

**Appendix 2** to M. den Uijl 2024: Changes in the phenology of spring migrating passerines at Blåvand Bird Observatory in Denmark 1984-2021.  
– Dansk Orn. Tidsskr. 118: 142-148.

Tab A1. Change in timing of spring migration for LDM species combined and by migration strategy over 33 years (1984-2021) as results of mixed effects models. Slope represents days per year change for early (95% of population remaining to be caught), median (50% of population remaining to be caught) and late (5% of the population remaining) population arrival. Positive values correspond to delayed departure.

Significance level: \* = P < 0.05, \*\* = P < 0.005, \*\*\* = P < 0.0005.

*Ændring i timingen af forårstrækket hos langdistanctrækkende småfugle i forhold til deres trækstrategi over 33 år (1984-2021) analyseret ved hjælp af 'mixed effects models', hvor hældningen (B) repræsenterer den daglige årlige ændring for tidlig (95 % af population mangler at blive fanget), median (50 % af population mangler at blive fanget) og sen (5 % af population mangler at blive fanget) populationsankomst. Positive værdier svarer til forsinket afgang fra Blåvand.*

Species	Years (N)	Birds (N)	First 5% on year			First 5% on winter NAO			Median on year			Median on winter NAO			Last 5% on year			Last 5% on winter NAO		
			B	R <sup>2</sup>	P	B	R <sup>2</sup>	P	B	R <sup>2</sup>	P	B	R <sup>2</sup>	P	B	R <sup>2</sup>	P	B	R <sup>2</sup>	P
Common Redstart	28	1384	-0.252	0.190	0.020*	-1.296	0.071	0.172	-0.050	0.013	0.566	0,007	0.000	0.993	0.227	0.087	0.128	1.448	0.050	0.255
Common Whitethroat	26	980	-0.175	0.020	0.489	-1.304	0.024	0.446	-0.094	0.032	0.381	-0.953	0.073	0.183	0.220	0.114	0.092	-1.062	0.058	0.236
Garden Warbler	18	611	0.305	0.171	0.088	-2.087	0.138	0.130	0.219	0.221	0.049*	-1.047	0.087	0.236	0.165	0.100	0.200	-0.653	0.027	0.514
Icterine Warbler	9	271	0.478	0.245	0.175	0.480	0.007	0.834	0.234	0.786	0.001**	0.327	0.042	0.597	0.377	0.738	0.003**	0.713	0.072	0.485
Lesser Whitethroat	32	1728	-0.118	0.008	0.634	2.164	0.046	0.237	-0.199	0.160	0.023*	-0.324	0.008	0.637	0.243	0.092	0.091	0.252	0.002	0.820
European Pied Flycatcher	9	274	-0.277	0.052	0.554	-2.164	0.050	0.562	-0.492	0.563	0.020*	-1.810	0.120	0.361	-0.164	0.061	0.521	-1.576	0.089	0.436
Willow Warbler	33	6118	-0.018	0.0003	0.930	-1.484	0.029	0.342	-0.121	0.071	0.135	-0.462	0.017	0.475	0.035	0.002	0.807	-1.527	0.060	0.171

Tab. A2. Change in timing of spring migration for SDM species combined and by migration strategy over 33 years (1984-2021) as results of mixed effects models. Slope represents days per year change for early (95% of population remaining to be caught), median (50% of population remaining to be caught) and late (5% of the population remaining) population arrival. Positive values correspond to delayed departure. Significance level: \* = P < 0.05, \*\* = P < 0.005, \*\*\* = P < 0.0005.

*Ændring i timingen af forårstrækket hos kortdistanctrækkende småfugle i forhold til deres trækstrategi over 33 år (1984-2021) analyseret ved hjælp af 'mixed effects models', hvor hældningen (B) repræsenterer den daglige årlige ændring for tidlig (95 % af population mangler at blive fanget), median (50 % af population mangler at blive fanget) og sen (5 % af population mangler at blive fanget) populationsankomst. Positive værdier svarer til forsinkel afgang fra Blåvand.*

Species	Years (N)	Birds (N)	First 5% on year			First 5% on winter NAO			Median on year			Median on winter NAO			Last 5% on year			Last 5% on winter NAO		
			B	R <sup>2</sup>	P	B	R <sup>2</sup>	P	B	R <sup>2</sup>	P	B	R <sup>2</sup>	P	B	R <sup>2</sup>	P	B	R <sup>2</sup>	P
Common Blackbird	33	3792	-0.487	0.299	0.001**	-2.279	0.106	0.065	-0.242	0.121	0.048*	-1.807	0.109	0.061	-0.153	0.011	0.554	-2.827	0.063	0.158
Eurasian Blackcap	29	1347	-0.359	0.268	0.004**	-1.041	0.037	0.317	-0.135	0.068	0.173	-0.703	0.030	0.366	0.453	0.199	0.015	1.458	0.034	0.339
Eurasian Chaffinch	33	1828	-0.628	0.393	0.000***	-1.989	0.064	0.156	-0.104	0.021	0.421	-1.014	0.032	0.319	0.465	0.237	0.004**	-1.041	0.019	0.441
Common Chiffchaff	33	3711	-0.207	0.055	0.187	-3.075	0.197	0.010**	-0.208	0.124	0.044*	-0.915	0.039	0.272	-0.033	0.001	0.831	-1.432	0.046	0.233
Dunnock	33	2915	-0.318	0.148	0.027*	-2.546	0.153	0.024*	-0.037	0.005	0.701	-1.097	0.069	0.140	0.407	0.066	0.149	-0.500	0.002	0.824
Goldcrest	24	1743	-0.296	0.132	0.081	-4.300	0.407	0.001***	-0.178	0.075	0.195	-2.686	0.249	0.013*	-0.146	0.013	0.596	-2.306	0.047	0.308
Common Linnet	27	908	0.1836	0.065	0.198	-0.885	0.024	0.437	0.344	0.271	0.005*	-0.753	0.021	0.473	0.461	0.466	0.000***	-0.727	0.019	0.498
Redpoll	32	3196	-0.318	0.069	0.140	-2.217	0.054	0.191	-0.072	0.008	0.621	0.011	0.000	0.992	0.224	0.105	0.066	-0.502	0.009	0.608
European Robin	33	4269	-0.258	0.102	0.075	-2.418	0.144	0.032*	-0.088	0.034	0.313	0.058	0.000	0.933	0.016	0.001	0.891	-0.085	0.000	0.926
Song Thrush	23	749	-0.487	0.299	0.001**	0.094	0.000	0.949	-0.242	0.121	0.047*	0.335	0.004	0.769	-0.153	0.358	0.554	3.607	0.088	0.169
Eurasian Wren	19	582	-0.583	0.147	0.105	0.949	0.157	0.093	-0.034	0.002	0.841	-0.881	0.047	0.375	-0.110	0.006	0.751	-0.540	0.004	0.794

The grouping of short-distance migrants (SDM) and long-distance migrants (LDM) analysed in this study.

*Indeling af småfuglene i kort- (SDM) og langdistance-trækkere (LDM).*

Common name	Scientific name	SDM or LDM
Eurasian Wren	<i>Troglodytes troglodytes</i>	SDM
Dunnock	<i>Prunella modularis</i>	SDM
European Robin	<i>Erithacus rubecula</i>	SDM
Common Blackbird	<i>Turdus merula</i>	SDM
Song Thrush	<i>Turdus philomelos</i>	SDM
Redwing	<i>Turdus iliacus</i>	SDM
Common Chiffchaff	<i>Phylloscopus collybita</i>	SDM
Goldcrest	<i>Regulus regulus</i>	SDM
Eurasian Chaffinch	<i>Fringilla coelebs</i>	SDM
Common Linnet	<i>Carduelis cannabina</i>	SDM
Eurasian Blackcap	<i>Sylvia atricapilla</i>	SDM
Common Redstart	<i>Phoenicurus phoenicurus</i>	LDM
Icterine Warbler	<i>Hippolais icterina</i>	LDM
Lesser Whitethroat	<i>Currucà curruca</i>	LDM
Common Whitethroat	<i>Currucà communis</i>	LDM
Garden Warbler	<i>Sylvia borin</i>	LDM
Willow Warbler	<i>Phylloscopus trochilus</i>	LDM
European Pied Flycatcher	<i>Ficedula hypoleuca</i>	LDM

The status of Blackcap has been altered to SDM because this species winters north of the Sahara (Telleria *et al.* 2013). This is the only change made from Jonzén *et al.* (2006).