**introduction**

001

**Tawny Owl** *Strix aluco* Kennemerduinen, Bloemendaal, Netherlands, 00:11, 30 September 2011 (*Arnoud B van den Berg*). Soliciting calls of a female and compound hooting of a male. 110930.AB.001103.01

002

**Long-eared Owl***Asio otus* Murrintown, Wexford, Ireland, 06:00, 13 November 2024 (*Killian Mullarney*). *Tu-whit, tu-whoo* call, a variation of a poorly known call primarily used outside the breeding season. Also, some bill-snapping. 241113.KM.060000.12

003

**Goldcrest** *Regulus regulus* IJmuiden, Noord-Holland, Netherlands, 17 November 2001 (*Magnus Robb*). Calls of an autumn migrant. Background: Lesser Black-backed Gull *Larus fuscus*, European Robin *Erithacus rubecula*, Fieldfare *Turdus pilaris* and Eurasian Magpie *Pica pica*. 01.043.MR.01819.01

004

**Firecrest** *Regulus ignicapilla* IJmuiden, Noord-Holland, Netherlands, 29 September 2002 (*Magnus Robb*). Two autumn migrants, one near and one far, calling to each other from a distance. Background: Common Chiffchaff *Phylloscopus collybita*, Eurasian Blue Tit *Cyanistes caeruleus* and Eurasian Magpie *Pica pica*. 02.042.MR.12628.02

005

**Short-billed Dowitcher** *Limnodromus griseus* Our Lady’s Island Lake, Wexford, Ireland, 20 July 2004 (*Killian Mullarney*). Calls on taking off. Background: Dunlin *Calidris alpina* and Common Tern *Sterna hirundo*. 04.001.KM.15555.32

006

**Long-billed Dowitcher** *Limnodromus scolopaceus* Veerse Meer, Zeeland, Netherlands, 09:30, 7 January 2004 (*Magnus Robb*). Multiple-note calls on taking off, then single note *keek* calls in flight. Background: Eurasian Wigeon *Mareca penelope*, Eurasian Oystercatcher *Haematopus ostralegus*, Common Redshank *Tringa totanus* and distant tractor. 04.001.MR.02610.01

**part 1**

007

**Grey Plover** *Pluvialis squatarola* Lena delta, Yakutia, Russia, c 04:00, 10 June 2004 (*Magnus Robb*). Typical calls of an adult in flight over its tundra breeding territory, recorded at close range. Background: another Grey Plover singing. 04.026.MR.10030.11

008

**European Golden Plover** *Pluvialis apricaria* Lissagriffin, Cork, Ireland, 04:00, 14 December 2022 (*Seán Ronayne*). Nocturnal flight calls of at least two individuals. Background: Redwing *Turdus iliacus*.

009

**American Golden Plover** *Pluvialis dominica* Tacumshin, Wexford, Ireland, 7 May 2001 (*Killian Mullarney*). Flight calls of a first-summer, the easier type of flight call to identify. Background: Common Ringed Plover *Charadrius hiaticula*, Northern Lapwing *Vanellus vanellus*, Meadow Pipit *Anthus pratensis*and Common Reed Bunting *Emberiza schoeniclus*. 01.008.KM.05430.01

010

**Pacific Golden Plover** *Pluvialis fulva* Sohar, Al Batinah, Oman, 17:09, 23 March 2013 (*Magnus Robb*). Flight calls of a wintering bird passing at close range. Background: Crested Lark *Galerida cristata* and Delicate Prinia *Prinia lepida*. 130323.MR.170914.02

011

**Grasshopper Sparrow***Ammodramus savannarum*Frank Lake, Alberta, Canada, 14 June 2003 (*Arnoud B van den Berg*). Song of a male. Background: Killdeer *Charadrius vociferus,*California Gull *Larus californicus*and Savannah Sparrow *Passerculus sandwichensis*. 03.027.AB.14611.01

012

**Eastern Rufous-tailed Scrub Robin** *Cercotrichas galactotes syriaca*Skala Kalloni, Lesvos, Greece, 5 May 2007 (*Mark Constantine*). Song of a male. Background: Crested Lark *Galerida cristata*, Greater Short-toed Lark *Calandrella brachydactyla*, Black-headed Wagtail *Motacilla feldegg*and Corn Bunting *Emberiza calandra*. 07.010.MC.05600.02

013

**Eurasian Bullfinch** *Pyrrhula pyrrhula* Durlston, Dorset, England, 10:47, 6 October 2008 (*Magnus Robb*). Flight calls of a migrating individual. Background: European Robin *Erithacus rubecula*. 081006.MR.104706.11

014

**African Houbara** *Chlamydotis undulata*Betancuria, south of El Cotillo, Fuerteventura, Canary Islands, 07:50, 28 January 2010 (*Magnus Robb*). Booming of displaying male with a dominant frequency of 107 Hz. Background: Berthelot's Pipit *Anthus berthelotii* and Mediterranean Short-toed Lark *Alaudala rufescens* 100128.MR.070530.01

015

**Eurasian Bittern** *Botaurus stellaris* Weerribben, Overijssel, Netherlands, 22:50, 4 May 2003 (*Magnus Robb*). After a series of faint up sounds as it gulps air, this male gives five loud ‘booms’, foghorn-like sounds around 141 Hz. Before each boom we can hear a quieter, higher note at 200 Hz where the bird seems to be inhaling; the first boom is preceded by two of these plus a brief lower note at around 122 Hz. The five booms produced by this male are all of the same strength, suggesting that it is in good condition and most likely an adult. Background: Marsh Frog *Pelophylax ridibunda*. 03.013.MR.01115f.10

016

**Andalusian Buttonquail** *Turnix sylvaticus sylvaticus*, female, Aysir, Safi, Abda, Morocco, 10:42, 27 June 2010 (*Arnoud B van den Berg*). Rolled song of a female, with energy peaking at around 360 Hz. Background: European Goldfinch *Carduelis carduelis*. 100627.AB.101700.12

017

**Tawny Owl** *Strix aluco* Kennemerduinen, Bloemendaal, Netherlands, 00:11, 30 September 2011 (*Arnoud B van den Berg*). Compound hooting of two males with soliciting calls of a female, the male's energy peaking at around 860 Hz. From 0:39, aggressive duet of male and female in response to a more distant male. Background: acorns falling, and Fallow Deer *Dama dama*. 110930.AB.001103.01

018

**Eurasian Scops Owl** *Otus scops* Vale da Ribeira das Mercês, São Bras de Alportel, Portugal, 19:31, 19 March 2009 (*Magnus Robb*). Hooting of four males, converging around 1.35 kHz. Background: crickets and Mediterranean Tree Frog *Hyla meridionalis.* 090319.MR.193136.11

019

**Eurasian Whimbrel** *Numenius phaeopus* Tacumshin, Wexford, Ireland, 8 September 2005 (*Killian Mullarney*). Flight calls of a single individual in flight, with the energy peaking at around 2.3 kHz. Background: Common Snipe *Gallinago gallinago* and European Robin *Erithacus rubecula*. 05.003.KM.10425.01

020

**Common Sandpiper** *Actitis hypoleucos* Skuleskogen, Ångermanland, Sweden, 09:58, 17 July 2001 (*Arnoud B van den Berg*). At 4.8 kHz, the sustained whistles of this nervous adult, heard from 8 sec into the recording, are just over twice as high as the calls of Eurasian Whimbrel *Numenius phaeopus* heard in the preceding recording. 01.014.AB.03230.31

021

**Goldcrest** *Regulus regulus* Hauts Plateaux du Vercors, Drôme, France, 10:54, 31 May 2002 (*Arnoud B van den Berg*). The main frequency around which this adult male spins its cyclical song is 7 kHz. Background: European Robin *Erithacus rubecula* and Eurasian Coal Tit *Periparus ater*. 02.011.AB.05825.01

022

**Balearic Flycatcher** *Muscicapa tyrrhenica balearica* Pollença, Mallorca, Spain, 8 May 2016 (*Magnus Robb*). Courtship song with 'electric' notes reaching 13 kHz. Background: Sardinian Warbler *Sylvia melanocephala*, Common Nightingale *Luscinia megarhynchos* and European Goldfinch *Carduelis carduelis*. 160508.MR.115345.22

023

**Common Grasshopper Warbler** *Locustella naevia* Dijkwielen, Wieringermeer, Noord-Holland, Netherlands, 03:30, 2 May 2003 (*Magnus Robb*). Reeling song. Main frequency 6 kHz, pulse rate 24/sec. Background: Mallard *Anas platyrhynchos* and Common Tern *Sterna* *hirundo*. 03.003.MR.12240.01

024

**Savi’s Warbler** *Locustella luscinioides* Karazhar field station, Aqmola Oblast, Kazakhstan, 14:00, 20 May 2003 (*Magnus Robb*). Reeling song. Main frequency 4 kHz, pulse rate 48/sec. Background: Paddyfield Warbler *Acrocephalus agricola*. (See sonagram on page 102.) 03.017.MR.12852.00

025

**Common Ringed Plover** *Charadrius hiaticula* Tacumshin Lake, Wexford, Ireland, 3 September 2000 (*Killian Mullarney*). Upward-inflected calls of several birds. Background: a flock of quietly chattering Dunlin *Calidris alpina*. 00.001.KM.03813a.01

026

**Little Ringed Plover** *Charadrius dubius* Parc Natural S’Albufera, Mallorca, Spain, dusk, 1 April 2003 (*Magnus Robb*). Downward-inflected calls of a breeding adult when flushed. These calls are also higher-pitched and a third shorter than the equivalent calls of Common Ringed Plover *C hiaticula*. Background: Mallard *Anas platyrhynchos* and Zitting Cisticola *Cisticola juncidis*. 03.008.MR.02314.01

027

**Red-throated Pipit** *Anthus cervinus* Seosan Lakes, Chungcheongnam-do, South Korea, 07:50, 14 October 2002 (*Arnoud B van den Berg*). Calls of a passing migrant, flying away in a straight line. The calls later in the recording sound slightly less piercing. This is not only due to the sound being quieter from a distance: the harmonics also become weaker. Background: Tundra Bean Geese *Anser serrirostris*. 02.029.AB.11311.01

028

**Mute Swan** *Cygnus olor* Poole Harbour, Dorset, England, 08:00, 18 January 2004 (*Mark Constantine*). Wing sounds and some calls, gradually descending in pitch due to the Doppler effect, as a pair flies past. 04.002.MC.11730.00

029

**Long-eared Owl *Asio otus otus*** Pancas, Benavente, Portugal, 23:25, 28 February 2013 (*Magnus Robb*). Hooting of a male in open Holm Oak *Quercus ilex* woodland, with large pools here and there following heavy rain. Background: Mallard *Anas platyrhynchos* and Tawny Owl *Strix aluco*. 130228.MR.232502.01

030

**House Mouse** *Mus musculus domesticus* Amsterdam, Noord-Holland, Netherlands, 01:53, 26 June 2007 (*Magnus Robb*). Sounds of four mice feeding on wholemeal bread then scampering up and down the back of a fridge (little mice with clogs on?). 070626.MR.015310.11

031

**Yellow-necked Mouse***Apodemus flavicollis* Białowieża forest, Podlasie, Poland, 20:00, 7 October 2012 (*Magnus Robb*). Mice presumably of this species vocalising while feeding in hazelnut and hornbeam scrub. Background: a hazelnut falling to the ground. 121007.MR.200053.11

032

**Eurasian Reed Warbler** *Acrocephalus scirpaceus* Wareham, Dorset, England, 04:15, 13 May 2000 (*Mark Constantine*). Song of a male, singing from an exposed perch. Its mate is nearby, collecting nest material. Background: Black-headed Gull *Chroicocephalus ridibundus*, Eurasian Skylark *Alauda arvensis* and Meadow Pipit *Anthus pratensis*. 00.013.MC.02430.01

033

**Sedge Warbler** *Acrocephalus schoenobaenus* Vendelsjön, Uppland, Sweden, 00:00, 19 July 2001 (*Arnoud B van den Berg*). Song of a male. Background: flight calls of Eurasian Bittern *Botaurus stellaris*. 01.014.AB.14647.10

034

**Lanceolated Warbler** *Locustella lanceolata* Tomsk, Siberia, Russia, 04:27, 08 July 2011 (*Arnoud B van den Berg*). Song of a male. Background: Siberian Chiffchaff *Phylloscopus tristis* and Siberian Rubythroat *Calliope calliope*. 110708.AB.042708.01

035

**River Warbler** *Locustella fluviatilis* Bieszczady national park, Podkarpackie, Poland, 22:00, 13 June 2005 (*Magnus Robb*). Several short songs. 05.015.MR.01142.01