

APPENDIX 1: Basic information about the towns and the data included in the study.

| Town | Number of inhabitants | Built-up area (km ²) | Human population density (inh/km ²) | Location N° | Founded | Number of species | Study method | Study plot area (km ²) | Main references for the bird data |
|-------------|-----------------------|----------------------------------|---|-------------|---------|-------------------|--------------|------------------------------------|---|
| Alkmaar | 94216 | 30 | 3249 | 52 | 1254 | 20 | M | 0,34 | Smit et al., 1995, 2005; Baeyens, unpub. |
| Angers | 151279 | 43 | 1100 | 47 | 150 | 35 | P | 0,1 | Clergeau, 2000 |
| Arheim | 142636 | 117 | 2100 | 51 | 1233 | 55 | M | 6 | Schoppers, 1999, 2001; Baeyens, unpub. |
| Berlin | 3405469 | 1347 | 3000 | 52 | 1200 | 12 | A | 0,76 | Witt, 2005 |
| Bologna | 374425 | 155 | 3400 | 44 | 728 | 20 | A | 0,25 | Bernini et al., 1998 |
| Bonn | 314299 | 932 | 2300 | 50 | 199BC | 14 | M | 1 | Rheinwald, 2005 |
| Bratislava | 425459 | 119 | 3300 | 48 | 907 | 30 | M | 1,4 | Weiserbs, unpublished |
| Brussels | 1067162 | 803 | 2600 | 50 | 978 | 36 | M | 4,5 | Weiserbs & Jacob, 2005; Weiserbs, unpub. |
| Florence | 366488 | 220 | 3800 | 43 | 598BC | 36 | A | 1 | Dinetti & Romani, 2002 |
| Groningen | 181819 | 78 | 2535 | 53 | 1040 | 9 | M | 0,86 | Modderman et al., 2001; Baeyens, unpub. |
| Grosseto | 77057 | 15 | 173 | 42 | 803 | 16 | A | 0,25 | Giovacchini, 2001 |
| Hamburg | 1769117 | 777 | 2700 | 53 | 845 | 10 | M | 0,22 | Mulsow, 2005 |
| Heinola | 20605 | 15 | 215 | 61 | 1839 | 18 | M | 0,5 | Vauhkonen, 1999 |
| Helsinki | 569611 | 641 | 1800 | 60 | 1550 | 14 | A | 1 | Pakkala et al., 1998 |
| Jyväskylä | 130735 | 99 | 1200 | 62 | 1837 | 18 | A | 1 | Keski-Suomen lintutieteellinen yhdistys, 2011 |
| Kemi | 22680 | 17 | 228 | 65 | 1869 | 30 | A | 1 | Rauhala & Suopajarvi, 2002 |
| Lahti | 99419 | 109 | 1100 | 60 | 1878 | 26 | A | 1 | Saikko & Loikkanen, 1999 |
| Leiden | 117530 | 22 | 5524 | 52 | 1266 | 32 | P | 1,73 | Epe et al., 2005; Baeyens, unpub. |
| Lisbon | 564447 | 958 | 2800 | 38 | 1256 | 9 | M | 18 | Geraldes & Coat, 2005 |
| Livorno | 155986 | 26 | 1500 | 43 | 1017 | 20 | A | 0,26 | Dinetti, 1994 |
| Lyon | 470000 | 1,178 | 1400 | 45 | 43BC | 21 | P | 3,75 | Tatibouet, 1981 |
| Marseille | 820900 | 689 | 2300 | 43 | 600BC | 12 | P | 3 | Marchetti, 1976 |
| Montpellier | 251634 | 311 | 1300 | 43 | 985 | 25 | P | 0,7 | Caula, 2007 |

| | | | | | | | | | |
|-------------------|---------|-------|------|----|-------|----|---|-------|---|
| Nantes | 280600 | 1,173 | 700 | 47 | 476 | 33 | P | 0,2 | Clergeau, 2000 |
| Napoli | 1046987 | 1023 | 3600 | 40 | 699BC | 22 | A | 1 | Fraissinet, 1995 |
| Oulu | 131786 | 192 | 1000 | 65 | 1605 | 19 | A | 1 | Tynjälä et al., 2004 |
| Paris | 9644502 | 2,845 | 3700 | 48 | 399BC | 40 | A | 4 | Clergeau et al., 1988; Le Lannic & Collias, 1997 |
| Pavia | 71486 | 18 | 1150 | 45 | 620 | 27 | A | 0,25 | Bernini et al., 1998 |
| Pisa | 90482 | 26 | 490 | 43 | 180BC | 26 | A | 0,25 | Dinetti, 1988 |
| Prague | 1212097 | 296 | 4600 | 50 | 885 | 12 | A | 2,6 | Štátný et al., 2005 |
| Rennes | 206229 | 285 | 1100 | 48 | 299BC | 34 | P | 0,4 | Clergeau et al., 1998; Le Lannic & Collias, 1997 |
| Rome | 2705603 | 1114 | 3500 | 41 | 753BC | 37 | A | 1 | Cignini & Zapparoli, 1996 |
| Rovaniemi | 58943 | 56 | 900 | 66 | 1929 | 21 | A | 1 | be Jokimäki & Kaisanlahti- Jokimäki, 2012 |
| St. Petersburg | 4661219 | 1347 | 3800 | 59 | 1703 | 10 | M | 1,5 | Khrabryi, 2005 |
| València | 797654 | 272 | 5800 | 39 | 138BC | 15 | A | 39,48 | Murgui, 2005 |
| Warsaw | 1700536 | 544 | 4200 | 52 | 1313 | 22 | A | 52 | Luniak, 2005 |
| Vienna | 1678435 | 453 | 3900 | 48 | 15BC | 26 | M | 1 | Holzer & Sziemer, 2005 |
| Örebro | 95400 | 49 | 2200 | 59 | 1404 | 16 | P | 1,5 | Sandström et al., 2006 |

Number of inhabitants refer to the municipality area of the town

Built-up area refers to an urban area that is a continuously built up land mass of urban development according to the Demographia.com

Human population density refers to the number of inhabitants living within the built-up area

Founded refers to the time when the town was established

Study methods: A) Atlas, M) Mapping and P) Point counts

APPENDIX 2: Breeding birds species , their occupancy frequency in towns of different sizes and locations, and other background information about the species.

| Species ¹ | Common name | Large towns (N=11) | Medium-sized towns (N=12) | Small towns (N=15) | Southern towns (N=13) | Central-European towns (N=16) | Northern towns (N=9) | Towns total (N=38) | Traits ² Buildings/ holes/ nest boxes | Year of urbanization ³ | Population trend 1980-2000 ⁴ | Population size million pairs ⁵ | Migration distance ⁶ | Northern distribution limit ⁶ | Southern distribution limit ⁶ |
|---|--------------------|--------------------|---------------------------|--------------------|-----------------------|-------------------------------|----------------------|--------------------|--|-----------------------------------|---|--|---------------------------------|--|--|
| <i>Columba livia</i> , Gmelin 1789 | Rock Dove | 10 | 12 | 14 | 13 | 14 | 9 | 36 | 1 | 1883 | | 11 | 0 | 70 | 35 |
| <i>Apus apus</i> , Linnaeus 1758 | Swift | 11 | 12 | 12 | 13 | 15 | 7 | 35 | 1 | | 7 | 19,1 | 74,5 | 70 | 35 |
| <i>Parus major</i> , Linnaeus 1758 | Great Tit | 9 | 10 | 15 | 12 | 14 | 8 | 34 | 1 | 1935 | 12 | 65,1 | 0 | 70 | 35 |
| <i>Carduelis chloris</i> , Linnaeus 1758 | Greenfinch | 8 | 10 | 14 | 11 | 13 | 8 | 32 | 0 | 1954 | 29 | 21,6 | 1,34 | 67 | 35 |
| <i>Passer domesticus</i> , Linnaeus 1758 | House Sparrow | 8 | 10 | 11 | 5 | 15 | 9 | 29 | 1 | 1925 | -37 | 134 | 0 | 70 | 35 |
| <i>Delichon urbicum</i> , Linnaeus 1758 | House Martin | 9 | 11 | 7 | 11 | 11 | 5 | 27 | 1 | 1850 | -8 | 11,2 | 55 | 70 | 35 |
| <i>Turdus merula</i> , Linnaeus 1758 | Blackbird | 10 | 9 | 8 | 9 | 16 | 2 | 27 | 0 | 1906 | 15 | 54,8 | 3,98 | 67 | 35 |
| <i>Pica pica</i> , Linnaeus 1758 | Magpie | 6 | 5 | 14 | 6 | 11 | 8 | 25 | 0 | 1976 | 5 | 7,5 | 0 | 70 | 35 |
| <i>Streptopelia decaocto</i> , Fridvaldsky 1838 | Collared Dove | 8 | 9 | 8 | 10 | 14 | 1 | 25 | 0 | 1950 | 59 | 7,91 | 0 | 65 | 35 |
| <i>Corvus corone</i> , Linnaeus 1758 | Carrion Crow | 8 | 6 | 10 | 6 | 12 | 6 | 24 | 0 | 1968 | 21 | 8,79 | 5,71 | 70 | 35 |
| <i>Parus caeruleus</i> , Linnaeus 1758 | Blue Tit | 8 | 4 | 12 | 4 | 12 | 8 | 24 | 1 | 1975 | 43 | 20 | 0 | 65 | 35 |
| <i>Corvus monedula</i> , Linnaeus 1758 | Jackdaw | 9 | 6 | 8 | 9 | 10 | 4 | 23 | 1 | 1880 | 14 | 9,93 | 0,28 | 65 | 35 |
| <i>Fringilla coelebs</i> , Linnaeus 1758 | Chaffinch | 6 | 9 | 8 | 9 | 10 | 4 | 23 | 0 | 1951 | 11 | 185 | 5,54 | 67 | 35 |
| <i>Sturnus vulgaris</i> , Linnaeus 1758 | Starling | 8 | 6 | 8 | 6 | 13 | 3 | 22 | 1 | 1921 | -49 | 28,8 | 2,63 | 70 | 35 |
| <i>Hirundo rustica</i> , Linnaeus 1758 | Swallow | 3 | 9 | 7 | 10 | 6 | 3 | 19 | 1 | 1995 | -16 | 29 | 42,34 | 67 | 35 |
| <i>Sylvia atricapilla</i> , Linnaeus 1758 | Blackcap | 6 | 8 | 5 | 10 | 9 | 0 | 19 | 0 | 1990 | 82 | 40,5 | 19,64 | 65 | 35 |
| <i>Muscicapa striata</i> , Pallas 1764 | Spotted Flycatcher | 5 | 5 | 8 | 8 | 6 | 4 | 18 | 1 | 1976 | -59 | 14,9 | 64,4 | 70 | 35 |
| <i>Serinus serinus</i> , Linnaeus 1766 | Serir | 5 | 9 | 4 | 12 | 6 | 0 | 18 | 0 | 1985 | -41 | 20,9 | 5 | 60 | 30 |
| <i>Columba palumbus</i> , Linnaeus 1758 | Wood Pigeon | 6 | 4 | 7 | 2 | 14 | 1 | 17 | 0 | 1919 | 71 | 20,5 | 2,04 | 67 | 35 |
| <i>Motacilla alba</i> , Linnaeus 1758 | Pied Wagtail | 5 | 2 | 10 | 7 | 2 | 8 | 17 | 1 | 1972 | -31 | 16,9 | 18,12 | 70 | 35 |

| Species ¹ | Common name | Large towns (N=11) | Medium-sized towns (N=12) | Small towns (N=15) | So-uthern towns (N=13) | Central-Euro-pean towns (N=16) | Nor-thern towns (N=9) | Towns total (N=38) | Traits ² Build-ings/ holes/ nest boxes | Year of urban-ization ³ | Popu-lation trend 1980-2000 ⁴ | Popula-tion size million pairs ⁵ | Migra-tion dis-tance ⁶ | Nor-thern dis-tri-bution limit ⁶ | So-uthern dis-tri-bution limit ⁶ |
|---|--------------------------|--------------------|---------------------------|--------------------|------------------------|--------------------------------|-----------------------|--------------------|---|------------------------------------|--|---|-----------------------------------|---|---|
| <i>Phoenicurus ochruros</i> , S G Gmelin 1774 | Black Redstart | 4 | 8 | 5 | 6 | 10 | 1 | 17 | 1 | 1947 | 24 | 5,76 | 20 | 60 | 35 |
| <i>Aegithalos caudatus</i> , Linnaeus 1758 | Long-tailed Tit | 3 | 3 | 7 | 5 | 8 | 0 | 13 | 0 | 2000 | 46 | 8,31 | 0 | 67 | 35 |
| <i>Troglodytes troglodytes</i> , Linnaeus 1758 | Wren | 4 | 4 | 5 | 5 | 8 | 0 | 13 | 0 | 1937 | 45 | 32,7 | 1,34 | 67 | 35 |
| <i>Anas platyrhynchos</i> , Linnaeus 1758 | Mallard | 2 | 1 | 9 | 3 | 5 | 4 | 12 | 0 | 1958 | | 2,85 | 7,5 | 70 | 35 |
| <i>Erithacus rubecula</i> , Linnaeus 1758 | Robin | 4 | 4 | 4 | 5 | 7 | 0 | 12 | 0 | 1978 | 16 | 58,7 | 5 | 67 | 35 |
| <i>Falco tinnunculus</i> , Linnaeus 1758 | Kestrel | 7 | 4 | 1 | 4 | 8 | 0 | 12 | 1 | 1950 | -23 | 0,409 | 5,59 | 70 | 35 |
| <i>Carduelis carduelis</i> , Linnaeus 1758 | Goldfinch | 3 | 5 | 3 | 4 | 7 | 0 | 11 | 0 | 1982 | -9 | 27,8 | 1,16 | 60 | 35 |
| <i>Certhia brachydactyla</i> , C L Brehm 1820 | Short-toed Treecreeper | 4 | 3 | 4 | 3 | 8 | 0 | 11 | 0 | 1950 | -46 | 5,13 | 0 | 55 | 35 |
| <i>Dendrocopos major</i> , Linnaeus 1758 | Great Spotted Woodpecker | 4 | 3 | 4 | 3 | 7 | 1 | 11 | 1 | 2006 | 43 | 12,9 | 0 | 67 | 35 |
| <i>Garrulus glandarius</i> , Linnaeus 1758 | Jay | 3 | 4 | 4 | 2 | 9 | 0 | 11 | 0 | 1950 | 32 | 7,48 | 0 | 67 | 35 |
| <i>Passer montanus</i> , Linnaeus 1758 | Tree Sparrow | 4 | 2 | 5 | 6 | 3 | 2 | 11 | 1 | 1963 | -45 | 24 | 3,62 | 62 | 35 |
| <i>Phylloscopus collybita</i> , Vieillot 1817 | Chiffchaff | 4 | 2 | 5 | 1 | 9 | 1 | 11 | 0 | 2003 | 56 | 41 | 22,55 | 67 | 35 |
| <i>Phoenicurus phoenicurus</i> , Linnaeus 1758 | Redstart | 1 | 4 | 5 | 5 | 1 | 4 | 10 | 1 | 1979 | -33 | 9,63 | 33,93 | 70 | 35 |
| <i>Sitta europaea</i> , Linnaeus 1758 | Nuthatch | 4 | 4 | 2 | 3 | 7 | 0 | 10 | 1 | 1980 | 61 | 10,7 | 0 | 62 | 35 |
| <i>Gallinula chloropus</i> , Linnaeus 1758 | Moorhen | 3 | 3 | 3 | 3 | 6 | 0 | 9 | 0 | 1980 | | 0,909 | 2,5 | 62 | 35 |
| <i>Regulus regulus</i> , Linnaeus 1758 | Goldcrest | 3 | 3 | 3 | 3 | 6 | 0 | 9 | 0 | 1995 | -19 | 20 | 0 | 67 | 35 |
| <i>Turdus philomelos</i> , C L Brehm 1831 | Song Thrush | 3 | 2 | 4 | 0 | 9 | 0 | 9 | 0 | 1935 | -5 | 24,4 | 14,65 | 70 | 35 |
| <i>Larus argentatus</i> , Pontoppidan 1763 | Herring Gull | 3 | 4 | 1 | 3 | 4 | 1 | 8 | 1 | 1972 | | 0,76 | 7,5 | 70 | 35 |
| <i>Passer domesticus italicae</i> , Vieillot 1817 | (Italian) House Sparrow | 3 | 2 | 3 | 8 | 0 | 0 | 8 | 1 | | | | 0 | | |

| Species ¹ | Common name | Large towns (N=11) | Medium-sized towns (N=12) | Small towns (N=15) | Southern towns (N=13) | Central-European towns (N=16) | Northern towns (N=9) | Towns total (N=38) | Traits ² Buildings/holes/nest boxes | Year of urbanization ³ | Population trend 1980-2000 ⁴ | Population size million pairs ⁵ | Migration distance ⁶ | Northern distribution limit ⁶ | Southern distribution limit ⁶ |
|---|--------------------|--------------------|---------------------------|--------------------|-----------------------|-------------------------------|----------------------|--------------------|--|-----------------------------------|---|--|---------------------------------|--|--|
| <i>Prunella modularis</i> , Linnaeus 1758 | Duncock | 2 | 2 | 4 | 0 | 8 | 0 | 8 | 0 | 1950 | -33 | 12,7 | 9,23 | 70 | 35 |
| <i>Jynx torquilla</i> , Linnaeus 1758 | Wryneck | 2 | 3 | 2 | 6 | 1 | 0 | 7 | 1 | | -74 | 0,674 | 35 | 70 | 35 |
| <i>Phylloscopus trochilus</i> , Linnaeus 1758 | Willow Warbler | 1 | 0 | 6 | 0 | 3 | 4 | 7 | 0 | | -30 | 62,2 | 68,08 | 70 | 45 |
| <i>Sylvia melanocephala</i> , Gmelin 1789 | Sardinian Warbler | 2 | 3 | 2 | 6 | 0 | 1 | 7 | 0 | 2010 | -16 | 7,65 | 5 | 45 | 35 |
| <i>Turdus pilaris</i> , Linnaeus 1758 | Fieldfare | 0 | 1 | 6 | 0 | 0 | 7 | 7 | 0 | 1992 | 7 | 14,2 | 8,3 | 70 | 45 |
| <i>Oenanthe oenanthe</i> , Linnaeus 1758 | Wheatear | 0 | 1 | 5 | 0 | 0 | 6 | 6 | 1 | | -70 | 5,28 | 47,5 | 70 | 35 |
| <i>Tyto alba</i> , Scopoli 1769 | Barn Owl | 2 | 3 | 1 | 0 | 6 | 0 | 6 | 1 | | | 0,111 | 0 | 55 | 35 |
| <i>Luscinia megarhynchos</i> , C.L. Brehm | Nightingale | 2 | 1 | 2 | 4 | 1 | 0 | 5 | 0 | | -63 | 10,7 | 32,5 | 55 | 35 |
| <i>Monticola solitarius</i> , Linnaeus 1758 | Blue Rock Thrush | 2 | 2 | 1 | 4 | 0 | 1 | 5 | 1 | | | 0,111 | 10 | 45 | 35 |
| <i>Parus cristatus</i> , Linnaeus 1758 | Crested Tit | 1 | 2 | 2 | 0 | 5 | 0 | 5 | 1 | | -35 | 5,45 | 0 | 67 | 35 |
| <i>Upupa epos</i> , Linnaeus 1758 | Hoopoe | 1 | 2 | 2 | 5 | 0 | 0 | 5 | 1 | | 49 | 5 | 30 | 60 | 35 |
| <i>Falco peregrinus</i> , Tunstall 1771 | Peregrine | 2 | 2 | 0 | 1 | 3 | 0 | 4 | 1 | | | 0,015 | 42,5 | 70 | 35 |
| <i>Ficedula hypoleuca</i> , Pallas 1764 | Pied Flycatcher | 0 | 0 | 4 | 0 | 0 | 4 | 4 | 1 | 1988 | -26 | 12,5 | 42,99 | 70 | 37 |
| <i>Larus canus</i> , Linnaeus 1758 | Common Gull | 0 | 1 | 3 | 0 | 1 | 3 | 4 | 1 | 1950 | | 0,64 | 2,5 | 70 | 45 |
| <i>Sylvia borin</i> , Boddaert 1783 | Garden Warbler | 1 | 0 | 3 | 0 | 2 | 2 | 4 | 0 | | -21 | 16,7 | 63,25 | 67 | 40 |
| <i>Sylvia curruca</i> , Linnaeus 1758 | Lesser Whitethroat | 1 | 0 | 3 | 0 | 2 | 2 | 4 | 0 | 1960 | -10 | 4,8 | 22,5 | 65 | 35 |
| <i>Apus pallidus</i> , Shelley 1870 | Pallid Swift | 2 | 1 | 0 | 3 | 0 | 0 | 3 | 1 | | | 0,063 | 15 | 45 | 35 |
| <i>Carduelis spinus</i> , Linnaeus 1758 | Pine Siskin | 0 | 0 | 3 | 0 | 0 | 3 | 3 | 0 | | -34 | 13,6 | 10 | 70 | 40 |
| <i>Corvus frugilegus</i> , Linnaeus 1758 | Rook | 0 | 1 | 2 | 0 | 2 | 1 | 3 | 0 | 1950 | 37 | 8,17 | 5 | 65 | 40 |
| <i>Cygnus alar</i> , Gmelin 1789 | Mute Swan | 0 | 1 | 2 | 1 | 1 | 1 | 3 | 0 | 1950 | | 0,083 | 6,5 | 63 | 45 |

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|---|---------------------------|--------------------|---------------------------|--------------------|-----------------------|-------------------------------|----------------------|--------------------|--|-----------------------------------|---|--|---------------------------------|--|--|
| <i>Fulica atra</i> , Linnaeus 1758 | Coot | 0 | 1 | 2 | 0 | 3 | 0 | 3 | 0 | | | 0,945 | 11 | 65 | 35 |
| <i>Galerida cristata</i> , Linnaeus 1758 | Crested Lark | 1 | 1 | 1 | 0 | 3 | 0 | 3 | 0 | 2010 | -95 | 17,7 | 0 | 57 | 35 |
| <i>Motacilla cinerea</i> , Tunstall 1771 | Grey Wagtail | 2 | 1 | 0 | 2 | 1 | 0 | 3 | 0 | 2000 | -54 | 0,689 | 25 | 67 | 35 |
| <i>Sylvia communis</i> , Linnaeus 1758 | Whitethroat | 1 | 0 | 2 | 0 | 2 | 1 | 3 | 0 | 2010 | 9 | 17,3 | 53,05 | 65 | 35 |
| <i>Turdus iliacus</i> , Linnaeus 1758 | Redwing | 0 | 0 | 3 | 0 | 0 | 3 | 3 | 0 | 1989 | 21 | 13,2 | 16,5 | 70 | 53 |
| <i>Acrocephalus palustris</i> , Bechstein 1798 | Marsh Warbler | 0 | 0 | 2 | 0 | 1 | 1 | 2 | 0 | | 0 | 4,17 | 58 | 63 | 43 |
| <i>Alcedo atthis</i> , Linnaeus 1758 | Kingfisher | 1 | 1 | 0 | 2 | 0 | 0 | 2 | 0 | | | 0,098 | 15 | 60 | 35 |
| <i>Alopechen aegyptiaca</i> , Linnaeus 1766 | Egyptian Goose | 0 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | | | | | | |
| <i>Aythya fuligula</i> , Linnaeus 1758 | Tufted Duck | 0 | 0 | 2 | 0 | 0 | 2 | 2 | 0 | | | 0,551 | 12,5 | 70 | 50 |
| <i>Charadrius dubius</i> , Scopoli 1786 | Little Ringed Plover | 0 | 0 | 2 | 0 | 1 | 1 | 2 | 0 | | | 0,134 | 38,5 | 67 | 35 |
| <i>Columba oenas</i> , Linnaeus 1758 | Stock Dove | 0 | 1 | 1 | 0 | 2 | 0 | 2 | 1 | 1975 | 13 | 0,561 | 5 | 65 | 35 |
| <i>Dendrocopos medius</i> , Linnaeus 1758 | Middle Spotted Woodpecker | 1 | 1 | 0 | 0 | 2 | 0 | 2 | 1 | | | 0,301 | 0 | 57 | 35 |
| <i>Dendrocopos minor</i> , Linnaeus 1758 | Lesser Spotted Woodpecker | 0 | 0 | 2 | 0 | 0 | 2 | 2 | 0 | | -81 | 0,491 | 0 | 70 | 35 |
| <i>Dendrocopos syriacus</i> , Hemprich and Ehrenberg 1833 | Syrian Woodpecker | 1 | 1 | 0 | 0 | 2 | 0 | 2 | 1 | 1950 | | 0,281 | 0 | 52 | 35 |
| <i>Hippolais icterina</i> , Vieillot 1817 | Icterine Warbler | 1 | 1 | 0 | 0 | 2 | 0 | 2 | 0 | | -42 | 3,72 | 71,33 | 70 | 42 |
| <i>Larus fuscus</i> , Linnaeus 1758 | Lesser Black-backed Gull | 1 | 0 | 1 | 0 | 1 | 1 | 2 | 1 | | | 0,394 | 28,5 | 70 | 47 |
| <i>Parus montanus</i> , Conrad 1827 | Willow Tit | 0 | 1 | 1 | 1 | 1 | 0 | 2 | 1 | | -58 | 30,5 | 0 | 70 | 40 |
| <i>Parus palustris</i> , Linnaeus 1758 | Marsh Tit | 0 | 1 | 1 | 0 | 2 | 0 | 2 | 1 | 2000 | -35 | 2,91 | 0 | 65 | 40 |
| <i>Picus viridis</i> , Linnaeus 1758 | Green Woodpecker | 0 | 1 | 1 | 0 | 2 | 0 | 2 | 0 | 2000 | 43 | 0,587 | 0 | 65 | 35 |

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|--|----------------------|--------------------|---------------------------|--------------------|-----------------------|-------------------------------|----------------------|--------------------|---------------------|-----------------------------------|---|--|---------------------------------|--|--|
| <i>Psittacula krameri</i> , Scopoli 1769 | Ring-necked Parakeet | 1 | 0 | 1 | 0 | 2 | 0 | 2 | 1 | | | | 0 | | |
| <i>Riparia riparia</i> , Linnaeus 1758 | Sand Martin | 0 | 1 | 1 | 1 | 0 | 1 | 2 | 0 | | | 3,64 | 47,5 | 70 | 35 |
| <i>Sturnus unicolor</i> , Temminck 1820 | Spotless Starling | 0 | 2 | 0 | 2 | 0 | 0 | 2 | 1 | 1989 | 55 | 23,9 | 0 | 44 | 35 |
| <i>Acrocephalus schoenobaenus</i> , Linnaeus 1758 | Sedge Warbler | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | | -65 | 3,83 | 58,5 | 70 | 37 |
| <i>Acrocephalus scirpaceus</i> , Hermann 1804 | Reed Warbler | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | | -11 | 2,12 | 42,5 | 65 | 35 |
| <i>Actitis hypoleucos</i> , Linnaeus 1758 | Common Sandpiper | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | | -19 | 0,794 | 51 | 70 | 37 |
| <i>Alauda arvensis</i> , Linnaeus 1758 | Skylark | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | | -47 | 44,3 | 13,02 | 70 | 35 |
| <i>Anas penelope</i> , Linnaeus 1758 | Wigeon | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | | | 0,469 | 17,5 | 70 | 50 |
| <i>Apus melba</i> , Linnaeus 1758 | Alpine Swift | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | | | 0,151 | 48,5 | 47 | 35 |
| <i>Ardea cinerea</i> , Linnaeus 1758 | Grey Heron | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | | | 0,223 | 7 | 60 | 43 |
| <i>Athene noctua</i> , Scopoli 1769 | Little Owl | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | | | 0,618 | 0 | 57 | 35 |
| <i>Bucephala clangula</i> , Linnaeus 1758 | Goldeneye | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | | | 0,489 | 7,5 | 70 | 50 |
| <i>Carduelis cannabina</i> , Linnaeus 1758 | Linnet | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | | -54 | 17,6 | 4,11 | 65 | 35 |
| <i>Carduelis flammea</i> , Linnaeus 1758 | Redpoll | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | | -54 | 6,07 | 9,46 | 70 | 45 |
| <i>Carpodacus erythrinus</i> , Pallas 1770 | Scarlet Rosefinch | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | | 224 | 7,81 | 30 | 63 | 37 |
| <i>Cettia cetti</i> , Temminck 1820 | Cetti's Warbler | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | | 541 | 2,02 | | 50 | 35 |
| <i>Coccothraustes coccothraustes</i> , Linnaeus 1758 | Hawfinch | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 2010 | 658 | 2,6 | 1,5 | 63 | 35 |
| <i>Haematopus ostralegus</i> , Linnaeus 1758 | Oystercatcher | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | | | 0,284 | 0,5 | 70 | 43 |
| <i>Lanius collurio</i> , Linnaeus 1758 | Red-backed Shrike | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | | -30 | 7,44 | 64,72 | 65 | 35 |

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|---|------------------------|--------------------|---------------------------|--------------------|-----------------------|-------------------------------|----------------------|--------------------|--|-----------------------------------|---|--|---------------------------------|--|--|
| <i>Larus ridibundus</i> ; Linnaeus 1766 | Black-headed Gull | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1959 | | 1,34 | 15 | 63 | 40 |
| <i>Luscinia luscinia</i> ; Linnaeus 1758 | Thrush Nightingale | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | | -29 | 3,78 | 54 | 65 | 43 |
| <i>Mergus merganser</i> ; Linnaeus 1758 | Goosander | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | | | 0,067 | 7,5 | 70 | 55 |
| <i>Mergus serrator</i> ; Linnaeus 1758 | Red-breasted Merganser | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | | | 0,070 | 7,5 | 70 | 55 |
| <i>Parus ater</i> ; Linnaeus 1758 | Coal Tit | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 2003 | -17 | 15,9 | 0 | 65 | 35 |
| <i>Phasianus colchicus</i> ; Linnaeus 1758 | Pheasant | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | | | 4,14 | 0 | 60 | 35 |
| <i>Phylloscopus bonelli</i> ; Vieillot 1819 | Bonelli's Warbler | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | | -33 | 1,4 | 25 | 47 | 33 |
| <i>Podiceps cristatus</i> ; Linnaeus 1758 | Great Crested Grebe | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | | | 0,33 | 4 | 65 | 35 |
| <i>Pyrrhula pyrrhula</i> ; Linnaeus 1758 | Bullfinch | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 2010 | -48 | 7,65 | 0 | 70 | 40 |
| <i>Regulus ignicapillus</i> ; Temminck 1820 | Firecrest | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 2010 | -19 | 4,18 | 1 | 55 | 35 |
| <i>Sterna hirundo</i> ; Linnaeus 1758 | Common Tern | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | | | 0,316 | | 70 | 35 |

1) Species names follow the Birds of the Western Palearctic book series (Cramp & Perrins 1977-1994); bold number refers to the dominant bird species (occurring at least 80% of the sites; the numbers in italics refers to satellite species (occurring at most 20% of the sites).

2) See Jokimäki and Suhonen (2015) for details of grouping

3) See Møller 2013 et al. 2012 for details

4) BirdLife International (2015) The BirdLife checklist of the birds of the world: Version 8. Downloaded from http://www.birdlife.org/datazone/userfiles/file/Species/Taxonomy/BirdLife_Checklist_Version_80.zip (.xls zipped 1 MB).

5) BirdLife International (2017) Species factsheet: Species name. Downloaded from <http://www.birdlife.org> on 20/01/2017. Recommended citation for factsheets for more than one species: BirdLife International (2017) IUCN Red List for birds. Downloaded from <http://www.birdlife.org> on 20/01/2017.

6) Measured from Cramp & Perrins 1977-1994