

**Table S1.** Details of sera collected for each bird species among years and seasons

Order	Species	Migratory Strategy <sup>1</sup>	Collection site <sup>2</sup>	Serum samples (n. individuals)					Total
				2012	2013		2014		
				Fall	Spring	Fall	Spring	Fall	
Anseriformes	Garganey ( <i>Anas querquedula</i> )	L	M		1(1)				1(1)
Galliformes	Common Quail ( <i>Coturnix coturnix</i> )	L	AL, BM, M, VI, ZI		142(159)	5(5)	1(1)		148(165)
Accipitriformes	Marsh Harrier ( <i>Circus aeroginosus</i> )	P	VI			1(1)	1(1)		2(2)
	Eurasian Sparrowhawk ( <i>Accipiter nisus</i> )	P	VI				1(1)		1(1)
Falconiformes	Kestrel ( <i>Falco tinnunculus</i> )	P	VI				2(2)		2(2)
Gruiformes	Water Rail ( <i>Rallus aquaticus</i> )	P	AL			48(48)			48(48)
	Spotted Crake ( <i>Porzana porzana</i> )	L	AL			28(28)			28(28)
	Common Moorhen ( <i>Gallinula chloropus</i> )	P	AL			2(2)			2(2)
Charadriiformes	Little Ringed Plover ( <i>Charadrius dubius</i> )	L	CS			1(1)			1(1)
	Ringed Plover ( <i>Charadrius hiaticula</i> )	S	CS	8(8)		10(11)			18(19)
	Grey Plover ( <i>Pluvialis squatarola</i> )	L	CS	1(1)					1(1)
	Dunlin ( <i>Calidris alpina</i> )	S	CS	2(2)		9(16)			11(18)
	Ruddy Turnstone ( <i>Arenaria interpres</i> )	L	CS, O	2(2)					2(2)
	Curlew Sandpiper ( <i>Calidris ferruginea</i> )	L	CS	9(9)		2(4)			11(13)
	Wood Sandpiper ( <i>Tringa glareola</i> )	L	CS, M	15(15)	37(100)	32(56)			84(171)
	Green Sandpiper ( <i>Tringa ochropus</i> )	L	CS	2(2)		1(2)			3(4)
	Common Sandpiper ( <i>Actitis hypoleucos</i> )	L	CS, O	9(9)		5(9)			14(18)
	Redshank ( <i>Tringa totanus</i> )	L	CS			15(19)			15(19)
	Spotted Redshank ( <i>Tringa erythropus</i> )	L	CS	4(4)					4(4)
	Common Greenshank ( <i>Tringa nebularia</i> )	L	CS, O	3(3)		3(3)			6(6)
	Marsh Sandpiper ( <i>Tringa stagnatilis</i> )	L	CS			1(1)			1(1)
	Ruff ( <i>Philomachus pugnax</i> )	L	M		12(12)				12(12)
	Black-headed Gull ( <i>Chroicocephalus ridibundus</i> )	S	CS	2(2)					2(2)
	Mediterranean Gull ( <i>Ichthyaetus melanocephalus</i> )	R	CS	4(4)					4(4)
	Sandwich Tern ( <i>Thalasseus sandvicensis</i> )	L	CS	20(20)					20(20)
	Common Tern ( <i>Sterna hirundo</i> )	L	CS	11(11)					11(11)
	Black Tern ( <i>Chlidonias niger</i> )	L	CS	2(2)					2(2)
	Columbiformes	European Turtle Dove ( <i>Streptopelia turtur</i> )	L	VI, ZI, BM		92(99)		81(81)	
Cuculiformes	Common Cuckoo ( <i>Cuculus canorus</i> )	L	VI		1(1)		5(5)		6(6)
Strigiformes	Boreal Owl ( <i>Aegolius funereus</i> )	R, Irr	BC					1(1)	1(1)
	Eurasian Scops-Owl ( <i>Otus scops</i> )	L	VI, ZI, BM, AL		6(8)	1(1)	7(7)		14(16)
Caprimulgiformes	European Nightjar ( <i>Caprimulgus europaeus</i> )	L	VI, ZI		53(64)		11(11)		64(75)
Bucerotiformes	Hoopoe ( <i>Upupa epops</i> )	L	VI, ZI, BM		16(25)		23(23)		39(48)
Coraciiformes	European Bee Eater ( <i>Merops apiaster</i> )	L	VI, ZI, BM, AL		28(64)	12(21)	17(39)		57(124)
Piciformes	Wryneck ( <i>Jynx torquata</i> )	L	VI				6(15)		6(15)
Passeriformes	Barn Swallow ( <i>Hirundo rustica</i> )	L	ML, M		9(73)			60(416)	69(489)

Common Nightingale ( <i>Luscinia megarhynchos</i> )	L	VI, ZI	4(29)		4(21)		8(50)	
Common Redstart ( <i>Phoenicurus phoenicurus</i> )	L	VI, ZI	18(140)		11(69)		29(209)	
Northern Wheatear ( <i>Oenanthe oenanthe</i> )	L	VI			6(26)		6(26)	
Whinchat ( <i>Saxicola rubetra</i> )	L	ZI	13(102)				13(102)	
Song Thrush ( <i>Turdus philomelos</i> )	P	BC, BAM, VI		21(45)	1(1)	51(116)	73(162)	
Mistle Thrush ( <i>Turdus viscivorus</i> )	P	BC, BAM		2(2)		4(4)	6(6)	
Blackbird ( <i>Turdus merula</i> )	P	BC, BAM		8(8)		37(38)	45(46)	
Ring Ouzel ( <i>Turdus torquatus</i> )	P	BC				3(3)	3(3)	
Garden Warbler ( <i>Sylvia borin</i> )	L	VI, ZI, C	32(255)		10(64)	1(10)	43(329)	
Common Whitethroat ( <i>Sylvia communis</i> )	L	VI	33(280)		5(30)		38(310)	
Icterine Warbler ( <i>Hippolais icterina</i> )	L	VI	9(80)		5(41)		14(121)	
Woodchat Shrike ( <i>Lanius senator</i> )	L	VI			7(16)		7(16)	
Nutcracker ( <i>Nucifraga caryocatactes</i> )	R, Irr	BC		1(1)			1(1)	
Eurasian Golden Oriole ( <i>Oriolus oriolus</i> )	L	ZI, VI	58(71)		55(87)		113(158)	
Crossbill ( <i>Loxia curvirostra</i> )	S	BC				12(32)	12(32)	
Hawfinch ( <i>Coccothraustes coccothraustes</i> )	S	BC				41(86)	41(86)	
Total			94(94)	564(1563)	209(294)	259(541)	209(696)	1335(3188)

Note: <sup>1</sup> L=long distance migrant, S=short distance migrant, P=partial migrant, Irr=irregular migrant, R=resident;

<sup>2</sup> AL= Alfieri Lake, BAM=Barro Mountain, BC=Bocca di Caset, BM=Brisighella Mountain, C=Campotto, CS=Comacchio Salina, M=Mirandola, ML=Matese Lake, O=Ortazzo, VI=Ventotene Island, ZI=Zannone Island.