

Supplementary table S1. Number of hibernating bats per species in the 18 monitored hibernation sites between 1986–2020 in northern Limburg. Abbreviations: *Mdau* = *Myotis daubentonii*, *Mnat* = *Myotis nattereri*, *Paur* = *Plecotus auritus*, *Paus* = *Plecotus austriacus*, *Pl. sp.* = *Plecotus* sp., *Eser* = *Eptesicus serotinus*, *Mb/m* = *Myotis brandtii/mystacinus*, and *i* = species unknown. Hibernation sites that were not accessible to bats that year are marked with x. In case no survey was carried out, this is displayed as – (for trend analysis, these missing counts were imputed with rtrim). Site number 9 was excluded since no bats were found hibernating here. Site numbers: see table 1.

Site number	Species / year	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total	
1	<i>Mdau</i>	-	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	0	0	4		
	<i>Mnat</i>	-	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
	<i>Paur</i>	-	-	-	-	-	-	0	0	0	0	2	4	2	3	0	2	1	0	4	3	4	3	5	7	6	8	0	3	2	1	0	1	0	1	0	66	
2	<i>Mdau</i>	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	4	7	6	2	1	3	6	8	4	3	7	4	2	7	5	13	7	8	98	
	<i>Mnat</i>	0	-	0	0	0	1	1	1	1	0	1	2	1	2	0	5	0	3	0	4	0	4	3	5	12	4	10	3	2	1	4	1	2	2	75		
	<i>Paur</i>	3	-	4	0	0	5	6	1	3	0	0	4	0	0	1	2	1	3	0	0	0	0	0	4	2	2	0	1	0	0	1	1	1	0	0	45	
	<i>Paus</i>	0	-	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
	<i>Mb/m</i>	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
<i>i</i>	0	-	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	0	0	2	6	5	3	3	0	0	0	3	3	7	39	
3	<i>Mdau</i>	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	<i>Paur</i>	-	-	-	-	-	0	0	1	1	1	2	2	0	1	1	0	1	3	0	1	3	1	2	6	3	6	0	3	1	3	0	2	0	0	0	2	46
4	<i>Mdau</i>	0	0	0	0	0	0	0	0	0	0	0	0	-	0	0	1	1	1	0	5	4	7	7	6	3	2	0	1	2	7	7	8	6	5	6	79	
	<i>Mnat</i>	1	1	2	5	0	0	0	0	0	1	0	0	-	3	3	3	4	4	4	8	5	3	3	11	10	17	5	11	10	7	8	12	10	15	15	181	
	<i>Paur</i>	3	0	0	0	0	0	0	0	0	2	1	0	-	1	2	3	3	2	1	0	2	1	2	3	3	4	1	2	1	3	1	3	3	3	1	51	
	<i>Mb/m</i>	0	0	0	0	0	0	0	0	0	0	1	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	<i>i</i>	0	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	1	0	1	1	1	0	0	0	0	0	0	1	0	1	6
5	<i>Mdau</i>	1	-	6	6	5	5	0	5	4	2	1	5	4	5	11	6	7	4	7	7	4	6	8	4	6	1	7	1	4	5	3	4	2	1	151		
	<i>Mnat</i>	-	0	0	1	3	2	4	5	5	4	4	2	6	7	8	13	4	7	7	12	4	6	11	10	8	6	13	12	11	9	16	13	11	15	239		
	<i>Paur</i>	-	-	6	3	1	5	2	5	8	6	3	2	2	10	1	0	4	1	1	1	1	0	1	0	0	3	2	1	0	1	0	0	1	0	0	71	
	<i>Pl. sp.</i>	-	-	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	<i>Eser</i>	-	-	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	<i>Mb/m</i>	-	-	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
<i>i</i>	-	-	0	1	0	3	2	0	0	0	0	1	1	1	3	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	1	16
6	<i>Mdau</i>	-	-	-	8	4	1	4	7	7	3	6	5	2	6	2	3	5	4	3	4	4	6	8	3	1	0	0	1	6	1	0	4	1	0	2	111	
	<i>Mnat</i>	-	-	-	0	0	0	0	1	0	1	2	0	0	1	2	0	1	2	6	4	4	1	1	1	0	2	1	2	2	2	3	2	4	5	2	1	52
	<i>Paur</i>	-	-	-	1	2	6	2	0	0	1	2	3	1	0	0	0	0	0	4	3	1	1	1	0	0	0	1	0	0	0	1	0	0	1	0	1	31
	<i>Mb/m</i>	-	-	-	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7	<i>Paur</i>	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	9
	<i>Mnat</i>	-	0	-	-	-	-	-	0	0	0	0	0	-	-	-	0	-	-	0	0	-	0	0	0	-	-	-	-	-	-	-	-	-	0	1	0	1
8	<i>Paur</i>	-	0	-	-	-	-	-	0	0	0	0	0	-	-	-	0	-	-	0	0	-	0	0	0	-	-	-	-	-	-	-	-	-	0	1	0	1
	<i>Paur</i>	-	0	-	-	-	-	-	0	0	0	0	0	-	-	-	0	-	-	0	0	-	0	0	0	-	-	-	-	-	-	-	-	-	0	1	1	2
10	<i>Paur</i>	-	-	0	-	0	2	1	0	0	0	1	1	0	0	0	1	1	1	0	-	2	-	2	2	0	4	2	2	2	1	0	2	0	2	0	2	29
	<i>Pl. sp.</i>	-	-	0	-	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11	<i>Mdau</i>	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	4	7	4	1	0	5	1	2	2	2	3	5	3	3	3	45	
	<i>Mnat</i>	-	0	0	0	0	0	0	1	0	2	1	1	3	2	3	6	0	3	5	6	4	4	3	19	15	5	8	2	3	5	7	4	3	4	3	124	
	<i>Paur</i>	-	0	1	0	0	0	0	1	3	4	6	6	6	9	3	5	5	5	4	0	2	0	0	0	1	2	0	1	0	0	0	1	0	0	0	0	65
	<i>Paus</i>	-	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	<i>i</i>	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
12	<i>Mdau</i>	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	5	4	2	10	7	8	11	15	69	
	<i>Mnat</i>	0	0	0	0	0	0	0	-	0	0	0	0	1	4	3	2	3	2	4	6	6	2	10	10	8	16	12	13	12	19	28	30	38	38	232		
	<i>Paur</i>	1	2	2	7	5	2	3	6	-	6	14	13	7	13	8	14	7	5	11	5	6	3	5	6	2	3	3	2	1	1	0	3	3	2	4	175	
	<i>i</i>	0	0	0	0	0	0	0	-	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
13	<i>Paur</i>	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	108
	<i>Mnat</i>	0	-	-	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	1	2	1	1	0	1	0	0	2	2	0	14	
14	<i>Paur</i>	2	-	-	3	3	-	1	3	1	0	0	0	1	2	0	1	2	2	3	3	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	29
	<i>Paur</i>	x	x	x	x	x	x	x	x	x	x	0	0	5	3	3	0	2	1	3	0	1	4	3	1	0	0	0	0	6	5	4	5	4	6	3	59	
16	<i>Paur</i>	-	2	-	1	0	0	0	1	-	-	-	-	-	-	0	0	0	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
	<i>Paur</i>	3	0	-	0	1	0	-	1	1	-	-	-	-	-	0	0	-	0	-	1	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	7
18	<i>Mdau</i>	0	2	0	0	0	0	0	0	0	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2	
	<i>Paur</i>	5	6	1	2	5	1	1	0	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	21	
Annual total	<i>Mdau</i>	1	2	6	14	9	6	4	12	11	5	7	10	6																								