

Table S2. Relative importance for main environmental predictors obtained from species-specific (69 spp)

Boosted Regression Trees.

Guild	Spp	Boosted regression trees			
		Salinity	Depth	Isolation	Hydroperiod
Dabbling ducks	<i>Anas acuta</i>	22.611	3.943	14.176	5.091
	<i>Anas clypeata</i>	24.125	8.738	6.863	2.955
	<i>Anas crecca</i>	22.571	5.963	11.164	5.702
	<i>Anas penelope</i>	18.608	12.387	10.453	3.142
	<i>Anas platyrhynchos</i>	23.636	7.46	6.272	0.823
	<i>Anas strepera</i>	33.244	7.193	12.838	2.261
	<i>Anser anser</i>	11.762	3.881	21.272	0.649
	<i>Tadorna tadorna</i>	30.819	14.244	13.281	1.285
Diving birds	<i>Aythya ferina</i>	14.887	12.344	13.724	1.75
	<i>Netta rufina</i>	8.94	28.72	24.999	1.778
	<i>Oxyura leucocephala</i>	35.626	6.152	3.135	5.362
	<i>Phalacrocorax carbo</i>	18.221	12.642	4.746	7.037
	<i>Podiceps cristatus</i>	15.659	24.773	21.236	1.217
	<i>Podiceps nigricollis</i>	17.368	14.64	12.134	0.404
	<i>Tachybaptus ruficollis</i>	41.975	11.036	6.371	1.413
Fishing birds	<i>Chlidonias hybrida</i>	16.337	4.561	4.971	1.405
	<i>Chlidonias niger</i>	9.537	5.275	10.541	0.752
	<i>Larus audouinii</i>	47.361	2.691	4.454	0.073
	<i>Larus fuscus</i>	31.75	7.892	5.572	1.37
	<i>Larus genei</i>	47.36	8.733	2.533	0.077
	<i>Larus michahellis</i>	52.495	7.884	5.515	1.068
	<i>Larus ridibundus</i>	31.521	9.573	7.819	3.634
	<i>Pandion haliaetus</i>	22.473	11.995	6.135	1.336
	<i>Sterna albifrons</i>	13.825	5.643	5.192	0.668
	<i>Sterna caspia</i>	27.511	8.422	7.992	0.196
	<i>Sterna nilotica</i>	3.446	7.304	6.849	4.377
	<i>Sterna sandvicensis</i>	28.915	4.605	13.361	0
	Large wading birds	<i>Ardea cinerea</i>	13.092	10.927	7.985
<i>Ardea purpurea</i>		11.378	7.743	9.456	2.759
<i>Ardeola ralloides</i>		24.941	3.395	9.633	3.201
<i>Bubulcus ibis</i>		23.211	8.265	12.022	1.182
<i>Ciconia ciconia</i>		25.669	8.567	7.091	3.068
<i>Egretta alba</i>		5.999	11.578	11.138	5.087
<i>Egretta garzetta</i>		19.579	4.524	12.696	20.124
<i>Ixobrychus minutus</i>		19.448	2.817	1.796	1.251
<i>Nycticorax nycticorax</i>		40.809	6.04	4.834	1.978
<i>Phoenicopterus roseus</i>		14.868	14.099	17.723	4.479
<i>Platalea leucorodia</i>		15.374	8.94	10.458	4.479
<i>Plegadis falcinellus</i>		8.241	10.075	6.628	3.393
Raptors		<i>Circus aeruginosus</i>	7.718	3.974	9.451
	<i>Milvus migrans</i>	10.274	3.622	18.979	0.72
	<i>Milvus milvus</i>	5.406	4.914	29.765	1.146
Small wading birds	<i>Actitis hypoleucos</i>	17.152	17.979	3.602	0.885
	<i>Arenaria interpres</i>	40.374	6.144	3.599	0.003
	<i>Calidris alba</i>	40.938	6.41	2.979	0.398
	<i>Calidris alpina</i>	43.372	6.24	5.861	0.607

	<i>Calidris ferruginea</i>	14.991	5.148	4.714	0.871
	<i>Calidris minuta</i>	26.007	10.719	2.983	2.393
	<i>Charadrius alexandrinus</i>	40.834	6.81	5.323	1.071
	<i>Charadrius dubius</i>	10.232	4.25	25.819	0.494
	<i>Charadrius hiaticula</i>	40.903	5.235	2.775	0.624
	<i>Gallinago gallinago</i>	12.865	2.326	10.07	2.215
	<i>Glareola pratincola</i>	10.976	11.008	9.353	1.994
	<i>Haematopus ostralegus</i>	17.213	3.265	1.77	0
	<i>Himantopus himantopus</i>	15.077	9.746	9.212	3.924
	<i>Limosa lapponica</i>	17.849	9.879	1.936	0
	<i>Limosa limosa</i>	17.41	9.3	13.009	3.477
	<i>Numenius arquata</i>	51.243	11.957	8.435	0.224
	<i>Numenius phaeopus</i>	37.902	10.006	11.704	0
	<i>Pluvialis squatarola</i>	57.143	9.466	4.549	0.228
	<i>Recurvirostra avosetta</i>	28.64	6.565	6.744	5.562
	<i>Tringa nebularia</i>	30.76	4.686	7.425	4.619
	<i>Tringa ochropus</i>	13.084	3.611	5.558	3.071
	<i>Tringa totanus</i>	44.234	4.71	5.687	5.049
	<i>Vanellus vanellus</i>	10.484	15.314	5.828	3.814
Vegetation gleaners	<i>Fulica atra</i>	45.872	8.467	5.38	3.268
	<i>Fulica cristata</i>	19.252	8.053	8.784	0.193
	<i>Gallinula chloropus</i>	47.495	6.079	3.5	1.61
	<i>Porphyrio porphyrio</i>	39.859	6.356	7.514	9.567

Boosted regression trees

Guild	Spp	Salinity	Depth	Isolation	Hydroperiod
Dabbling ducks	Anaacu	22.611	3.943	14.176	5.091
	Anacly	24.125	8.738	6.863	2.955
	Anacre	22.571	5.963	11.164	5.702
	Anapen	18.608	12.387	10.453	3.142
	Anapla	23.636	7.460	6.272	0.823
	Anastr	33.244	7.193	12.838	2.261
	Ansans	11.762	3.881	21.272	0.649
	Tadtad	30.819	14.244	13.281	1.285
Diving birds	Aytfer	14.887	12.344	13.724	1.750
	Netruf	8.940	28.720	24.999	1.778
	Oxyleu	35.626	6.152	3.135	5.362
	Phacar	18.221	12.642	4.746	7.037
	Podcri	15.659	24.773	21.236	1.217
	Podnig	17.368	14.640	12.134	0.404
	Tacruf	41.975	11.036	6.371	1.413
Fishing birds	Chlhyb	16.337	4.561	4.971	1.405
	Chlnig	9.537	5.275	10.541	0.752
	Laraud	47.361	2.691	4.454	0.073
	Larfus	31.750	7.892	5.572	1.370
	Largen	47.360	8.733	2.533	0.077
	Larmic	52.495	7.884	5.515	1.068
	Larrid	31.521	9.573	7.819	3.634
	Panhal	22.473	11.995	6.135	1.336
	Stealb	13.825	5.643	5.192	0.668
	Stecas	27.511	8.422	7.992	0.196
	Stenil	3.446	7.304	6.849	4.377
	Stesan	28.915	4.605	13.361	0.000
	Large wading birds	Ardcin	13.092	10.927	7.985
Ardpur		11.378	7.743	9.456	2.759
Ardral		24.941	3.395	9.633	3.201
Bubibi		23.211	8.265	12.022	1.182
Ciccic		25.669	8.567	7.091	3.068
Egralb		5.999	11.578	11.138	5.087
Egrgar		19.579	4.524	12.696	20.124
Ixomin		19.448	2.817	1.796	1.251
Nycnyc		40.809	6.040	4.834	1.978
Phoros		14.868	14.099	17.723	4.479
Plaleu		15.374	8.940	10.458	4.479
Plefal		8.241	10.075	6.628	3.393
Raptors		Ciraer	7.718	3.974	9.451
	Milmig	10.274	3.622	18.979	0.720
	Milmil	5.406	4.914	29.765	1.146
Small wading birds	Acthyp	17.152	17.979	3.602	0.885
	Areint	40.374	6.144	3.599	0.003
	Calalb	40.938	6.410	2.979	0.398
	Calalp	43.372	6.240	5.861	0.607

	Calfer	14.991	5.148	4.714	0.871
	Calmin	26.007	10.719	2.983	2.393
	Chaale	40.834	6.810	5.323	1.071
	Chadub	10.232	4.250	25.819	0.494
	Chahia	40.903	5.235	2.775	0.624
	Galgal	12.865	2.326	10.070	2.215
	Glapra	10.976	11.008	9.353	1.994
	Haeost	17.213	3.265	1.770	0.000
	Himhim	15.077	9.746	9.212	3.924
	Limlap	17.849	9.879	1.936	0.000
	Limlim	17.410	9.300	13.009	3.477
	Numarq	51.243	11.957	8.435	0.224
	Numpha	37.902	10.006	11.704	0.000
	Plusqu	57.143	9.466	4.549	0.228
	Recavo	28.640	6.565	6.744	5.562
	Trineb	30.760	4.686	7.425	4.619
	Trioeh	13.084	3.611	5.558	3.071
	Tritot	44.234	4.710	5.687	5.049
	Vanvan	10.484	15.314	5.828	3.814
Vegetation gleaners	Fulatr	45.872	8.467	5.380	3.268
	Fulcri	19.252	8.053	8.784	0.193
	Galchl	47.495	6.079	3.500	1.610
	Porpor	39.859	6.356	7.514	9.567
