

## Appendix 1

Host-parasite systems examined in studies used in the meta-analysis. See Supplementary material Appendix 2 for corresponding references.

Reference	Host sp.	Parasite taxon	Parasite sp.	Predation-mediated parasite?	log(OR)	SE
<b>Amphibian</b>						
1	<i>Hyla regilla</i>	Helminth	<i>Ribeiroia</i> sp.	Y	2.45	0.61
1	<i>Hyla regilla</i>	Helminth	<i>Alaria</i> sp.	Y	4.20	0.65
2	<i>Hyla versicolor</i>	Helminth	<i>Telorchis</i> sp.	N	0.65	1.17
3	<i>Rana aurora</i>	Microparasite (fungus)	<i>Candida humicola</i>	N	1.11	1.49
<b>Arthropod</b>						
4	<i>Gammarus pulex</i>	Helminth	<i>Pomphorhynchus laevis</i>	Y	0.87	0.94
5	<i>Asellus aquaticus</i>	Helminth	<i>Acanthocephalus lucii</i>	Y	0.94	0.21
6	<i>Hyalella azteca</i>	Helminth	<i>Leptorhynchoides thecatus</i>	Y	0.47	2.91
7	<i>Artemia</i> sp.	Helminth	<i>Hymenolepididae</i>	Y	-1.29	0.52
8	<i>Paracalliope novizealandiae</i>	Helminth	<i>Maritrema novaezelandensis</i>	Y	0.80	0.43
9	<i>Corophium arenarium</i>	Helminth	<i>Microphallus claviformis</i>	Y	-0.13	1.58
9	<i>Corophium volutator</i>	Helminth	<i>Microphallus claviformis</i>	Y	0.72	1.34
10	<i>Cyclops vernalis</i>	Helminth	<i>Eubothrium salvelini</i>	Y	2.18	0.47
11	<i>Tigriopus californicus</i>	Helminth	<i>Lacistorhynchus tenuis</i>	Y	2.57	0.51
12	<i>Gammarus duebeni</i>	Microparasite (fungus)	<i>Nosema</i> sp.	N	0.18	0.20
13	<i>Gammarus duebeni</i>	Microparasite (fungus)	<i>Nosema granulosis</i>	N	-0.86	0.96
14	<i>Anopheles gambiae sansu lato</i>	Microparasite (protozoan)	<i>Plasmodium falciparum</i>	N	0.17	0.20
<b>Bird</b>						
15	<i>Diomedea melanophrrys</i>	Arthropod	<i>Ixodes uriae</i>	N	2.14	0.47
16	<i>Apus melba</i>	Arthropod	<i>Crataerina melbae</i>	N	1.19	0.72
17	<i>Petrochelidon pyrrhonota</i>	Arthropod	<i>Oeciacus vicarius</i>	N	1.38	1.40
18	<i>Hirundo pyrrhonota</i>	Arthropod	<i>Oeciacus vicarius</i>	N	0.28	0.42
19	<i>Hirundo pyrrhonota</i>	Arthropod	<i>Oeciacus vicarius, Argas cooleyi, Ornithodoros concanensis</i>	N	1.99	0.23
20	<i>Accipiter striatus</i>	Arthropod	<i>Philornis</i> sp.	N	1.99	0.55
21	<i>Parus major</i>	Arthropod	<i>Ceratophyllus gallinae</i>	N	0.51	0.23
22	<i>Diomeda chrysostoma</i>	Arthropod	<i>Ixodes uriae</i>	N	-1.10	0.84
23	<i>Phasianus colchicus</i>	Arthropod	<i>Ixodes ricinus</i>	N	0.80	0.34
24	<i>Phasianus colchicus</i>	Arthropod	<i>Ixodes ricinus</i>	N	0.00	0.19
25	<i>Oreoscoptes montanus</i>	Arthropod	<i>Protocalliphora braueri</i>	N	2.24	1.09
26	<i>Troglodytes aedon</i>	Arthropod	<i>Protocalliphora parorum, Dermanyssus hirundinis</i>	N	-0.21	2.03
27	<i>Ardeola ibis</i>	Arthropod	<i>Argas (Persicargas) robertsi</i>	N	1.33	0.29

28	<i>Ardeola ibis</i>	Arthropod	<i>Argas (Persicargas) robertsi</i>	N	1.56	1.02
29	<i>Pseudoseisura lophotes</i>	Arthropod	<i>Philornis</i> sp.	N	0.29	0.47
29	<i>Anumbius annumbi</i>	Arthropod	<i>Philornis</i> sp.	N	0.22	0.44
30	<i>Mimus saturninus</i>	Arthropod	<i>Philornis</i> sp.	N	2.07	0.58
31	<i>Sialia sialis</i>	Arthropod	<i>Protocalliphora</i> sp.	N	-0.66	0.76
31	<i>Iridoprocne bicolor</i>	Arthropod	<i>Protocalliphora</i> sp.	N	0.78	1.38
32	<i>Lagopus lagopus scoticus</i>	Helminth	<i>Trichostrongylus tenuis</i>	N	0.59	0.28
33	<i>Falco sparverius</i>	Microparasite (protozoan)	<i>Haemoproteus</i> sp.	N	-0.25	0.43
34	<i>Ficedula hypoleuca</i>	Microparasite (protozoan)	<i>Haemoproteus pallidus,</i> <i>Haemoproteus balmorali,</i> <i>Trypanosoma avium</i>	N	0.33	0.16
Fish						
35	<i>Cyprinodon tularosa</i>	Helminth	<i>Posthodiplostomum minimum</i>	Y	3.61	1.46
36	<i>Fundulus parvipinnis</i>	Helminth	<i>Euhaplorchis californiensis</i>	Y	3.96	1.03
37	<i>Oncorhynchus tshawytscha</i>	Microparasite (bacteria)	<i>Renibacterium salmoninarum</i>	N	1.48	0.56
Mammal						
38	<i>Microtus townsendii</i>	Arthropod	<i>Cuterebra grisea</i>	N	0.44	0.04
39	<i>Peromyscus leucopus</i>	Arthropod	<i>Cuterebra angustifrons</i>	N	-0.72	0.46
39	<i>Peromyscus leucopus</i>	Helminth	<i>Hymenolepis citelli</i>	N	0.50	0.38
40	<i>Lepus americanus</i>	Helminth	<i>Protostrongylus boughtoni,</i> <i>Nematodirus triangularis,</i> <i>Obeliscoides cuniculi</i>	N	0.55	0.29
41	<i>Ovis aries</i>	Helminth	<i>Teladorsagia circumcincta</i>	N	1.77	0.47
42	<i>Lepus americanus</i>	Helminth	<i>Dirofilaria scapiceps,</i> <i>Protostrongylus boughtoni</i> <i>Obeliscoides cuniculi,</i> <i>Nematodirus triangularis</i>	N	0.27	0.19
43	<i>Peromyscus maniculatus rubidus</i>	Microparasite (protozoan)	<i>Eimeria arizonensis</i>	N	0.96	1.53
Mollusc						
44	<i>Littorina littorea</i>	Helminth	<i>Cryptocotyle lingua</i>	N	0.84	0.22
45	<i>Bulinus globosus</i>	Helminth	<i>Schistosoma haematobium</i>	N	3.23	1.44
46	<i>Bulinus globosus</i>	Helminth	<i>Schistosoma haematobium</i>	N	2.27	0.78
46	<i>Bulinus pfeifferi</i>	Helminth	<i>Schistosoma haematobium</i>	N	2.54	0.58

## Appendix 2

Source references for studies used in the meta-analysis. Corresponding references for data sets listed in Appendix 1.

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Table A1. High-ranking ( $w_i > 0.01$ ) meta-regression models of among-study heterogeneity in parasite-associated mortality. The reduced model is included for comparison of remaining heterogeneity ( $I^2$ ).

Model	K	AIC <sub>c</sub>	$\Delta i$	$w_i$	$I^2$
1. Predation-borne + Host taxon + Latitude	10	7.068	0.000	0.612	0.677
2. Predation-borne + Host taxon + Latitude + Load type	11	10.618	3.550	0.104	0.680
3. Predation-borne + Host taxon	9	10.917	3.849	0.089	0.732
4. Predation-borne + Latitude	5	12.678	5.610	0.037	0.719
5. Host taxon + Latitude	9	13.552	6.484	0.024	0.713
6. Predation-borne + Host taxon + Latitude + Parasite taxon	12	13.650	6.582	0.023	0.691
7. Latitude + Study type	5	14.183	7.115	0.017	0.740
8. Predation-borne + Host taxon + Load type	10	14.219	7.151	0.017	0.736
9. Predation-borne + Latitude + Study type	6	14.341	7.273	0.016	0.721
10. Predation-borne + Latitude + Load type	6	15.125	8.057	0.011	0.713
Reduced model					0.800