

Supplementary Material

Review

A review of non-invasive sampling in wildlife disease and health research: what's new?

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Table S1. Number and percentage of papers published per topic.

Topic	N	%
Stress	67	24.63
Physiology	42	15.44
Virus	29	10.66
Helminths	20	7.35
Reproductive condition	18	6.62
Pollutants	14	5.15
Bacteria	14	5.15
Disease	13	4.78
Other	12	4.41
Fungi	8	2.94
Immunity	8	2.94
Endoparasites	8	2.94
Protozoa	8	2.94
Ectoparasites	6	2.20
Diet	5	1.83

Table S2. Number and percentage of papers published per biological material collected (21 NA removed).

Biological material collected	N	%
Faeces	126	50.00
Saliva and other body fluids	34	13.55
Hair-feathers-skin	25	9.96
Several	19	7.56
Imaging and remote sensing	22	8.76
Urine	19	7.56
Invertebrates	6	2.39

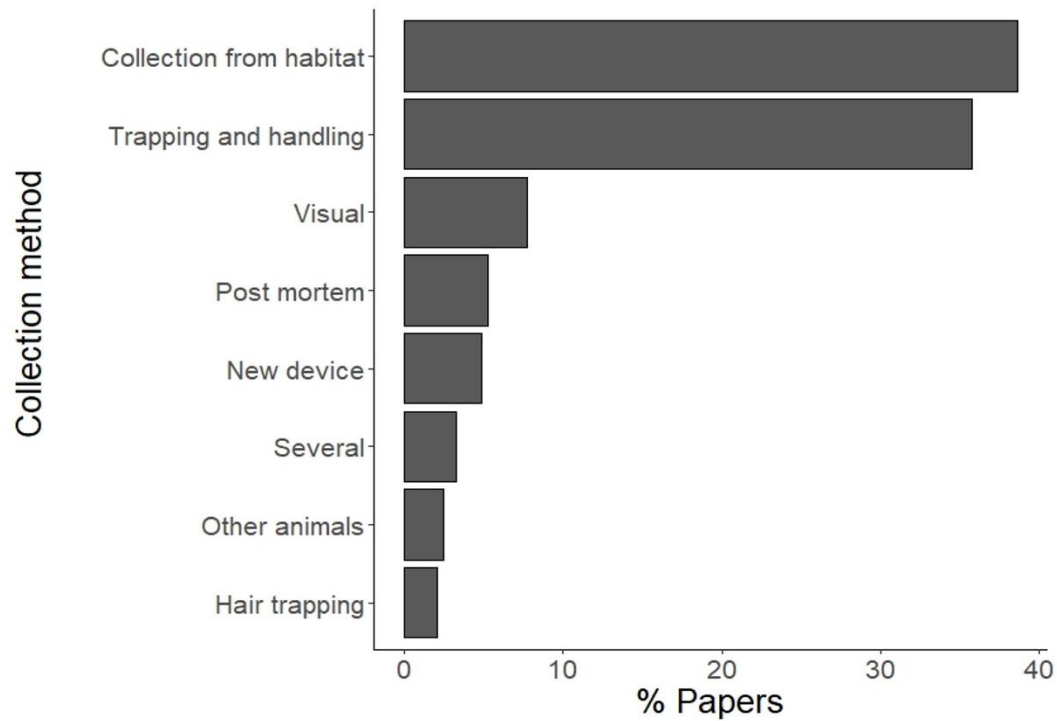


Figure S1. Percentage of published articles classified based on method used to collect samples.

Table S3. Number and percentage of papers published per biological material collection method (26 NA removed)

Biological material collection method	N	%
Collection from habitat	95	38.62
Trapping and handling	89	35.77
Visual	19	7.72
Post mortem	13	5.28
New device	12	4.87
Several	8	3.25
Other animals	6	2.43
Hair trapping	5	2.03

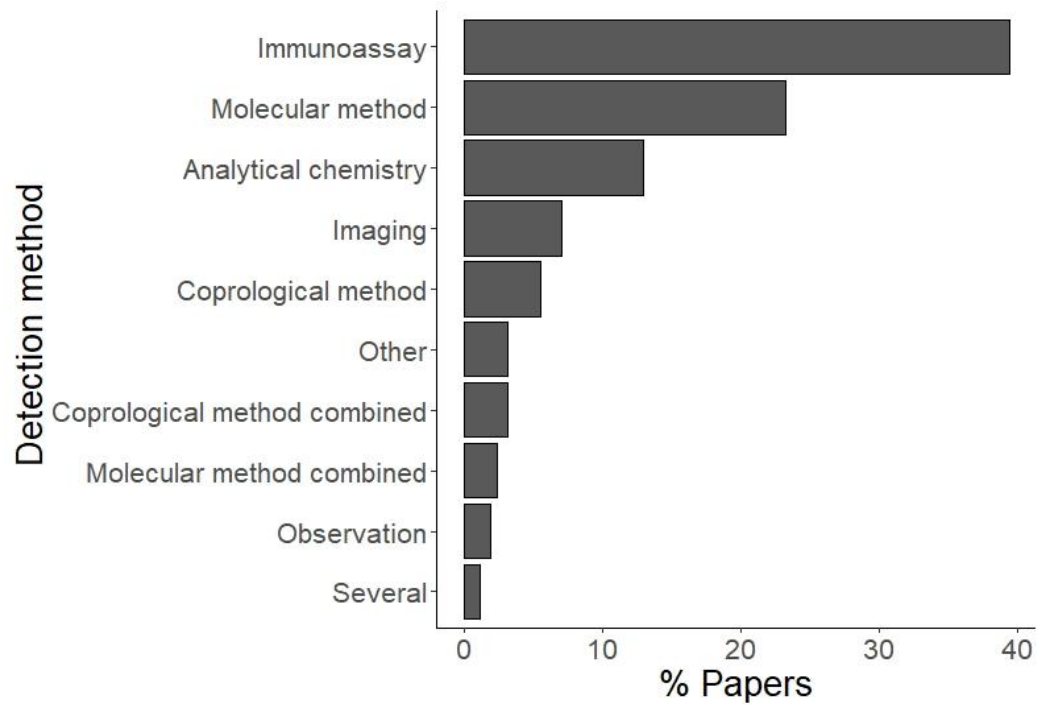


Figure S2. Percentage of published articles classified based on detection method.

Table S4. Number and percentage of papers published per detection method (18 NA removed).

Detection method	N	%
Immunoassay	100	39.37
Molecular method	59	23.22
Analytical chemistry	34	12.99
Imaging	18	7.09
Coprological method	14	5.51
Coprological method combined	8	3.15
Molecular method combined	6	2.36
Observation	5	1.96
Other	4	3.15
Several	3	1.18

Table S5. Percentage contribution to Chi-squared independence test biological material sample collected – Host's taxon.

	Amphibia	Aves	Fish	Mammalia	Marine mammal	Reptilia
Faeces	3.935	0.104	1.041	1.366	2.52	0.471
Hair-feathers-skin	0.974	3.046	0.195	0.003	0.909	0.112
Imaging and remote sensing	0.762	0.081	0.152	0.319	2.484	2.838
Invertebrates	0.254	0.356	0.051	0.037	0.237	2.661
Saliva and other body fluids	38.07	2.015	10.669	7.282	12.499	0
Several	0.762	0.081	0.152	0.11	0.001	0.356
Urine	0.019	1.126	0.161	0.663	0.751	0.375

Table S6. Percentage contribution to Chi-squared independence test Topic – Biological material sample collected.

	Faeces	Hair-feathers-skin	Imaging and remote sensing	Invertebrates	Saliva and other body fluids	Several	Urine
Bacteria	0.074	0.536	0.42	0.14	1.86	0.35	0.004
Diet	0	0.402	0.661	0.04	0.227	0.12	0.127
Disease	1.229	0.23	5.834	1.945	0.011	0.18	0.236
Ectoparasites	1.229	0.128	5.834	0.06	0.011	0.273	0.19
Endoparasites	1.509	0.307	0.24	0.08	0.453	0.24	0.253
Fungi	0.935	0.307	0.109	0.08	8.441	0.24	0.253
Helminths	1.645	0.728	0.57	0.19	1.076	0.05	0.068
Immunity	0.037	0.268	0.21	0.07	0.396	0.21	8.65
Other	0.037	0.066	0.21	1.571	0	0.175	0.222
Physiology	0.184	0.216	4.455	0.35	0.305	0.295	0.008
Pollutants	1.115	21.629	0.36	0.12	0.68	0.005	0.38
Protozoa	0.001	0.804	0.24	1.293	0.453	0.109	0.253
Reproductive condition	0.99	0.575	0.45	0.15	0.85	0.45	1.121
Stress	1.211	0.068	1.889	0.63	0.201	0.248	0.711
Virus	0.913	0.085	0.005	2.886	0.358	0.623	0.089