

## Electronic Supplementary Material

Table ESM1. List of species, community parameters, and species of conservation interest of the breeding bird assemblages in the study area during the period 2013 – 2019. N = average number of territorial males; pi = average relative frequency; I.K.A. = average number of territorial males/km; biomass (% g) = standing crop biomass as total weight of the territorial males in the assemblage calculated as g/10 ha. CB = Arboreal-shrubby hedge; CL = Cultivated Land, TW = Linear wood. N.R.L.= National Red List (Gustin et al. 2019b, IUCN 2020 <https://www.iucnredlist.org>); SPECS = Species of European Conservation Concern (BirdLife International 2017); Annex 1 = Birds Directive 2009/147/EC; N.S.C.= National Conservation Status (Gustin et al. 2016, Gustin et al. 2019a).

Species	CB				CL				TW				N.R.L.	SPECS	N.C.S.	Annex 1
	N	pi	I.K.A.	Biomass (% g)	N	pi	I.K.A.	Biomass (% g)	N	pi	I.K.A.	Biomass (% g)				
<i>Coturnix coturnix</i>	0.14	0.002	0.1	0.002										3	Unfavourable	
<i>Phasianus colchi.</i>	0.40	0.007	0.3	0.070	0.30	0.021	0.3	0.100	0.90	0.029	1.2	0.170				
<i>Anas platyrhynch.</i>	2.10	0.035	1.5	0.250	2.30	<b>0.163*</b>			1.60	<b>0.051*</b>	2.2	0.210				
<i>Columba palumb.</i>	3.00	<b>0.051*</b>	2.2	0.160	0.60	0.043			3.70	<b>0.118*</b>	5.0	0.220				
<i>Streptopelia turtur</i>	2.60	0.044	1.9	0.040					0.60	0.019	0.8	0.020		1	Inadequate	
<i>Streptopelia deca.</i>	1.90	0.032	1.4	0.040					0.70	0.022	1.0	0.020				
<i>Cuculus canorus</i>	1.70	0.029	1.2	0.020	0.60	0.043	0.6	0.014	1.40	<b>0.050*</b>	1.9	0.020				
<i>Gallinula chlorop.</i>	2.70	<b>0.050*</b>	1.9	0.080	0.14	0.010			1.40	<b>0.050*</b>	1.9	0.050				
<i>Vanellus vanellus</i>					1.00	<b>0.071*</b>	1.0	0.050						1	Inadequate	
<i>Asio otus</i>									0.60	0.019	0.8	0.020				
<i>Alcedo atthis</i>	0.14	0.002	0.1	0.0005										3	Inadequate	X
<i>Picus viridis</i>	0.30	0.005	0.2	0.006					0.70	0.022	1.0	0.020				
<i>Dendrocopos maj.</i>	0.40	0.007	0.3	0.003					0.90	0.029	1.2	0.008				
<i>Oriolus oriolus</i>	0.14	0.002	0.1	0.001					1.14	0.036	1.5	0.009				
<i>Lanius collurio</i>	1.00	0.017	0.7	0.003									VU	2	Unfavourable	X
<i>Garrulus glandar.</i>	0.14	0.002	0.1	0.003					1.30	0.042	1.8	0.030				
<i>Pica pica</i>	3.70	<b>0.063*</b>	2.7	0.090	1.40	<b>0.100*</b>	1.4	0.070	3.00	<b>0.096*</b>	4.1	0.080				
<i>Corvus corone</i>	1.90	0.032	1.4	0.110	1.00	<b>0.071*</b>	1.0	0.120	1.90	<b>0.061*</b>	2.6	0.120				
<i>Parus major</i>	1.00	0.017	0.7	0.002	0.14	0.010			1.60	<b>0.051*</b>	2.2	0.003				
<i>Alauda arvensis</i>	1.60	0.027	1.2	0.007	2.70	<b>0.191*</b>	2.7	0.020						3	Unfavourable	
<i>Galerida cristata</i>	0.40	0.007	0.3	0.002	0.14	0.010	0.1	0.001						3	Inadequate	
<i>Cisticola juncidis</i>	0.14	0.002	0.1	0.0001					0.14	0.005	0.2	0.0002				
<i>Acrocephalus pal.</i>	3.70	<b>0.063*</b>	2.7	0.005					0.40	0.013	0.5	0.0006				
<i>Acrocephalus sci.</i>	1.40	0.024	1.0	0.002												
<i>Acrocephalus aru.</i>	0.40	0.007	0.3	0.002					0.70	0.022	1.0	0.003				
<i>Cettia cetti</i>	3.60	<b>0.061*</b>	2.6	0.006					0.14	0.005	0.2	0.0003				
<i>Aegithalos cauda.</i>									0.90	0.029	1.2	0.0009				
<i>Sylvia atricapilla.</i>	3.00	<b>0.051*</b>	2.2	0.006					2.10	<b>0.067*</b>	2.8	0.004				
<i>Sylvia communis</i>	6.60	<b>0.111*</b>	4.8	0.010					0.70	0.022	1.0	0.001				
<i>Sturnus vulgaris</i>	0.70	0.012	0.5	0.006					0.40	0.013	0.5	0.004		3		

<i>Turdus merula</i>	1.00	0.017	0.7	0.009					1.10	0.035	1.5	0.010					
<i>Luscinia megarhy.</i>	8.80	<b>0.149*</b>	6.3	0.020					2.30	<b>0.074*</b>	3.1	0.006					
<i>Passer montanus</i>	0.30	0.005	0.2	0.0007										<b>3</b>	<b>Unfavourable</b>		
<i>Motacilla flava</i>	2.40	0.041	1.7	0.004	3.40	<b>0.241*</b>	3.4	0.012	0.40	0.013	0.5	0.0008		<b>3</b>	<b>Unfavourable</b>		
<i>Fringilla coelebs</i>									0.28	0.009	0.4	0.0008					
<i>Chloris chloris</i>									0.14	0.005	0.2	0.0004				Inadequate	
<i>Carduelis cardue.</i>	0.70	0.012	0.5	0.001					0.14	0.005	0.2	0.0003				Inadequate	
<i>Emberiza calandr.</i>	0.30	0.005	0.2	0.001										<b>2</b>		Inadequate	
<i>Emberiza hortul.</i>	0.90	0.015	0.7	0.002	0.42	0.030	0.4	0.002						<b>VU</b>	<b>2</b>	<b>Unfavourable</b>	<b>X</b>
<b>Total</b>		<b>59.2</b>	1.0	<b>42.7</b>	1.0	<b>14.14</b>	1.0	<b>10.9</b>	1.0	<b>31.3</b>	1.0	<b>42.5</b>					

Table ESM2. Community parameters of the breeding bird assemblages in the study area. CB: Arboreal-shrubby hedge; CL: Cultivated Land; TW: Linear wood. Stot: total number of bird species recorded in a specific habitat type; Ab: Abundance or number of territorial males; H': Shannon Diversity Index.

		2013	2014	2015	2016	2017	2018	2019		mean	SD
<b>Stot</b>	CB	26	21	26	17	26	22	22		22.9	3.4
	CL	10	10	7	10	6	5	9		8.1	2.1
	TW	23	17	13	18	21	22	17		19.3	3.9
<b>Ab</b>	CB	66	52	59	52	67	68	52		59.2	7.5
	CL	15	17	12	19	13	10	16		14.2	3.1
	TW	44	30	21	28	33	36	25		31.3	7.6
<b>H'</b>	CB	3.01	2.81	3.06	2.61	2.96	2.82	2.88		2.88	0.15
	CL	2.21	2.15	1.86	2.16	1.67	1.51	2.01		1.94	0.27
	TW	3.00	2.69	2.47	2.75	2.89	2.97	2.70		2.78	0.19

Table ESM3. Comparison between the community parameters of the study area and those of other similar environments present in Italy. H = Hedges; C = Cultivated countrysides; W = Woods.

Study area	Methodology	Average Richness (Stot)			Shannon Diversity (H')		
		H	C	W	H	C	W
Piedmont Apennines (AL) (Carpegna et al. 2018)	Point count	20.5	10.3			3.52	
Cuneo-Turin plain (Capello & Boano 2010)	I.K.A. transect				2.39		
N.R. Tevere-Farfa (RM) (Angelici et al. 2012)	Point count		16.5	19.7			
Plain in the province of Modena (Malavasi 2001)	Line transect					1.30	
Eastern Po-Veneto plain (TV) (Nardo 2002)	Line transect			23.0			2.71
Present study	Line transect	22.9	8.1	19.3	2.88	1.94	2.78