

Table S2. Epidemiological studies of tick infestation in birds in Europe.

| Country | Tick Prevalence (%) | Area | Year | Capture Period (months) | Birds Captured (No.) | Bird Species (No.) | Birds Infested (No.) | Collected Ticks (No.) | Tick Species % all ticks | Tick Loads Ticks/infest. bird | Most Infested Bird Species | Reference |
|--------------------|---------------------|--------------------------|---------|-------------------------|----------------------|--------------------|----------------------|-----------------------|--|-------------------------------|---|------------------------------|
| Poland | 4.4 | 1 ornithological station | 2021 | 2 (autumn) | 3,903 | 55 | 173 | 335 | <i>I. ricinus</i> (80%) | 1.9 (335/173) | <i>Turdus philomelos</i> <i>Turdus merula</i> <i>Erithacus rubecula</i> | Zajac et al., 2022 [41] |
| Finland | N/A | 11 bird ringing | 2018 | 8 (spring-autumn) | 193 | 32 | | 430 | <i>I. ricinus</i> (98%) | 1.0 to 7.3 (bird species) | <i>Turdidae</i> <i>Erithacus rubecula</i> | Sormunen et al., 2022 [58] |
| Italy | N/A | 3 Islas | 2017-19 | 36 (spring seasons) | 48,500 | | | 2,344 | <i>Hyalomma</i> | | | Toma et al., 2021 [59] |
| Greece | 1.7 | 4 localities (North) | 2013 | 4 (summer, autumn) | 403 | 52 | 7 | 15 | <i>I. frontalis</i> <i>I. acuminatus</i> | 1-5 | <i>Turdus merula</i> <i>Erithacus rubecula</i> | Diakou et al., 2016 [39] |
| Germany | 3.0 | 25 (6 Federal States) | 2008-10 | 30 | 23,949 | 48 | 725 | 3,195 | <i>I. ricinus</i> <i>I. hexagonus</i> | 3.8 (3,195/838) | <i>Turdus merula</i> <i>Turdus philomelos</i> | Klaus et al., 2016 [40] |
| Portugal | N/A | 19 Counties | 2010-14 | 48 | 435 | 38 | | 1,349 | <i>I. frontalis</i> <i>I. ricinus</i> <i>Hyalomma</i> | | <i>Turdus merula</i> | Norte et al., 2015 [54] |
| Sweden | | 1 bird observatory | 2009 | | 5,365 | 65 | 748 | 1,335 | <i>Ixodes</i> spp. (83%) | 1.8 (1,335/748) | <i>Anthus trivialis</i> , <i>Luscinia luscinia</i> <i>Turdus merula</i> | Sandelin et al., 2015 [21] |
| Italy & Greece | | 2 isles | 2009-10 | 6 (spring) | 14,789 | | 463 | | <i>H. marginatum</i> | | | Wallmenius et al., 2014 [60] |
| Russia | 18.5 | Baltic region | 2009 | (spring) | 577 | 38 | 107 | 212 | <i>I. ricinus</i> <i>I. frontalis</i> <i>Hyalomma</i> | 0.4 (212/107) | <i>Erithacus rubecula</i> | Movila et al., 2013 [52] |
| Portugal | 32.4 – 16.7 | 2 mixed forest (West) | 2010-11 | 12 | 953 | 37 | | 1,122 | <i>I. ricinus</i> <i>I. frontalis</i> <i>H. punctata</i> | | <i>Turdus merula</i> <i>Sturnus unicolor</i> <i>Erithacus rubecula</i> | Norte et al., 2012 [46] |
| Scotland | | 1 area | 2007 | 7 (summer, autumn) | 1,229 | 22 | | 165 | <i>I. ricinus</i> | | <i>Turdus merula</i> | James et al., 2011 [51] |
| Czechia | 41.1 | 1 locality (Certak) | 2005 | 2 | 1,084 | | 446 | 2,240 | <i>I. ricinus</i> | 5.1 (2,240/562) | <i>Turdus merula</i> <i>Prunella modularis</i> <i>Turdus philomelos</i> | Dubska et al., 2009 [44] |
| Moldova | 31.9 | 1 forest reserve | 1995-97 | | 474 | 10 | 151 | 539 | <i>I. ricinus</i> (82%) | | Blackbirds | Movila et al., 2008 [50] |
| Slovakia & Czechia | 36.7 | 3 and 1 woodlands | 2001-02 | | 529 (345 & 184) | 40 | 194 | 1,461 | <i>I. ricinus</i> | | <i>Turdus merula</i> <i>Turdus philomelos</i> | Taragelova et a., 2008 [45] |
| Switzerland | 18.2 and 6.0 | 2 sites | 2002 | 5 (spring-autumn) | 1,270 | | 180 17 | 417 33 | <i>I. ricinus</i> (91%) | 2.3 (417/180) 1.9 (33/17) | <i>Erithacus rubecula</i> | Poupon et al., 2006 [53] |

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|------------------|------|----------------------|------|-------------------|--------|-----|-----|-------|-------------------|---------------|---|--------------------------------|
| Switzerland | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 6,136 | <i>I. ricinus</i> | N/A | <i>Erithacus rubecula</i> <i>Turdus merula</i> | Papadopoulos et al., 2001 [49] |
| Sweden & Denmark | 2.0 | 7 bird observatories | 1991 | 7 (spring-autumn) | 22,998 | 42 | 465 | 967 | <i>I. ricinus</i> | 2.1 (967/465) | | Olsen et al., 1995 [42] |
| Switzerland | 58.0 | 1 Lyme endemic area | 1988 | 6 (spring-autumn) | 178 | 20 | | 462 | <i>I. ricinus</i> | | <i>Erithacus rubecula</i> <i>Turdus philomelos</i> <i>Turdus merula</i> | Humair et al., 1993 [43] |

N/A = Not available (no data on birds ringing without ticks).

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