

# Breeding in an agricultural landscape: conservation actions increase nest survival in a ground-nesting bird

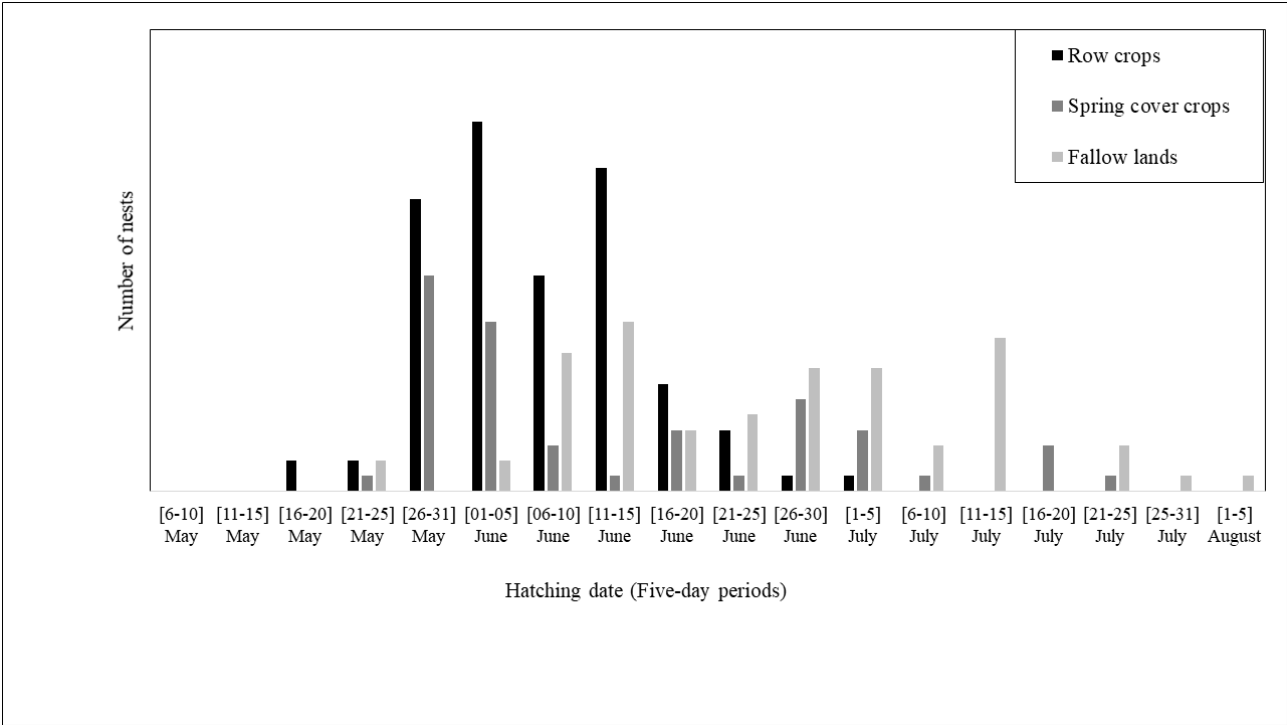
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SUPPLEMENTARY TABLE 1 Agricultural habitat types of the collared pratincole *Glareola pratincola* in Hungary.

Habitat	Characteristics of preparation and treatment	Examples
<b>Row crops</b>	Planted in wide rows, intensive land use with pesticides and row cultivation	corn, sunflower
<b>Spring cover crops</b>	Planted in narrow rows, less intense land use by chemicalization	Alexandra-clover, alfalfa, barley, millet, oat, phacelia, sorghum
<b>Fallow lands</b>	Created by disc ploughing, there aren't any disturbance by agricultural machineries	dry paddies, rested areas

SUPPLEMENTARY FIG. 1 Phenology of nest hatching events during a breeding season in various agricultural habitats (n=212).



SUPPLEMENTARY TABLE 2 Number of hatched nests, proportion of exposure days, daily and total nest survival probabilities during the study period.

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	<i>Mean daily nest survival rate</i>	
<b>Row crops</b>	No. Nests	14	9	3	21	24	12	17	17	9	26	0.94
	No. of hatched nests	0	5	0	10	18	8	12	8	9	24	
	Exposure (days)	139.5	142.5	10	216.5	309	170.5	215.5	192.5	136	356	
	Daily nest survival	0.9	0.97	0.7	0.95	0.98	0.98	0.98	0.95	1	0.99	
	Total nest survival (%)	12.1	57	< 0.01	35.3	67.6	62.2	62.3	38.6	100	89.4	
<b>Spring cover crops</b>	No. Nests	7	3	6	8	15	10	2	1	16	4	0.93
	No. of hatched nests	2	2	3	7	7	9	2	0	15	3	
	Exposure (days)	33	40.5	47	90.5	99	170.5	36	3	185.5	32.5	
	Daily nest survival	0.85	0.98	0.94	0.99	0.92	0.99	1	0.67	0.99	0.97	
	Total nest survival (%)	< 0.01	60.7	22.3	80.1	18.5	88.9	100	< 0.01	89.8	52.5	
<b>Fallow lands</b>	No. Nests	3	4	5	9	7	27	15	3	8	10	0.97
	No. of hatched nests	1	4	5	7	5	20	12	2	5	8	
	Exposure (days)	30	6	79	56.5	70	274	135.5	50.5	50	168.5	
	Daily nest survival	0.93	1	1	0.96	0.97	0.97	0.98	0.98	0.94	0.99	
	Total nest survival (%)	25.2	100	100	48	56	59.6	64	67	29.4	78.9	

SUPPLEMENTARY TABLE 3 Nest fates, exposure days, daily and total nest survival rate probabilities of Collared Pratincoles.

Year	Hatched (%)	Predated (%)	Abandoned (%)	Flooded (%)	Unknown (%)	Agricultural activities (%)	Exposure (days)	Daily nest survival rate	Total nest survival (%)
2012	12	71	0	17	0	0	202.5	0.9	11.2
2013	68	12	14	6	0	0	189	0.97	52.5
2014	57	14	7	22	0	0	136	0.96	40.6
2015	63	26	11	0	0	0	363.5	0.96	45.6
2016	66	9	4	17	2	2	478	0.97	50.6
2017	76	16	8	0	0	0	615	0.98	67.4
2018	76	21	3	0	0	0	387	0.98	65.9
2019	48	24	19	9	0	0	246	0.96	40.1
2020	88	3	9	0	0	0	371.5	0.99	80.5
2021	88	7	5	0	0	0	557	0.99	83.5