

## SUPPLEMENTARY ELECTRONIC MATERIAL

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### THREE DECADES OF CRIMES AND MISDEMEANOURS IN THE NEST BOX LIFE OF EUROPEAN PIED FLYCATCHERS *FICEDULA HYPOLEUCA*

TRES DÉCADAS DE CRÍMENES Y USURPACIONES DE NIDOS EN LA VIDA DE LOS NIDALES DEL PAPAMOSCAS  
CERROJILLO *FICEDULA HYPOLEUCA*

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## APPENDIX 1

TABLE A1

Number of nests (successful incubation onsets) of all species occupying nest boxes in the studied habitats, an oakwood and a pinewood, over the entire study period (oakwood: 1984–2018; pinewood: 1988–2018); years 2002-2003 omitted due to incomplete sampling; dashes (-) indicate absence of the species as a breeder; \* data for Blue Tits that year were lost, see Potti (2009); \*\* abundant breeder in the oakwood but does not occupy nest boxes in that habitat.

*[Número de nidos de cada especie que ocupó cajas nido en los dos bosques a lo largo del periodo considerado (robleal: 1984-2018; pinar: 1988-2018.)*

Number of nests								
<u>Year</u>	<u>Habitat</u>	<u>Pied Flycatcher</u>	<u>Great Tit</u>	<u>Blue Tit</u>	<u>Coal Tit</u>	<u>Crested Tit</u>	<u>Nuthatch</u>	<u>Treecreeper **</u>
1984	Oak	15	0	27	-	-	0	
1985	Oak	34	0	23	-	-	0	
1986	Oak	37	1	16	-	-	0	
1987	Oak	56	2	19	-	-	0	
1988	Oak	64	0	*	-	-	0	
1989	Oak	88	8	31	-	-	1	
1990	Oak	80	3	13	-	-	3	
1991	Oak	75	3	9	-	-	0	
1992	Oak	85	2	10	-	-	0	
1993	Oak	83	3	13	-	-	1	

1994	Oak	76	5	14	-	-	0	
1995	Oak	73	1	0	-	-	0	
1996	Oak	75	1	4	-	-	0	
1997	Oak	61	0	7	-	-	0	
1998	Oak	78	1	13	-	-	0	
1999	Oak	74	0	12	-	-	0	
2000	Oak	71	0	17	-	-	1	
2001	Oak	59	1	14	-	-	0	
2004	Oak	70	1	21	-	-	2	
2005	Oak	87	0	15	-	-	1	
2006	Oak	90	0	13	-	-	1	
2007	Oak	96	0	23	-	-	0	
2008	Oak	92	3	42	-	-	3	
2009	Oak	94	0	18	-	-	1	
2010	Oak	92	0	25	-	-	0	
2011	Oak	95	1	30	-	-	2	
2012	Oak	81	0	19	-	-	0	
2013	Oak	93	0	12	-	-	4	
2014	Oak	97	0	15	-	-	2	
2015	Oak	93	2	24	-	-	1	
2016	Oak	101	2	14	-	-	2	
2017	Oak	96	1	15	-	-	1	
2018	Oak	107	2	11	-	-	2	
1988	Pine	2	1	3	0	0	0	0
1989	Pine	3	3	2	2	1	1	2
1990	Pine	4	1	2	2	1	1	1
1991	Pine	13	3	2	1	3	2	1
1992	Pine	20	0	3	1	4	1	2
1993	Pine	35	1	4	2	2	1	1
1994	Pine	35	0	4	4	2	1	2
1995	Pine	38	1	3	5	3	1	2

1996	Pine	31	2	1	3	3	0	1
1997	Pine	37	1	4	6	6	0	1
1998	Pine	33	4	2	7	3	0	3
1999	Pine	31	0	4	7	2	0	1
2000	Pine	34	3	6	8	1	0	1
2001	Pine	34	4	3	6	1	1	1
2004	Pine	37	0	1	3	0	0	0
2005	Pine	43	3	3	3	2	0	1
2006	Pine	41	1	3	2	1	0	0
2007	Pine	56	3	4	4	3	1	1
2008	Pine	56	3	8	6	6	1	1
2009	Pine	52	3	1	3	2	0	0
2010	Pine	52	0	1	6	3	1	0
2011	Pine	52	0	5	5	4	0	0
2012	Pine	53	0	4	3	9	1	0
2013	Pine	49	0	6	5	1	2	0
2014	Pine	55	1	6	7	5	2	1
2015	Pine	55	4	8	3	4	2	0
2016	Pine	56	3	7	2	4	2	0
2017	Pine	65	3	6	5	3	1	1
2018	Pine	68	2	1	0	1	0	0

TABLE A2

Details of individual Pied Flycatchers found killed inside nest boxes during a 31-year study in montane forests in central Spain. The species whose nest box was usurped is under the 'Nest Box Owner' column'; dashes (-) stand for an empty, previously undefended/unoccupied nest box. Victim age in years; numbers in *italics* denote estimated age of immigrants, with ageing criteria taken from Potti & Montalvo (1991b); † symbols beside 'Nest Box Id.' indicate that the nest box was later used for breeding by the presumed killer individual.

*[Detalles sobre los papamoscas cerrojillos encontrados 'asesinados' en el interior de los nidales a lo largo de 31 años de estudio en bosques montanos en España central.]*

<b>Year</b>	<b>Subarea</b>	<b>Nest Box Id.</b>	<b>Nest Box Owner</b>	<b>Victim Age</b>	<b>Victim Sex</b>	<b>Culprit</b>
1989	Oakwood	162	-	2	male	Great Tit
1996	Oakwood	D5	-	1	male	Great Tit
1998	Oakwood	80	-	1	male	Great Tit
1999	Oakwood	31 †	-	2	male	Pied Flycatcher
1999	Oakwood	107	Pied Flycatcher	3	male	Great Tit
1999	Oakwood	50	-	2	female	Great Tit
1999	Oakwood	D12	-	3	male	Great Tit
2000	Oakwood	67	-	4	male	Great Tit
2000	Oakwood	111	Pied Flycatcher	4	male	Great Tit
2002	Oakwood	89	-	3	male	Pied

2003	Oakwood	23	Pied Flycatcher	2	male	Flycatcher* unknown
2004	Oakwood	45	-	2	male	Great Tit
2005	Oakwood	E4	-	2	male	Great Tit
2005	Oakwood	D9	Pied Flycatcher	3	male	Pied Flycatcher
2005	Pinewood	10	Pied Flycatcher	2	male	Great Tit
2006	Oakwood	90	-	2	male	Great Tit
2006	Oakwood	31 †	Pied Flycatcher	2	male	Pied Flycatcher
2006	Oakwood	D1 †	Pied Flycatcher	2	male	Nuthatch
2006	Oakwood	D3	-	2	female	Great Tit
2006	Oakwood	50	-	1	female	Great Tit
2007	Oakwood	44	Great Tit/Pied Flycatcher	5	female	Great Tit/Pied Flycatcher **
2009	Oakwood	27	-	3	male	Great Tit
2009	Oakwood	52 †	-	2	male	Pied Flycatcher
2010	Oakwood	D13	-	2	male	Great Tit
2011	Oakwood	E4	Pied Flycatcher	3	male	Nuthatch/Pied Flycatcher
2011	Oakwood	85 †	-	3	male	Pied Flycatcher
2012	Oakwood	99 †	-	3	male	Pied Flycatcher
2013	Oakwood	33 †	Pied Flycatcher	1	male	Pied Flycatcher

2015	Pinewood	40 †	Coal Tit/Pied Flycatcher	1	male	Pied Flycatcher***
2017	Oakwood	D3	-	2	male	Great Tit
2017	Pinewood	A	Pied Flycatcher	2	male	Pied Flycatcher****

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### Notes

\* Found injured inside the nest box after an approaching field worker saw an unidentified male Pied Flycatcher departing the nest box.

\*\* Killed in nest box previously containing 'Great Tit moss', then with Pied Flycatcher nest material; hence culprit uncertain. After the killing, a Pied Flycatcher pair bred successfully in this nest box.

\*\*\* An incubating female Coal Tit was killed by a male Pied Flycatcher; a male Pied Flycatcher was then found killed in the same nest box two days later; presumably, both birds were killed by the male Pied Flycatcher that nested there afterwards.

\*\*\*\* Described in main text, culprit captured and identified (ring KH0473).