

# SUPPLEMENTARY MATERIAL

Table S1

Detailed effort and results in regional integrated survey

Provinces' acronyms: AR=Arezzo (including intensive study area), FI=Firenze, GR=Grosseto, LI=Livorno, LU=Lucca, MS=Massa-Carrara, PI=Pisa, PO=Prato, PT=Pistoia, SI=Siena; Wolf-howling: sessions =number of nights spent to stimulate howls from multiple points in the same area, positive responses= nights recording wolves' howls; Camera trapping: Sessions = number of trapping days, Locations = clusters of camera traps (within 3 km radius), Positive responses = records of wolves (every ten minutes). Packs detected by each Monitoring Unit, in bracket n° of packs occupying a territory in two or more different provinces (detected packs sum doesn't return the minimum number of observed packs).

Province	Year	Wolf howling		Camera trapping			Genetic monitoring		Packs detected (shared)
		Sessions	Positive responses	Sessions	Locations (N)	Positive responses	Samples collected	Positive responses	
AR	2014	24	12	3043	41	536	44	30	22 (4)
FI	2014	24	10	1170	62	41	1	1	19 (7)
GR	2014	27	4	510	34	26	2	2	21 (1)
LI	2014	4	1	600	8	30	0	0	2 (1)
LU	2014	12	3	480	8	6	1	1	9 (5)
MS	2014	57	9	240	12	7	1	1	8 (2)
PI	2014	18	3	815	12	20	1	1	7 (5)
PO	2014	9	5	600	20	16	0	0	4 (3)
PT	2014	17	3	552	24	16	8	8	12 (5)
SI	2014	30	8	600	40	29	17	17	22 (4)
2014 minimum regional number of observed packs (N° of packs shared by provinces)									<b>107 (18)</b>
AR	2015	28	9	5119	79	1125	94	84	25 (4)
FI	2015	26	11	1220	68	46	7	4	18 (6)
GR	2015	80	25	1050	70	49	42	30	16 (1)
LI	2015	19	1	505	7	37	4	3	3 (1)
LU	2015	14	5	600	18	10	3	2	9 (4)
MS	2015	64	11	480	24	14	4	4	8 (1)
PI	2015	10	2	920	13	35	14	1	8 (5)
PO	2015	12	4	640	24	18	1	0	4 (3)
PT	2015	27	8	441	16	12	23	20	12 (5)
SI	2015	21	7	510	34	27	1	1	24 (5)
2015 minimum regional number of observed packs (N° of packs shared by provinces)									<b>109 (17)</b>
AR	2016	10	5	2144	36	611	66	41	25 (2)
FI	2016	35	12	1200	58	32	15	9	23 (4)
GR	2016	80	22	900	60	38	23	10	16 (0)
LI	2016	20	2	480	9	66	10	2	3 (1)
LU	2016	18	4	720	22	12	8	6	8 (2)
MS	2016	62	8	480	24	11	7	2	8 (1)
PI	2016	22	4	1080	24	40	19	16	5 (1)
PO	2016	15	4	720	26	20	1	1	5 (3)
PT	2016	24	6	305	14	11	11	7	9 (3)
SI	2016	20	5	450	30	26	13	6	17 (1)
2016 minimum regional number of observed packs (N° of packs shared by provinces)									<b>110 (15)</b>
Yearly regional mean (min-max)		276.3 (222-306)	71.0 (58-83)	9524.7 (8610-11485)	305.7 (261-353)	989.0 (727-1373)	147.0 (75-174)	105.3 (61-149)	<b>108.7 (107-110)</b>