth Hill	SD40I	59	52	Sollom	SD41P	49	56
Burscough Priory	SD40J	38	56	Hoscar	SD41Q	50	54
Simonswood Moss north	SD40K	47	65	Hoscar Moss	SD41R	74	68
Barrow Nook	SD40L	50	49	Low Meadows	SD41S	90	67
Bickerstaffe	SD40M	40	43	Rufford Old Hall	SD41T	66	59
Blaguegate	SD40N	51	45	Bretherton Eyes	SD41U	70	54
Mains Wood, Lathom	SD40P	45	53	Parbold	SD41V	60	55
Dairy Farm Rd, Rainford	SD40Q	65	56	Bispham Green	SD41W	44	49
Siding Lane	SD40R	59	50	Mawdesley	SD41X	62	62
White Moss, Skelmersdale	SD40S	50	47	Croston Moss	SD41Y	54	56
Stanley	SD40T	56	45	Croston	SD41Z	59	64
Tawd Vale	SD40U	41	57	Far Banks	SD42A	61	42

Tetrad name	Tetrad	Winter 2007- 2011	Breeding 2008- 2011	Tetrad name	Tetrad	Winter 2007- 2011	Breeding 2008- 2011
Hundred End	SD42B	47	32	Medlar Woods	SD43H	55	43
Banks Marsh/Hesketh O. Marsh South	SD42C	108	58	Roseacre	SD43I	48	47
Warton Bank	SD42D	98	57	Elswick	SD43J	45	50
Warton	SD42E	72	54	Newton-with-Scales	SD43K	43	38
Tarleton Moss	SD42F	39	38	Treales	SD43L	50	52
Hesketh Moss	SD42G	51	47	Wharles	SD43M	52	45
Hesketh New Marsh	SD42H	64	46	HMS Inskip	SD43N	44	49
Freckleton Naze	SD42I	100	61	Inskip Moss Side	SD43P	46	39
Freckleton	SD42J	75	52	Clifton	SD43Q	47	41
Tarleton	SD42K	61	53	Salwick	SD43R	48	50
Hesketh Bank	SD42L	65	57	Blackleach	SD43S	58	51
Longton Marsh South	SD42M	73	60	Carr House Green Common	SD43T	72	58
N Longton & Freckleton Marshes	SD42N	62	44	Sowerby	SD43U	69	54
Newton Marsh	SD42P	90	55	Lea Town	SD43V	44	47
Bretherton	SD42Q	49	55	Bartle Hall	SD43W	45	51
Much Hoole	SD42R	41	37	Swillbrook	SD43X	59	47
Longton	SD42S	60	48	Cuddy Hill	SD43Y	73	56
Longton North	SD42T	58	48	Myerscough Lodge	SD43Z	58	50
Lea Gate	SD42U	57	57	Larbreck	SD44A	63	50
Bretherton Moss	SD42V	58	63	Out Rawcliffe	SD44B	65	58
Much Hoole Moss	SD42W	43	52	Stalmine Moss	SD44C	69	48
Longton Hall	SD42X	73	54	Pilling Moss	SD44D	79	52
Hutton	SD42Y	40	47	Pilling Marsh	SD44E	109	61
Lea Marsh	SD42Z	77	50	Great Eccleston	SD44F	60	44
Ribby Hall	SD43A	44	45	Skitham	SD44G	75	55
Wesham	SD43B	43	44	Eagland Hill	SD44H	75	53
Greenhalgh	SD43C	49	54	Bone Hill	SD44I	79	55
Thistleton	SD43D	51	44	Horse Park Lane	SD44J	70	59
Meagles Lane	SD43E	54	46	Wyre Hall	SD44K	62	53
Dowbridge	SD43F	40	45	Rawcliffe Moss	SD44L	82	60
Kirkham	SD43G	56	45	Cophorne	SD44M	80	50

Tetrad name	Tetrad	Winter 2007- 2011	Breeding 2008- 2011	Tetrad name	Tetrad	Winter 2007- 2011	Breeding 2008- 2011
Winmarleigh Moss	SD44N	65	54	Forton	SD45V	45	40
Cockerham Moss	SD44P	69	51	Bay Horse/Ellel Grange	SD45W	48	43
St. Michael's-on-Wyre	SD44Q	59	46	Galgate	SD45X	64	47
Tarnacre House Farm	SD44R	63	57	Lancaster University	SD45Y	52	52
Nateby	SD44S	60	54	Blea Tarn Reservoir	SD45Z	73	48
Winmarleigh	SD44T	47	44	Heysham	SD46A	69	49
Lathwaite	SD44U	57	41	Morecambe South	SD46B	43	22
Myerscough College	SD44V	54	48	Heysham Moss	SD46F	49	46
Churchtown	SD44W	65	48	Sandylands	SD46G	56	34
Garstang Marina	SD44X	50	46	Morecambe Central	SD46H	71	32
Cabus	SD44Y	47	54	Aldcliffe Marsh	SD46K	106	54
Cabus Nook	SD44Z	49	48	White Lund	SD46L	50	46
Pilling Lane Ends intertidal	SD45A	57	/	Morecambe North	SD46M	80	40
Middleton Saltmarsh South	SD45C	14	/	Lancaster	SD46Q	78	50
Potts Corner	SD45D	51	34	Skerton	SD46R	77	53
Heysham Nature Reserve	SD45E	76	63	Slyne	SD46S	67	51
Cockerham Marsh	SD45F	90	45	Hest Bank	SD46T	85	44
Cockerham Sands	SD45G	107	48	Morecambe Bay Reserve	SD46U	66	32
Sunderland Point/Cockersand	SD45H	113	53	Williamson Park, Lancaster	SD46V	60	43
Bazil/Fishnet Point	SD45I	77	49	Ridge	SD46W	73	55
Middleton	SD45J	38	41	Beaumont Grange	SD46X	50	49
Great Crimbles	SD45K	72	46	Inglebrick	SD46Y	52	41
Bank End, Cockerham	SD45L	89	52	Bolton-le-Sands	SD46Z	55	54
Conder Estuary/Thurnham	SD45M	114	57	Jenny Brown's Point	SD47L	103	45
Glasson	SD45N	105	48	Cove	SD47M	87	48
Colloway Marsh	SD45P	54	34	Carnforth Slag Tips	SD47Q	63	28
Crookhey	SD45Q	54	46	Eric Morecambe complex	SD47R	118	88
Cockerham Village	SD45R	71	53	Silverdale	SD47S	114	79
Thurnham Hall	SD45S	82	55	Silverdale Moss/Gait B'ows/H'swater	SD47T	87	75
Ashton Park	SD45T	52	40	Carnforth	SD47V	90	59
Stodday	SD45U	52	43	Warton Crag	SD47W	75	57

Tetrad name	Tetrad	Winter 2007- 2011	Breeding 2008- 2011	Tetrad name	Tetrad	Winter 2007- 2011	Breeding 2008- 2011
Leighton Moss	SD47X	108	83	Chorley South	SD51Y	37	38
Thrang End	SD47Y	58	53	Chorley North	SD51Z	53	45
Kings Moss	SD50A	60	56	Ulnes Walton	SD52A	53	62
Crawford	SD50B	43	48	Leyland Moss	SD52B	45	43
Upholland	SD50C	38	44	New Longton	SD52C	36	48
Beacon Country Park	SD50D	58	56	Howick Cross	SD52D	33	42
Dalton Lees	SD50E	46	57	Penwortham/Preston Dock	SD52E	77	47
Billinge	SD50F	50	49	Leyland South-West	SD52F	35	36
Orrell	SD50H	36	41	Leyland North-West	SD52G	43	33
Dean Wood	SD50I	48	53	Farington	SD52H	36	44
Appley Bridge	SD50J	44	50	Middleforth Green	SD52I	42	53
High Moor	SD51A	62	60	Preston South-West	SD52J	72	42
Harrock Hill	SD51B	58	54	Leyland South-East	SD52K	46	40
Heskin	SD51C	59	46	Leyland North-West	SD52L	40	43
Tincklers Bridge	SD51D	55	55	Lostock Hall	SD52M	39	42
Eccleston West	SD51E	67	61	Walton-le-Dale	SD52N	59	52
Wrightington	SD51F	50	50	Preston south-east/Frenchwood	SD52P	67	47
Mossy Lea	SD51G	33	42	Whittle-le-Woods	SD52Q	51	48
Heskin Green	SD51H	38	47	Cuerden Valley South	SD52R	54	43
Eccleston East	SD51I	34	44	Cuerden Valley North	SD52S	58	49
Shaw Green	SD51J	32	41	Bamber Bridge	SD52T	45	36
Coppull Moor	SD51L	51	54	Fishwick Bottoms	SD52U	40	42
Charnock Richard	SD51M	32	37	Johnsons Hillock	SD52V	36	40
Charnock Green	SD51N	39	37	Hough Hill	SD52W	36	45
Euxton	SD51P	41	35	Brindle	SD52X	41	51
Coppull Hill	SD51R	56	44	Higher Walton	SD52Y	31	33
Birkacre	SD51S	63	63	Roach Bridge	SD52Z	39	41
Common Bank	SD51T	53	48	Ingol/Ashton Park	SD53A	68	55
Astley Village	SD51U	47	37	Greyfriars	SD53B	62	57
Ellerbeck	SD51W	51	44	Woodplumpton	SD53C	70	57
Duxbury	SD51X	36	44	Barton	SD53D	57	40

Tetrad name	Tetrad	Winter 2007- 2011	Breeding 2008- 2011	Tetrad name	Tetrad	Winter 2007- 2011	Breeding 2008- 2011
Myerscough Quarry	SD53E	87	68	Whitechapel	SD54K	32	40
Moor Park, Ashton-on-Ribble	SD53F	44	30	Brock Mill	SD54L	35	51
Lightfoot Lane	SD53G	51	45	Tootle Hall	SD54M	34	60
Broughton	SD53H	40	38	Bleasdale Tower	SD54N	44	52
Barton House	SD53I	34	39	Stake House Fell	SD54P	4	28
Jack Nook Farm	SD53J	35	35	Barn Fold Reservoir	SD54Q	30	36
Fulwood	SD53K	46	32	Beacon Fell Country Park	SD54R	33	41
Sherwood	SD53L	33	38	Bleasdale	SD54S	37	60
Haighton Top	SD53M	36	35	Hazelhurst	SD54T	28	38
Goosnargh	SD53N	32	42	Bleasdale Moors	SD54U	3	12
Inglewhite	SD53P	40	53	Loud Bridge	SD54V	20	28
Lower Brockholes	SD53Q	50	41	Watery Gate Farm	SD54W	16	30
Cow Hill	SD53R	59	47	Parlick/Blindhurst Fell	SD54X	35	45
Haighton Green	SD53S	36	45	Fairsnape Fell	SD54Y	17	16
Cumeroagh Village	SD53T	43	49	Fiendsdale	SD54Z	9	15
Horns Reservoir	SD53U	39	47	Cleveley Bridge, Scorton	SD55A	58	66
Brockholes Wetland	SD53V	103	74	Cinder Hill	SD55B	63	65
Red Scar	SD53W	44	45	Middle Crag	SD55C	40	51
Grimsargh	SD53X	65	48	Blackwood Edge	SD55D	45	42
Higher Green Nook	SD53Y	31	32	Mount Vernon	SD55E	49	50
Ashley Hall	SD53Z	30	32	Cross Hill	SD55F	43	48
Brock	SD54A	47	55	Swainshead Hall	SD55G	38	47
Cloughton Lake	SD54B	57	49	Knowsly	SD55H	33	45
Dobson's Farm	SD54C	23	40	Damas Gill	SD55I	30	42
Barnacre Lodge	SD54D	19	38	Brow Top	SD55J	43	48
Wyredale Park	SD54E	29	50	Eccles House	SD55K	30	42
Walmsley Bridge	SD54F	37	44	Catshaw Fell	SD55L	38	53
Cloughton	SD54G	19	53	Meeting House	SD55M	52	61
Calder Vale	SD54H	41	57	Abbeystead Fell	SD55N	32	40
Oakenclough/Barnacre Reservoir	SD54I	52	59	Clougha	SD55P	7	16
Grizedale Lea Reservoir	SD54J	33	59	Fellside Fell	SD55Q	7	17

Tetrad name	Tetrad	Winter 2007- 2011	Breeding 2008- 2011	Tetrad name	Tetrad	Winter 2007- 2011	Breeding 2008- 2011
Hawthornthwaite Fell	SD55R	41	55	Whit Moor	SD56X	27	34
Abbeystead	SD55S	53	64	Cold Park	SD56Y	44	53
Lee Fell	SD55T	26	56	Hornby	SD56Z	67	55
Brownley Hill	SD55U	10	8	Netherbeck Farm	SD57A	74	45
Langden Head	SD55V	1	14	Pine Lake	SD57B	86	58
Marshaw	SD55W	41	62	Yealand Conyers	SD57C	64	57
Tarnbrook	SD55X	42	52	Hale Moss	SD57D	58	55
Dunkenshaw Fell	SD55Y	10	35	Kellet Park Wood	SD57F	61	57
Ward's Stone	SD55Z	7	13	Dockacres	SD57G	68	54
Stockabank	SD56A	41	36	Lord's Lot Wood	SD57K	43	52
Knots Wood	SD56B	34	39	Capernwray Park	SD57L	51	60
Halton	SD56C	63	55	Thrushgill Plantation	SD57Q	49	54
Moor End	SD56D	46	34	Snab Green Farm	SD57R	48	47
Nether Kellet	SD56E	50	56	Docker Hall	SD57S	48	56
Birk Bank	SD56F	38	43	Arkholme	SD57V	76	74
Gresgarth	SD56G	44	49	Higher Broomfield	SD57W	81	78
Caton	SD56H	77	67	Newton	SD57X	56	63
Green Hill	SD56I	47	60	Whittington Hall	SD57Y	49	71
Swarthdale	SD56J	61	58	Anderton	SD61B	39	50
Littledale	SD56K	43	34	Anglezarke Reservoir South	SD61C	43	46
Crossgill	SD56L	41	50	Anglezarke Reservoir North	SD61D	61	69
Brookhouse	SD56M	57	52	Healey Nab	SD61E	64	72
Aughton	SD56N	66	63	Rivington South	SD61F	52	45
Higher Snab	SD56P	44	47	Lever Park	SD61G	70	63
Foxdale	SD56Q	29	39	Rivington Reservoir	SD61H	78	72
Caton Moor	SD56R	36	50	Anglezarke Moor	SD61I	59	57
Moorcock Hall	SD56S	30	43	White Coppice	SD61J	29	67
Cloughton	SD56T	73	52	Rivington Pike	SD61L	58	51
Gressingham	SD56U	56	62	Rivington Moor	SD61M	23	43
Haylot Fell	SD56V	11	17	Spitler's Edge	SD61N	19	34
Winder	SD56W	46	62	Great Hill	SD61P	17	36

Tetrad name	Tetrad	Winter 2007- 2011	Breeding 2008- 2011	Tetrad name	Tetrad	Winter 2007- 2011	Breeding 2008- 2011
Winter Hill	SD61S	75	84	Turner Green	SD63A	45	47
Belmont Reservoir	SD61T	93	92	Elston	SD63B	58	58
Conyries	SD61U	40	61	Alston	SD63C	39	51
Longworth Clough/Delph Reservoir	SD61X	90	92	Alston Reservoirs	SD63D	92	67
Longworth Moor	SD61Y	52	67	Thornley	SD63E	48	50
Turton Moor	SD61Z	39	58	Samlesbury Hall	SD63F	30	39
Wheelton	SD62A	40	44	Balderstone	SD63G	60	59
Withnell Fold	SD62B	50	45	Hothersall	SD63H	48	50
Windmill Hill	SD62C	39	41	Frances Green	SD63I	39	40
Hoghton	SD62D	30	47	Knowle Green	SD63J	29	43
Samlesbury Bottoms	SD62E	41	43	Mellor	SD63K	40	35
Brinscall	SD62F	56	70	Osbaldeston	SD63L	37	45
Withnell	SD62G	41	44	Ribchester	SD63M	65	59
Riley Green	SD62H	55	51	Old Buckley	SD63N	34	44
Hoghton Bottoms	SD62I	29	56	Dutton Manor	SD63P	33	47
Nab's Head	SD62J	35	63	Ramsgreave	SD63Q	42	44
Withnell Moor	SD62K	47	62	Salebury	SD63R	42	34
Abbey Village	SD62L	42	64	Park Gate	SD63S	46	50
Higher Broadhalgh	SD62M	31	40	Gallows Lane	SD63T	44	57
Pleasington	SD62N	49	50	Greengore	SD63U	40	38
Middle Shorrock Hey Farm	SD62P	40	48	Brownhill	SD63V	39	49
Darwen Moor	SD62Q	49	70	Wilpshire	SD63W	49	37
Sunnyhurst Wood/Earnsdale Reservoir	SD62R	45	56	Dinckley Grange	SD63X	30	41
Bunkers Hill	SD62S	34	33	Lambing Clough	SD63Y	65	57
Griffin Park	SD62T	37	38	Stonyhurst	SD63Z	56	48
Corporation Park, Blackburn	SD62U	49	42	Hesketh Lane	SD64A	32	46
South Darwen	SD62V	43	50	Ferry Butts	SD64B	38	51
Hollins Grove	SD62W	49	48	Wolfen Hall	SD64C	41	57
Lower Darwen	SD62X	49	38	Saddle Fell	SD64D	21	37
Fishmoor Reservoir	SD62Y	72	33	Bleadale Moss	SD64E	10	23
Blackburn Cathedral	SD62Z	36	30	Thornley Hall	SD64F	35	53

Tetrad name	Tetrad	Winter 2007- 2011	Breeding 2008- 2011	Tetrad name	Tetrad	Winter 2007- 2011	Breeding 2008- 2011
Chipping	SD64G	47	59	Far Pasture	SD65M	36	56
Stanley	SD64H	42	50	Burn Fell	SD65N	9	25
Fair Oak Fell	SD64I	23	31	Guide Hill	SD65P	9	16
Totridge	SD64J	9	28	Oxenhurst Clough	SD65Q	53	62
Rams Clough	SD64K	43	44	Ox Rig	SD65R	21	43
Doeford Bridge	SD64L	44	53	Calf Clough Head	SD65S	34	55
Bowland Wild Boar Park	SD64M	52	57	Strong Clough Head	SD65T	5	32
Whitewell	SD64N	52	65	Long Clough	SD65U	3	19
Langden Bridge	SD64P	57	55	Newton	SD65V	45	54
Longridge Fell	SD64Q	45	51	Parrock Head	SD65W	40	46
Armydding	SD64R	45	55	Dunsop Fell	SD65X	27	49
Cow Ark	SD64S	45	56	Croasdale Fell	SD65Y	11	39
Crimpton	SD64T	40	56	Bloe Greet	SD65Z	18	39
Hodder Bank Fell	SD64U	56	62	Mallowdale Pike	SD66A	29	58
Kemple End/Higher Hodder Bridge	SD64V	50	62	High Salter	SD66B	48	63
Bashall Eaves	SD64W	49	64	Outhwaite	SD66C	49	68
Browsholme Hall/Moor Piece	SD64X	57	70	Wray	SD66D	57	67
Marl Hill	SD64Y	54	63	Lower Tatham	SD66E	53	56
Gibbs	SD64Z	71	65	Goodber Fell	SD66F	30	41
Langden Castle	SD65A	17	56	Goodber Common	SD66G	13	36
Marshaw Fell	SD65B	40	58	White Moss	SD66H	45	44
White Moor	SD65C	34	42	Birks Farm	SD66I	58	65
Tarnbrook Fell	SD65D	11	22	Perry Moor	SD66J	63	64
Grey Crag	SD65E	5	9	Greenbank Fell	SD66K	50	58
Sykes Nab	SD65F	48	75	Lower Thrushgill	SD66L	58	73
Whins Brow	SD65G	22	41	Lowgill	SD66M	42	65
Brennand Fell	SD65H	14	24	Oakhead	SD66N	43	46
Long Crag	SD65I	7	15	Whitray Fell	SD66Q	24	46
Mallowdale Fell	SD65J	5	15	Lythe	SD66R	44	48
Dunsop Bridge	SD65K	58	80	Balshaw Bridge	SD66S	40	58
Whin Fell	SD65L	40	67	Cross o' Greet	SD66V	15	25

Tetrad name	Tetrad	Winter 2007- 2011	Breeding 2008- 2011	Tetrad name	Tetrad	Winter 2007- 2011	Breeding 2008- 2011
Burn Moor south	SD66W	3	13	Pickup Bank	SD72G	24	37
Crossdale Grains	SD66X	18	21	Whetstone Edge	SD72H	21	34
Wennington	SD67A	37	55	Oswaltdwistle	SD72I	71	67
Tunstall	SD67B	63	72	West End	SD72J	58	54
Nether Burrow	SD67C	46	64	Broadhead Plantation	SD72K	27	36
Whittington	SD67D	57	54	Calf Hey Reservoir	SD72L	64	66
Ravens Close	SD67F	42	47	Oswaltdwistle Moor	SD72M	71	65
Cantsfield	SD67G	41	46	Jackhouse Reservoir	SD72N	72	63
Collingholme	SD67H	36	45	Church	SD72P	40	40
Cowan Bridge	SD67I	39	41	Tor Hill	SD72Q	60	66
Ireby	SD67M	49	32	Holden Wood Reservoir	SD72R	64	73
Leck	SD67N	41	51	Haslingden Moor	SD72S	26	39
High Park	SD67P	22	38	Baxenden	SD72T	34	39
Ireby Fell	SD67T	11	19	Accrington	SD72U	33	33
Leck Fell West	SD67U	10	19	Helmshore	SD72V	61	67
Ease Gill	SD68V	3	10	Haslingden	SD72W	35	46
Turton Heights	SD71D	55	49	Acre	SD72X	33	38
Cranberry Moss	SD71E	48	53	Mitchell House Reservoir	SD72Y	26	37
Jumbles Reservoir	SD71H	67	61	Great Hameldon Hill	SD72Z	33	34
Wayoh Reservoir	SD71I	73	68	New Inns	SD73A	49	57
Aushaw Moss	SD71J	52	68	Dean Clough & Parsonage Reservoirs	SD73B	80	61
Edgeworth	SD71N	45	54	Langho	SD73C	42	46
Scholes Height	SD71P	19	50	Brockhall	SD73D	68	63
Bull Hill	SD71U	29	47	Great Mitton	SD73E	67	64
Stubbins	SD71Z	56	59	Rishton	SD73F	53	49
Blacksnape	SD72A	21	29	Great Harwood	SD73G	55	52
Hoddlesden	SD72B	43	47	Billington	SD73H	71	59
Belthorn	SD72C	38	38	Whalley	SD73I	69	57
Shadsworth	SD72D	24	32	Barrow	SD73J	74	59
Rishton Reservoir/Whitebirk	SD72E	77	56	Clayton-le-Moors/Whinney Hill	SD73K	52	43
Hoddlesden Moss	SD72F	21	37	Read Park	SD73M	49	51

Tetrad name	Tetrad	Winter 2007- 2011	Breeding 2008- 2011	Tetrad name	Tetrad	Winter 2007- 2011	Breeding 2008- 2011
Wiswell	SD73N	46	45	Holden	SD74U	47	50
Pendleton/Barrow Lodges	SD73P	63	49	Pendle Moor	SD74V	8	11
Huncoat	SD73Q	44	41	Hookcliffe	SD74W	39	52
Altham	SD73R	87	67	Downham	SD74X	45	53
Read	SD73S	41	42	Sawley Grange	SD74Y	46	46
Sabden	SD73T	52	56	Bolton-by-Bowland	SD74Z	51	61
Pendleton Moor	SD73U	32	40	Easington	SD75A	59	60
Hapton	SD73V	41	52	Slaidburn	SD75B	56	65
Padiham	SD73W	63	52	Croasdale House	SD75C	48	62
Huntroyde	SD73X	48	43	Merrybent Hill	SD75D	36	51
Padiham Heights	SD73Y	45	50	Cross of Greet Bridge	SD75E	41	57
Churn Clough Reservoir	SD73Z	27	42	Harrop Hall	SD75F	34	41
Withgill	SD74A	49	64	High Field	SD75G	45	36
Bashall Hall	SD74B	49	53	Stocks Reservoir South	SD75H	70	60
Burbles Hill	SD74C	41	62	Stocks Reservoir North	SD75I	97	83
Waddington Fell	SD74D	43	47	Green Pike	SD75J	39	54
New Laithe Farm, Newton	SD74E	55	52	Lane Ends	SD75K	36	35
Clitheroe, Low Moor	SD74F	76	68	Champion Moor	SD75L	52	48
Waddington	SD74G	61	48	Cocklet Hill	SD75M	38	52
Dove Syke	SD74H	45	47	Gisburn F'rest/H'bert Hall/B'tom's Beck	SD75N	44	59
Bradford Fell	SD74I	38	51	Halstead's Farm	SD75P	41	58
Easington Fell	SD74J	33	41	Wycongill	SD75Q	37	46
Clitheroe Castle	SD74K	57	57	Knotts	SD75R	48	47
Clitheroe north	SD74L	59	62	Tosside Fold	SD75S	42	51
West Bradford	SD74M	65	55	Tosside	SD75T	45	45
Cob House	SD74N	48	54	Forest Becks	SD75V	42	52
Harrop Fold	SD74P	39	50	Higher Flass	SD75W	43	47
Mearley Hall	SD74Q	47	38	Mere Syke	SD75X	35	41
Worston	SD74R	58	58	Great Hill	SD76K	18	26
Chatburn	SD74S	61	54	Harden Moor	SD81D	48	50
Sawley	SD74T	62	47	Plunge Farm	SD81E	39	53

Tetrad name	Tetrad	Winter 2007- 2011	Breeding 2008- 2011	Tetrad name	Tetrad	Winter 2007- 2011	Breeding 2008- 2011
Ashworth Moor	SD81H	64	46	Watson Laithe	SD83A	34	43
Scout Moor	SD81J	15	22	Lowerhouse Lodges	SD83B	62	49
Cowpe Moss	SD81P	18	26	Pendle Hall	SD83C	77	70
	SD81T	47	47	Higham	SD83D	25	39
Cowm Quarry	SD81U	34	42	Lower Sabden Fold	SD83E	39	45
Broadley	SD81Y	27	46	Rose Hill	SD83F	43	41
Facit	SD81Z	66	57	Whittlefield	SD83G	39	34
Balladen	SD82A	44	54	Wood End	SD83H	71	59
Rawtenstall	SD82B	55	46	Fence	SD83I	44	47
Crawshawbooth	SD82C	49	53	Newchurch-in-Pendle	SD83J	32	37
Loveclough	SD82D	60	52	Burnley Wood	SD83K	72	57
Hameldon Hill	SD82E	38	31	Burnley	SD83L	61	47
Cowpe	SD82F	63	53	Burnley Lane	SD83M	38	40
Newchurch	SD82G	62	45	Lomeshaye	SD83N	57	41
Swinshaw Moor	SD82H	39	46	Barrowford	SD83P	53	44
Meadow Head	SD82I	55	33	Mereclough	SD83Q	49	48
Clowbridge Reservoir	SD82J	67	59	Worsthorne	SD83R	69	58
Cowpe Lowe	SD82K	55	52	Cockden	SD83S	51	54
The Hile	SD82L	43	34	Nelson South	SD83T	57	47
Smallshaw	SD82M	22	30	Nelson North	SD83U	56	41
Clough Bottom Reservoir	SD82N	44	49	Hurstwood/Cant Clough Reservoir	SD83V	50	55
Crown Point	SD82P	31	37	Swinden/Lee Green Reservoir	SD83W	70	66
Lee Quarry	SD82Q	45	47	Briercliffe	SD83X	35	54
Bacup	SD82R	42	45	Catlow	SD83Y	32	47
Weir	SD82S	28	36	Lenche	SD83Z	32	44
Thieveley Pike	SD82T	38	49	Pendle Hill, Big End	SD84A	43	54
Holmes Chapel	SD82U	47	42	Twiston	SD84B	37	48
Shawforth	SD82V	37	47	Rimington	SD84C	53	48
Reaps Moss	SD82W	25	27	Mylah	SD84D	36	41
Cliviger	SD82Y	35	50	Stirk House	SD84E	62	60
Sheddon Clough	SD82Z	40	55	Barley	SD84F	62	74

Tetrad name	Tetrad	Winter 2007- 2011	Breeding 2008- 2011	Tetrad name	Tetrad	Winter 2007- 2011	Breeding 2008- 2011
Rimington Moor	SD84G	37	51	Lad Law	SD93H	5	10
Whytha	SD84H	32	43	Potbrinks Moor	SD93I	24	34
Todber	SD84I	30	40	Wycoller	SD93J	53	65
Gisburn	SD84J	50	57	Brink Ends Moor	SD93N	5	16
Roughlee	SD84K	42	52	Upper Wycoller	SD93P	21	45
Burn Moor	SD84L	40	46	Blue Bell	SD94A	50	57
Weets Hill	SD84M	37	38	Great Edge	SD94B	18	42
Brogden	SD84N	36	45	Kelbrook	SD94C	39	52
Willcross	SD84P	45	52	Earby	SD94D	35	48
Blacko/Barrowford Reservoir	SD84Q	58	46	Laneshaw Bridge	SD94F	40	60
Whitemoor/Slipper Hill Reservoirs	SD84R	50	48	Black Lane Ends	SD94G	26	46
Prospect Farm	SD84S	34	45	Laneshaw Reservoir	SD94K	39	55
Barnoldswick West	SD84T	44	51	Brunswick Dock	SJ38N	42	33
Stock	SD84U	41	46	Liverpool Anglican Cathedral	SJ38P	39	30
Foulridge Reservoirs	SD84V	93	66	Otterspool	SJ38S	41	30
Foulridge	SD84W	42	47	Sefton Park/Garden Festival site	SJ38T	77	51
Salterforth	SD84X	38	48	Princes Park	SJ38U	53	46
Copy Hill	SD84Y	46	47	Garston Rocks	SJ38W	27	/
Fooden Moor	SD85A	45	47	Grassendale	SJ38X	59	36
Hyles Moor	SD85B	35	44	Mossley Hill	SJ38Y	46	41
Paythorne Bridge	SD85F	54	64	Wavertree	SJ38Z	51	45
Paythorne Moor	SD85G	33	48	Seaforth NR/Crosby Marine Lake	SJ39D	121	52
Horton	SD85K	31	39	Crosby Coastal Park North	SJ39E	71	42
Nappa	SD85L	45	47	Liverpool Central Docks	SJ39F	30	29
Lower Paradise	SD85Q	27	37	Stanley Dock	SJ39G	30	29
Stiperden Moor	SD92E	8	22	Gladstone Dock	SJ39H	39	35
Worsthorne Moor	SD93A	7	22	Brookvale LNR	SJ39I	53	45
Hameldon	SD93B	5	19	Rimrose Valley North	SJ39J	53	49
Thursden	SD93C	37	61	Liverpool City Centre	SJ39K	38	31
Coldwell Reservoirs	SD93D	37	58	Kirkdale	SJ39L	35	33
Trawden/Coal Clough	SD93E	42	42	Bootle	SJ39M	38	30

Tetrad name	Tetrad	Winter 2007- 2011	Breeding 2008- 2011	Tetrad name	Tetrad	Winter 2007- 2011	Breeding 2008- 2011
Orrell	SJ39N	34	37	West Derby	SJ49B	35	36
Bootle Golf Course	SJ39P	46	42	Croxteth Park	SJ49C	53	51
Newsham Park	SJ39Q	48	42	Gillmoss	SJ49D	39	41
Anfield	SJ39R	28	26	Kirkby	SJ49E	33	27
Walton Hall Park	SJ39S	43	40	Roby	SJ49F	34	41
Fazakerley Woods & Fields	SJ39T	47	47	Stockbridge Village	SJ49G	38	36
Aintree	SJ39U	44	35	Knowsley Village	SJ49H	48	52
Old Swan	SJ39V	36	28	Acornfield Plantation, Kirkby	SJ49I	43	51
Tuebrook	SJ39W	44	30	Northwood, Kirkby	SJ49J	48	41
Norris Green	SJ39X	33	23	Huyton	SJ49K	33	33
Fazakerley Reedbed	SJ39Y	63	53	Knowsley Hall	SJ49L	71	65
Waddicar	SJ39Z	49	44	Knowsley Park North	SJ49M	58	67
Speke Hall	SJ48B	80	52	Old Coach Road	SJ49N	63	63
Allerton	SJ48C	43	44	Simonswood Moss South	SJ49P	62	74
Calderstones Park	SJ48D	52	45	Stadt Moers Park, Huyton	SJ49Q	50	54
Childwall Woods and Fields LNR	SJ48E	44	44	Prescot Reservoirs	SJ49R	115	76
Oglet Banks	SJ48F	57	38	Knowsley Safari Park	SJ49S	96	77
Stocktons Wood, Speke	SJ48G	55	46	Catchdale Moss	SJ49T	57	57
Hunts Cross	SJ48H	32	42	Reed's Moss/Mossborough Hall	SJ49U	61	73
Woolton	SJ48I	46	43	Whiston	SJ49V	40	54
Belle Vale	SJ48J	48	52	Rainhill	SJ49W	37	47
Oglet Shore	SJ48K	57	37	Eccleston Mere	SJ49X	76	66
Speke East	SJ48L	72	55	Windle	SJ49Y	51	42
Halewood	SJ48M	47	54	Berrington's Lane, Rainford	SJ49Z	58	59
Netherley	SJ48N	62	55	Pex Hill	SJ58E	37	36
Childwall Golf Course	SJ48P	52	49	Bold Heath	SJ58J	40	33
Ditton Brook	SJ48S	35	49	Lingley Green	SJ58P	47	43
Tarbock Green	SJ48T	41	51	Sutton Manor	SJ59A	48	54
Cronton Colliery	SJ48U	54	61	Thatto Heath	SJ59B	74	57
Cronton	SJ48Z	37	38	Ravenhead	SJ59C	53	28
Broadgreen	SJ49A	50	45	Windle Hall, St. Helens	SJ59D	44	43

Tetrad name	Tetrad	Winter 2007- 2011	Breeding 2008- 2011
Rainford Hall	SJ59E	48	54
Clock Face Country Park	SJ59F	49	57
Sutton	SJ59G	38	43
Parr	SJ59H	32	31
Stanley Bank	SJ59I	71	60
Carr Mill Dam	SJ59J	90	71
Burtonwood Airfield West	SJ59K	43	49
Bold Moss	SJ59L	47	53
Sankey Valley	SJ59M	60	55

Tetrad name	Tetrad	Winter 2007- 2011	Breeding 2008- 2011
Blackbrook, St. Helens	SJ59N	53	57
Garswood	SJ59P	40	42
Earlestown	SJ59S	46	57
Haydock	SJ59T	63	50
Newton-le-Willows	SJ59X	60	57
Haydock Park	SJ59Y	50	58
Highfield Moss	SJ69C	39	52

Appendix 7. Breeding species recorded during 2008-2011

Arctic Tern	Common Sandpiper	Grey Heron	Long-tailed Tit	Redshank	Swift
Avocet	Common Tern	Grey Partridge	Magpie	Redstart	Tawny Owl
Bar-headed Goose	Coot	Grey Wagtail	Mallard	Reed Bunting	Teal
Barn Owl	Corn Bunting	Greylag Goose	Mandarin Duck	Reed Warbler	Tree Pipit
Barnacle Goose	Cuckoo	Harris's Hawk	Marsh Harrier	Ring Ouzel	Tree Sparrow
Bearded Tit	Curlew	Hawfinch	Marsh Tit	Ringed Plover	Treecreeper
Bittern	Dipper	Hen Harrier	Meadow Pipit	Ring-necked Parakeet	Tufted Duck
Black Grouse	Dunlin	Herring Gull	Mediterranean Gull	Robin	Twite
Black Guillemot	Dunnoch	Hobby	Melodious Warbler	Rook	Water Rail
Black Redstart	Eagle Owl	House Martin	Merlin	Roseate Tern	Wheatear
Black Swan	Eider	House Sparrow	Mistle Thrush	Ruddy Duck	Whinchat
Blackbird	Feral Pigeon	Jackdaw	Moorhen	Ruff	Whitethroat
Blackcap	Gadwall	Jay	Mute Swan	Sand Martin	Willow Tit
Black-headed Gull	Garden Warbler	Kestrel	Nightjar	Sedge Warbler	Willow Warbler
Black-tailed Godwit	Garganey	Kingfisher	Nuthatch	Shelduck	Wood Duck
Blue Tit	Goldcrest	Kittiwake	Oystercatcher	Short-eared Owl	Wood Warbler
Bullfinch	Golden Plover	Lapwing	Pallid Swift	Shoveler	Woodcock
Buzzard	Goldfinch	Lesser Black-backed Gull	Peregrine	Siskin	Woodpigeon
Canada Goose	Goosander	Lesser Redpoll	Pheasant	Skylark	Wren
Carrion Crow	Goshawk	Lesser Spotted Woodpecker	Pied Flycatcher	Snipe	Yellow Wagtail
Cetti's Warbler	Grasshopper Warbler	Lesser Whitethroat	Pied Wagtail	Song Thrush	Yellowhammer
Chaffinch	Great Black-backed Gull	Linnet	Pochard	Sparrowhawk	
Chiffchaff	Great Crested Grebe	Little Grebe	Quail	Spotted Flycatcher	
Coal Tit	Great Spotted W'pecker	Little Owl	Raven	Starling	
Coal Tit	Great Tit	Little Ringed Plover	Red Grouse	Stock Dove	
Collared Dove	Green Woodpecker	Long-eared Owl	Red-breasted Merganser	Stonechat	
Common Crossbill	Greenfinch		Red-legged Partridge	Swallow	

Appendix 8. Species recorded in winter during 2007/08 - 2010/11

American Golden Plover	Chough	Great Crested Grebe	Lesser Black-backed Gull	Pomarine Skua	Skylark
American Wigeon	Coal Tit	Great Grey Shrike	Lesser Redpoll	Purple Sandpiper	Slavonian Grebe
Arctic Skua	Collared Dove	Great Northern Diver	Lesser Spotted Woodpecker	Raven	Smew
Arctic Tern	Common Crossbill	Great Skua	Linnet	Razorbill	Snipe
Avocet	Common Gull	Great Spotted Woodpecker	Little Auk	Red Grouse	Snow Bunting
Barn Owl	Common Redpoll	Woodpecker	Little Bunting	Red Kite	Song Thrush
Barnacle Goose	Common Rosefinch	Great Tit	Little Egret	Red-breasted Goose	Sparrowhawk
Barred Warbler	Common Sandpiper	Great White Egret	Little Grebe	Red-breasted Merganser	Spoonbill
Bar-tailed Godwit	Common Scoter	Green Sandpiper	Little Gull	Red-legged Partridge	Spotted Redshank
Bean Goose	Coot	Green Woodpecker	Little Owl	Red-necked Grebe	Starling
Bearded Tit	Cormorant	Greenfinch	Little Stint	Redshank	Stock Dove
Bewick's Swan	Corn Bunting	Greenshank	Long-billed Dowitcher	Red-throated Diver	Stonechat
Bewick's Swan	Curlew	Green-winged Teal	Long-eared Owl	Redwing	Surf Scoter
Bittern	Curlew Sandpiper	Grey Heron	Long-tailed Duck	Reed Bunting	Swallow
Black Grouse	Dipper	Grey Partridge	Long-tailed Tit	Reed Warbler	Tawny Owl
Black Guillemot	Dunlin	Grey Phalarope	Magpie	Richard's Pipit	Teal
Black Redstart	Dunnock	Grey Plover	Mallard	Ring Ouzel	Tree Sparrow
Black Tern	Eider	Grey Wagtail	Mandarin Duck	Ring-billed Gull	Treecreeper
Blackbird	European Storm-petrel	Greylag Goose	Marsh Harrier	Ringed Plover	Tufted Duck
Blackcap	Feral Pigeon	Guillemot	Marsh Tit	Ring-necked Duck	Turnstone
Black-headed Gull	Fieldfare	Hawfinch	Marsh/Willow Tit	Ring-necked Parakeet	Twite
Black-necked Grebe	Firecrest	Hen Harrier	Meadow Pipit	Robin	Velvet Scoter
Black-tailed Godwit	Fulmar	Herring Gull	Mediterranean Gull	Rock Pipit	Water Pipit
Black-throated Diver	Gadwall	Hooded Crow	Merlin	Rook	Water Rail
Blue Tit	Gannet	House Sparrow	Mistle Thrush	Rough-legged Buzzard	Waxwing
Brambling	Garden Warbler	Iceland Gull	Moorhen	Ruddy Duck	Wheatear
Brent Goose	Garganey	Jack Snipe	Mute Swan	Ruff	White-fronted Goose
Bullfinch	Glaucous Gull	Jackdaw	Nuthatch	Sanderling	Whooper Swan
Buzzard	Glossy Ibis	Jay	Oystercatcher	Sandwich Tern	Wigeon
Canada Goose	Goldcrest	Kestrel	Peregrine	Scaup	Willow Tit
Carrion Crow	Golden Plover	Kingfisher	Pheasant	Shag	Woodcock
Caspian Gull	Goldeneye	Kittiwake	Pied Wagtail	Shelduck	Woodpigeon
Cattle Egret	Goldfinch	Knot	Pink-footed Goose	Shore Lark	Wren
Cetti's Warbler	Goosander	Lapland Bunting	Pintail	Short-eared Owl	Yellow-browed Warbler
Chaffinch	Goshawk	Lapwing	Pochard	Shoveler	Yellowhammer
Chiffchaff	Great Black-backed Gull	Leach's Storm-petrel		Siskin	Yellow-legged Gull

Appendix 9. The 30 most numerous species in summer

Species	Population (pairs)	% of total
Wren	40000	7.4
Blackbird	35000	6.5
House Sparrow	35000	6.5
Robin	35000	6.5
Blue Tit	34000	6.3
Woodpigeon	22000	4.1
Chaffinch	20000	3.7
Great Tit	20000	3.7
Black-headed Gull	16000	3.0
Feral Pigeon	15000	2.8
Lesser Black-backed Gull	15000	2.8
Pheasant	12500	2.3
Starling	12000	2.2
Dunnock	10500	1.9
Greenfinch	10000	1.9
Magpie	10000	1.9
Meadow Pipit	10000	1.9
Goldfinch	9500	1.8
Carrion Crow	9000	1.7
Swallow	9000	1.7
Blackcap	8000	1.5
Willow Warbler	8000	1.5
Rook	7000	1.3
Skylark	7000	1.3
Lapwing	6500	1.2
Jackdaw	6000	1.1
Red Grouse	6000	1.1
Song Thrush	6000	1.1
Coal Tit	5500	1.0
Collared Dove	5000	0.9
Long-tailed Tit	5000	0.9

Appendix 10. The 30 most numerous species in winter

Species	Population	% all total
Starling	300000	12.97
Chaffinch	150000	6.48
Wren	120000	5.19
Blackbird	100000	4.32
Blue Tit	100000	4.32
House Sparrow	100000	4.32
Robin	100000	4.32
Woodpigeon	100000	4.32
Knot	85000	3.67
Wigeon	84000	3.63
Great Tit	60000	2.59
Feral Pigeon	50000	2.16
Herring Gull	50000	2.16
Pink-footed Goose	50000	2.16
Oystercatcher	47000	2.03
Common Scoter	40000	1.73
Dunlin	39000	1.69
Lapwing	35000	1.51
Black-headed Gull	30000	1.30
Common Gull	30000	1.30
Greenfinch	30000	1.30
Pheasant	30000	1.30
Carrion Crow	28000	1.21
Magpie	26000	1.12
Goldfinch	25000	1.08
Skylark	25000	1.08
Dunnock	21500	0.93
Rook	21000	0.91
Fieldfare	20000	0.86
Long-tailed Tit	20000	0.86

Appendix 11. The 30 most widespread species in summer

Species	Tetrads	% tetrads
Wren	924	98.61%
Carrion Crow	916	97.76%
Chaffinch	899	95.94%
Blackbird	898	95.84%
Woodpigeon	893	95.30%
Robin	893	95.20%
Goldfinch	886	94.56%
Blue Tit	883	94.24%
Great Tit	876	93.49%
Dunnock	873	93.17%
Magpie	856	91.14%
Starling	839	89.54%
Starling	832	88.79%
Song Thrush	825	88.05%
House Sparrow	821	87.62%
Greenfinch	813	86.77%
Pied Wagtail	808	86.23%
Willow Warbler	797	85.06%
Collared Dove	779	83.14%
Pheasant	773	82.50%
Mistle Thrush	770	82.18%
Mallard	846	80.15%
Blackcap	736	78.55%
Great Spotted Woodpecker	723	77.16%
Long-tailed Tit	721	76.95%
Swallow	851	76.63%
Jackdaw	710	75.77%
Lapwing	706	75.35%
Coal Tit	679	72.47%
Moorhen	671	71.61%

Appendix 12. The 30 most widespread species in winter

Species	Tetrads	% tetrads
Carrion Crow	927	98.1
Wren	909	96.2
Robin	892	94.4
Blue Tit	887	93.9
Great Tit	886	93.8
Blackbird	885	93.7
Chaffinch	885	93.7
Starling	866	91.6
Woodpigeon	865	91.5
Magpie	864	91.4
Dunnock	857	90.7
Kestrel	835	88.4
Mistle Thrush	824	87.2
Mallard	805	85.2
House Sparrow	781	82.6
Jackdaw	767	81.2
Long-tailed Tit	765	81.0
Black-headed Gull	764	80.8
Fieldfare	762	80.6
Redwing	750	79.4
Song Thrush	749	79.3
Goldfinch	748	79.2
Greenfinch	748	79.2
Coal Tit	743	78.6
Collared Dove	740	78.3
Great Spotted Woodpecker	712	75.3
Pied Wagtail	708	74.9
Sparrowhawk	703	74.4
Pheasant	693	73.3
Buzzard	667	70.6