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2 **Supplementary Table S1.** List of hosts and their chewing lice for five target species occurring in reed beds in southwestern Slovakia: two  
 3 residents/short-distance migrants (*Acrocephalus melanopogon*, *Panurus biarmicus*) and three long-distance migrants (*Acrocephalus*  
 4 *scirpaceus*, *Acrocephalus schoenobaenus*, *Locustella luscinioides*). A = Amblycera: Menoponidae; I = Ischnocera: Philopteridae.

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Bird species	prevalence				mean abundance				mean intensity			
	2008	2009	2016	total	2008	2009	2016	total	2008	2009	2016	total
<i>Panurus biarmicus</i>	n=39	n=34	n=13	n=86								
A/	0	5.9	7.7		0	0.1	0.1		0	1.5	1.0	
Me												
nac												
ant												

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*hus*  
*sp.*  
*I/P*  
*ene*  
*nir*  
*mu*  
*s*  
*vise*  
*ndu*

s	84.6	64.7	84.6		10.0	9.3	3.6		11.8	14.4	4.3	
Tot al	84.6	64.7	84.6	<b>76.7</b>	10.0	9.4	3.7	<b>8.8</b>	11.8	14.5	4.4	<b>11.5</b>

***Acrocep***  
***halus***  
***melano***  
***pogon***

**n=28**

n=11	n=9	n=8										
I/P	100	100	100	<b>100</b>	6.0	5.1	5.8	<b>5.6</b>	6.0	5.1	5.8	<b>5.6</b>

*hil*  
*opt*  
*eru*  
*s*  
*acr*

*oc*  
*ep*  
*hal*  
*us*

**resident**  
**s/short-**  
**distance**  
**migrant**  
**s**

88.0                    72.1   90.5   **82.5**   9.1   8.5   4.5   **8.0**   10.4   11.8   4.9   **9.8**

***Acrocep***  
***halus***  
***scirpace***  
***us***

**n=433**

n=235                    n=149   n=49

A/                    7.7                    18.1   2.0                    0.4   1.0   0.1                    5.1   5.6   4.0

*Me*  
*na*  
*ca*  
*nth*  
*us*  
*cur*

*ucc  
ae  
l/B  
rue  
eli  
a*

sp. 0.9 2.0 0 0.03 0.03 0 3.0 1.3 0.0

*l/P  
hil  
opt  
eru  
s*

sp. 0.4 0.7 0 0.004 0.01 0 1.0 1.0 0

Tot 8.9 19.5 2.0 11.8 0.4 1.0 0.08 0.6 4.7 5.3 4.0 5.1  
al

***Acrocep***

***halus***

***schoeno***

***baenus***

n=284 n=51 n=28

A/ 6.3 17.6 0 0.7 2.3 0 10.5 13.2 0

*Me  
na*

**n=363**

ca  
nth  
us  
cur  
ucc  
ae  
I/B  
rue  
eli  
a  
va  
ne  
ki  
I/P  
hil  
opt  
eru  
s  
sp.  
Tot  
al

1.1	3.9	0	0.01	0.3	0	1.0	6.5	0			
0	2.0	0	0	0.02	0	0	1.0	0			
7.4	19.6	0	<b>8.5</b>	0.7	2.6	0	<b>0.9</b>	9.1	13.3	0	<b>10.5</b>

*Locustella luscinioides*

**n=110**

n=49

n=52

n=9

A/  
Me  
na  
ca  
nth  
us  
obr  
teli  
l/B  
rue  
eli  
a  
loc  
ust  
ell  
ae

22.4

11.5

22.2

0.7

0.8

1.2

3.2

6.7

5.5

4.1

1.9

11.1

0.8

0.6

0.1

20.5

31.0

1.0

Total	24.5	13.5	33.3	<b>20.0</b>	1.6	1.4	1.3	<b>1.4</b>	6.3	10.1	4.0	<b>7.2</b>
long-distance migrants	9.5	18.3	4.7	<b>11.5</b>	0.6	1.4	0.2	<b>0.8</b>	6.8	7.8	4.0	<b>7.1</b>

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12 **Supplementary Table S2.** Proportion of birds (%) in reed beds in southwestern Slovakia with a particular category of infestation of all chewing lice species  
13 combined on all parasitized birds during pre-breeding spring migration in April (n = 377), and also separately for *Penenirmus visendus* on parasitized target  
14 species *Panurus biarmicus* (n = 146).

	All chewing louse species on all host species* (n=283)	<i>Penenirmus visendus</i> on <i>Panurus biarmicus</i> * Total (n=146)	Female (n=51)	Male (n=93)
very light infestation (1–10 lice/host)	74.2	65.8	70.6	64.5
light infestation (11–20 lice/host)	16.3	21.9	19.6	21.5
medium infestation (21–30 lice/host)	4.2	6.2	7.8	5.4
heavy infestation (31–50 lice/host)	4.2	4.8	2.0	6.5
very heavy infestation (51–100 lice/host)	1.1	1.4	–	2.2

15 \* = sex was not noted for two birds

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21 **Supplementary Table S3.** List of individual retrapped birds examined in reed beds in southwestern Slovakia in two different periods and their chewing lice.

host / ring number	the first trap	chewing louse	retrap	chewing louse
<i>Acrocephalus melanopogon</i>				



S013921	14 April 2008	<i>Philopterus</i> (7 ex)	30 April 2009	<i>Philopterus</i> (10 ex)
S126012	19 April 2008	<i>Philopterus</i> (2 ex)	18 April 2009	<i>Philopterus</i> (6 ex)
<i>Acrocephalus scirpaceus</i>				
S068237	12 April 2008	–	20 April 2009	–
S013943	15 April 2008	–	19 April 2009	<i>Menacanthus</i> (30 ex)
S034279	15 April 2008	–	20 April 2009	–
S013405	17 April 2008	<i>Menacanthus</i> (4 ex)	27 April 2009	–
S126004	18 April 2008	<i>Menacanthus</i> (2 ex)	24 April 2009	–
S126040	21 April 2008	–	21 April 2009	–
S126069	22 April 2008	<i>Menacanthus</i> (4 ex)	28 April 2009	–
S126121	23 April 2008	–	22 April 2009	–
S126144	23 April 2008	–	29 April 2009	–
S126170	24 April 2008	–	29 April 2009	–
S074228	25 April 2008	–	22 April 2009	<i>Menacanthus</i> (1 ex)
S126221	25 April 2008	–	27 April 2009	–
S126307	29 April 2008	<i>Menacanthus</i> (2 ex)	22 April 2009	–
S126378	30 April 2008	–	20 April 2009	–
<i>Locustella luscinioides</i>				
S013899	13 April 2008	–	19 April 2009	<i>Brueelia</i> (31 ex)
S126209	25 April 2008	<i>Menacanthus</i> (6 ex)	21 April 2009	–
S068165	30 April 2008	–	19 April 2009	–
<i>Panurus biarmicus</i>				
S224021	9 July 2019	–	1 October 2019	–
S224036	9 July 2019	–	1 October 2019	<i>Penenirmus</i> (4 ex)
S224070	9 July 2019	<i>Penenirmus</i> (18 ex)	2 October 2019	–
S224132	10 July 2019	<i>Penenirmus</i> (12 ex)	2 October 2019	<i>Penenirmus</i> (11 ex)
S224136	10 July 2019	<i>Penenirmus</i> (3 ex)	2 October 2019	–
		<i>Menacanthus</i> (1 ex)		
S224154	10 July 2019	–	2 October 2019	–

22 ex = exemplars

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