Supplementary document 1. Captures and estimated abundance data for creeks in the Northern and Southern Eifel Mountains 2015–2019, ordered after districts, then alphabetically after site names. Legend: * results of the *Bsal*-screening according to Lötters et al. (2020a); ** estimated abundance according to the best fitting model with ΔAIC = 0; red indicates finding of *Bsal*-positive salamanders or newts in sample sites in the surrounding of the creeks; capture occasion dates are given as 'day.month.year' or 'year' only.

Site	County	Capture occasion	*Bsal*-record* (prevalence with Bayesian 95%-credible intervals)	Captured larvae	Estimated larvae ± 95%-credible interval** (considered variables: date, pools, creek width)	Estimated larvae ± 95%-credible interval** (considered variables: date, pools, creek width, *Bsal*-presence)	N of pools	Creek width (cm)	Remarks
Northern Eifel Mts.									
North Rhine-Westphalia, Beverbach 1	StädteRegion Aachen	19.06.2015	no *Bsal*-screening	0	3.9 (0; 19)	no *Bsal*-screening	54	80	site was exluded after 2015
North Rhine-Westphalia, Beverbach 2	StädteRegion Aachen	22.06.2015	no *Bsal*-screening	0	4.6 (0; 22)	no *Bsal*-screening	33	90	site was exluded after 2015
North Rhine-Westphalia, Belgenbach	StädteRegion Aachen	2015	96% (79–99%)	no monitoring	no monitoring	no monitoring	no monitoring	no monitoring	
		25.05.2017	0% (0–26%)	7	16.8 (9; 28)	17.8 (10; 29)	12	146	only larvae could be swabbed
		10.05.2018	no *Bsal*-screening	2	3.2 (2; 6)	5.3 (2; 12)	16	100	
		22.05.2019	0% (0–70%)	1	2.6 (1; 7)	2.0 (1; 5)	14	180	only anurans could be swabbed
North Rhine-Westphalia, Dreilägerbach	StädteRegion Aachen	11.06.2015	no *Bsal*-screening	1	6.1 (1; 18)	no *Bsal*-screening	54	90	
		25.05.2016	no *Bsal*-screening	0	0.4 (0; 2)	no *Bsal*-screening	23	177	
		14.05.2017	no *Bsal*-screening	0	0.6 (0; 3)	no *Bsal*-screening	23	150	
North Rhine-Westphalia, Entenpfuhl	StädteRegion Aachen	22.06.2015	no *Bsal*-screening	0	4.6 (0; 22)	no *Bsal*-screening	53	70	site was exluded after 2015
North Rhine-Westphalia, Ermesbach	StädteRegion Aachen	24.06.2015	no *Bsal*-screening	0	5.4 (0; 26)	no *Bsal*-screening	18	70	site was exluded after 2015
North Rhine-Westphalia, Eselsbach	StädteRegion Aachen	17.06.2015	no *Bsal*-screening	10	65.8 (35; 107)	no *Bsal*-screening	15	60	
		02.06.2016	no *Bsal*-screening	11	18.1 (13; 26)	no *Bsal*-screening	17	120	
		12.05.2017	no *Bsal*-screening	9	16.1 (10; 24)	no *Bsal*-screening	24	40	
		24.05.2018	no *Bsal*-screening	0	0.8 (0; 5)	no *Bsal*-screening	40	50	
		22.05.2019	no *Bsal*-screening	1	2.7 (1; 7)	no *Bsal*-screening	32	50	
North Rhine-Westphalia, Fischbach	StädteRegion Aachen	2014	0% (0–13%)	no monitoring	no monitoring	no monitoring	no monitoring	no monitoring	
		2015	2% (1–9%)	no monitoring	no monitoring	no monitoring	no monitoring	no monitoring	
		09.06.2016	13% (1–30%)	46	70.6 (60; 84)	70.5 (60; 83)	20	70	
		11.05.2017	0%(0–14%)	94	110.3 (102; 119)	109.2 (102; 118)	50	90	
		19.05.2018	0% (0–8%)	57	110.1 (92; 131)	119.2 (99; 143)	27	45	
		14.05.2019	0% (0–9%)	36	167.8 (167; 168)	167.8 (166; 168)	41	130	

Site	County	Capture occasion	*Bsal*-record* (prevalence with Bayesian 95%-credible intervals)	Captured larvae	Estimated larvae ± 95%-credible interval** (considered variables: date, pools, creek width)	Estimated larvae ± 95%-credible interval** (considered variables: date, pools, creek width, *Bsal*-presence)	N of pools	Creek width (cm)	Remarks
North Rhine-Westphalia, Holderbach	StädteRegion Aachen	24.06.2015	no *Bsal*-screening	3	34.2 (9; 76)	31.8 (10; 68)	56	120	
		27.05.2016	no *Bsal*-screening	17	18.3 (17; 21)	17.6 (17; 20)	56	113	
		25.05.2017	0% (0–61%)	26	70.1 (51; 93)	74.0 (54; 99)	6	200	
		09.05.2018	0% (0–70%)	5	7.3 (5; 12)	6.9 (5; 10)	9	110	
		24.05.2019	0% (0–61%)	2	4.8 (2; 10)	3.7 (2; 8)	18	120	
North Rhine-Westphalia, Inde, Zufluss	StädteRegion Aachen	19.06.2015	no *Bsal*-screening	3	25.5 (7; 56)	no *Bsal*-screening	4	50	
		26.05.2016	no *Bsal*-screening	16	33.7 (23; 47)	no *Bsal*-screening	4	70	
		10.05.2017	no *Bsal*-screening	18	49.0 (33; 69)	no *Bsal*-screening	6	53	
North Rhine-Westphalia, Kitzenhausen	StädteRegion Aachen	05.06.2015	no *Bsal*-screening	20	56.6 (39; 78)	53.3 (37; 73)	69	110	
		22.05.2016	no *Bsal*-screening	25	42.8 (33; 55)	44.2 (34; 57)	14	130	
		18.05.2017	0% (0–31%)	8	12.9 (9; 19)	13.2 (9; 20)	29	240	
North Rhine-Westphalia, Lamersiefen	StädteRegion Aachen	2014	0% (0–19%)	no monitoring	no monitoring	no monitoring	no monitoring	no monitoring	
		2015	0% (0–11%)	no monitoring	no monitoring	no monitoring	no monitoring	no monitoring	
		08.06.2016	0% (0–31%)	42	62.5 (53; 74)	61.9 (52; 73)	22	90	
		24.05.2017	0% (0–13%)	174	179.8 (178; 180)	179.7 (178; 180)	52	70	
		05.05.2018	0% (0–36%)	168	191.0 (187; 192)	191.0 (187; 192)	15	95	
		10.05.2019	0% (0–20%)	168	168 (168; 168)	168.0 (168; 168)	27	98	
North Rhine-Westphalia, Lensbach	StädteRegion Aachen	05.06.2015	no *Bsal*-screening	41	114.9 (89; 145)	107.3 (84; 135)	60	100	
		25.05.2016	no *Bsal*-screening	52	83.9 (71; 99)	85.0 (72; 100)	17	180	
		28.05.2017	0% (0–61%)	70	90.9 (81; 102)	90.3 (81; 101)	41	225	
		28.05.2018	0%	56	153.0 (124; 184)	72.8 (64; 83)	16	53	
		13.06.2019	0% (0–13%)	44	56.4 (49; 65)	55.0 (49; 63)	35	70	
North Rhine-Westphalia, Lejbeschsloch	StädteRegion Aachen	17.06.2015	no *Bsal*-screening	4	28.3 (10; 57)	no *Bsal*-screening	80	53	
		27.05.2016	no *Bsal*-screening	5	5.1 (5; 6)	no *Bsal*-screening	80	60	
		25.05.2017	no *Bsal*-screening	3	4.1 (3; 7)	no *Bsal*-screening	42	235	
		09.05.2018	no *Bsal*-screening	0	0.2 (0; 2)	no *Bsal*-screening	9	70	
		24.05.2019	no *Bsal*-screening	3	6.6 (3; 13)	no *Bsal*-screening	16	120	

Site	County	Capture occasion	*Bsal*-record* (prevalence with Bayesian 95%-credible intervals)	Captured larvae	Estimated larvae ± 95%-credible interval** (considered variables: date, pools, creek width)	Estimated larvae ± 95%-credible interval** (considered variables: date, pools, creek width, *Bsal*-presence)	N of pools	Creek width (cm)	Remarks
North Rhine-Westphalia, Peterbach	StädteRegion Aachen	2014	0% (0–20%)	no monitoring	no monitoring	no monitoring	no monitoring	no monitoring	
		20.05.2015	no *Bsal*-screening	1	1.5 (1; 4)	1.6 (1; 4)	16	70	
		02.06.2016	no *Bsal*-screening	0	0.6 (0; 3)	0.8 (0; 4)	11	60	
		11.05.2017	no *Bsal*-screening	0	0.7 (0; 4)	0.9 (0; 5)	20	60	
		2018	0% (0–51%)	no monitoring	no monitoring	no monitoring	no monitoring	no monitoring	
		23.05.2019	0% (0–6%)	2	4.7 (2; 10)	3.8 (2; 8)	40	70	
North Rhine-Westphalia, Saarscher Bach	StädteRegion Aachen	17.06.2015	no *Bsal*-screening	1	9.6 (1; 28)	no *Bsal*-screening	24	110	
North Rhine-Westphalia, Schleebach	StädteRegion Aachen	15.04.2015	no *Bsal*-screening	0	0 (0; 0)	no *Bsal*-screening	41	70	
North Rhine-Westphalia, Solchbachquelle	StädteRegion Aachen	2014	0% (0–13%)	no monitoring	no monitoring	no monitoring	no monitoring	no monitoring	
		24.05.2015	5% (1–25%)	5	7.8 (5; 13)	8.0 (5; 13)	93	270	
		31.05.2016	0% (0–31%)	3	5.8 (3; 11)	6.2 (3; 12)	12	240	
		21.05.2017	4% (2–15%)	8	11.8 (8; 17)	11.9 (8; 17)	34	125	
		18.05.2018	2% (1–11%)	10	19.1 (12; 28)	21.9 (14; 33)	17	167	
		23.05.2019	0% (0–9%)	3	6.2 (3; 12)	5.1 (3; 9)	15	160	
North Rhine-Westphalia, Tiefenbach	StädteRegion Aachen	17.06.2015	no *Bsal*-screening	0	3.3 (0; 16)	no *Bsal*-screening	9	105	
North Rhine-Westphalia, Vichtbach	StädteRegion Aachen	2004	100% (26–99%)	no monitoring	no monitoring	no monitoring	no monitoring	no monitoring	
		2017	0% (0–11%)	no monitoring	no monitoring	no monitoring	no monitoring	no monitoring	
		21.05.2018	0% (0–11%)	40	83.2 (66; 103)	84.0 (67; 104)	62	83	
		01.05.2019	0% (0–10%)	44	46.2 (44; 50)	47.5 (44; 52)	40	150	
North Rhine-Westphalia, Weihrauchbend	StädteRegion Aachen	24.05.2015	no *Bsal*-screening	7	10.8 (7; 16)	no *Bsal*-screening	42	118	
		31.05.2016	no *Bsal*-screening	31	64.5 (50; 82)	no *Bsal*-screening	4	145	
		21.05.2017	no *Bsal*-screening	26	59.9 (44; 79)	no *Bsal*-screening	12	110	
		18.05.2018	no *Bsal*-screening	57	106.3 (89; 126)	no *Bsal*-screening	17	167	
		18.05.2019	no *Bsal*-screening	35	51.8 (43; 62)	no *Bsal*-screening	16	127	
North Rhine-Westphalia, Giesenbach	Düren	20.05.2015	no *Bsal*-screening	18	23.7 (19; 30)	no *Bsal*-screening	19	90	
		25.05.2016	no *Bsal*-screening	28	43.1 (35; 53)	no *Bsal*-screening	20	50	
		10.05.2017	no *Bsal*-screening	26	49.5 (38; 64)	no *Bsal*-screening	20	50	
		08.05.2018	no *Bsal*-screening	30	41.8 (35; 51)	no *Bsal*-screening	27	30	
		22.05.2019	no *Bsal*-screening	9	16.8 (11; 25)	no *Bsal*-screening	30	50	

Site	County	Capture occasion	*Bsal*-record* (prevalence with Bayesian 95%-credible intervals)	Captured larvae	Estimated larvae ± 95%-credible interval** (considered variables: date, pools, creek width)	Estimated larvae ± 95%-credible interval** (considered variables: date, pools, creek width, *Bsal*-presence)	N of pools	Creek width (cm)	Remarks
North Rhine-Westphalia, Kallerbach	Düren	22.05.2015	0% (0–15%)	7	9.9 (7; 15)	10.1 (7; 15)	10	45	
		10.05.2016	0% (0–30%)	0	0.6 (0; 4)	0.8 (0; 4)	10	45	
		2017	0% (0–51%)	no monitoring	no monitoring	no monitoring	no monitoring	no monitoring	
North Rhine-Westphalia, Morlesief	Düren	20.05.2015	no *Bsal*-screening	30	39.3 (33; 47)	no *Bsal*-screening	17	50	
		02.06.2016	no *Bsal*-screening	15	24.1 (18; 32)	no *Bsal*-screening	18	120	
		22.05.2017	no *Bsal*-screening	29	55.1 (43; 70)	no *Bsal*-screening	20	40	
		24.05.2018	no *Bsal*-screening	0	0.8 (0; 5)	no *Bsal*-screening	27	50	
		23.05.2019	no *Bsal*-screening	31	58.7 (46; 74)	no *Bsal*-screening	38	70	
North Rhine-Westphalia, Mückensiefen	Düren	20.05.2015	no *Bsal*-screening	11	14.5 (11; 19)	no *Bsal*-screening	61	70	
		21.05.2016	no *Bsal*-screening	2	2.3 (2; 4)	no *Bsal*-screening	51	90	
		14.05.2017	no *Bsal*-screening	7	10.6 (7; 16)	no *Bsal*-screening	33	120	
		11.05.2018	no *Bsal*-screening	21	31.7 (25; 40)	no *Bsal*-screening	36	100	
		18.05.2019	no *Bsal*-screening	11	16.8 (12; 23)	no *Bsal*-screening	21	76	
North Rhine-Westphalia, Rinnebach	Düren	17.06.2015	no *Bsal*-screening	9	59.6 (30; 99)	no *Bsal*-screening	3	120	
		25.05.2016	no *Bsal*-screening	2	4.7 (2; 10)	no *Bsal*-screening	6	130	
		11.05.2017	no *Bsal*-screening	0	0.7 (0; 4)	no *Bsal*-screening	20	60	
		24.05.2018	no *Bsal*-screening	0	0.8 (0; 5)	no *Bsal*-screening	27	80	
		16.05.2019	no *Bsal*-screening	11	15.9 (12; 22)	no *Bsal*-screening	39	95	
North Rhine-Westphalia, Rosbach	Düren	19.05.2015	0% (0–7%)	130	161.7 (152; 168)	161.6 (152; 168)	24	75	
		09.05.2016	0%	59	78.4 (69; 89)	75.7 (67; 85)	30	40	
		04.05.2017	0% (0–15%)	97	167.0 (149; 180)	168.3 (151; 180)	23	50	
		08.05.2018	0% (0–31%)	60	83.4 (73; 95)	78.0 (69; 88)	41	45	
		16.05.2019	0% (0–11%)	115	158.9 (146; 168)	151.9 (139; 165)	53	70	
North Rhine-Westphalia, Sandkaulsiefen	Düren	26.05.2015	no *Bsal*-screening	20	32.9 (25; 43)	32.4 (25; 42)	24	97	
		29.05.2016	no *Bsal*-screening	41	65.1 (54; 78)	65.7 (54; 79)	18	120	
		13.05.2017	no *Bsal*-screening	70	138.1 (117; 162)	141.4 (119; 166)	18	90	
		01.05.2018	0% (0–51%)	66	79.6 (72; 88)	85.8 (77; 96)	11	77	
		07.05.2019	0% (0–43%)	26	29.3 (26; 33)	29.7 (26; 34)	23	167	

Site	County	Capture occasion	*Bsal*-record* (prevalence with Bayesian 95%-credible intervals)	Captured larvae	Estimated larvae ± 95%-credible interval** (considered variables: date, pools, creek width)	Estimated larvae ± 95%-credible interval** (considered variables: date, pools, creek width, *Bsal*-presence)	N of pools	Creek width (cm)	Remarks
North Rhine-Westphalia, Schiefersiefen	Düren	26.05.2015	no *Bsal*-screening	54	88.8 (75; 104)	no *Bsal*-screening	32	108	
		20.05.2016	no *Bsal*-screening	101	108.5 (104; 114)	no *Bsal*-screening	56	2	
		12.05.2017	no *Bsal*-screening	66	169.6 (149; 180)	no *Bsal*-screening	3	110	
		19.05.2018	no *Bsal*-screening	225	excluded from analysis	no *Bsal*-screening	22	229	
		17.05.2019	no *Bsal*-screening	56	81.2 (70; 94)	no *Bsal*-screening	30	127	
North Rhine-Westphalia, Schüllbach	Düren	20.05.2015	no *Bsal*-screening	30	39.3 (33; 47)	no *Bsal*-screening	30	30	
		25.05.2016	no *Bsal*-screening	62	128.2 (107; 152)	no *Bsal*-screening	4	60	
		11.05.2017	no *Bsal*-screening	75	138.3 (118; 161)	no *Bsal*-screening	21	50	
		08.05.2018	no *Bsal*-screening	122	169.2 (154; 185)	no *Bsal*-screening	27	50	
		22.05.2019	no *Bsal*-screening	64	113.8 (97; 133)	no *Bsal*-screening	32	60	
North Rhine-Westphalia, Thönbach	Düren	22.05.2015	no *Bsal*-screening	70	97.7 (86; 111)	96.9 (86; 110)	75	165	
		28.05.2016	no *Bsal*-screening	69	136.4 (116; 158)	145.5 (124; 162)	6	220	
		13.05.2017	no *Bsal*-screening	30	78.6 (59; 102)	82.6 (61; 108)	7	180	
		07.05.2018	0% (0–8%)	93	126.1 (114; 140)	120.7 (110; 133)	10	107	
		12.05.2019	4% (2–8%)	15	18.9 (15; 24)	18.6 (15; 23)	29	220	
North Rhine-Westphalia, Ursprungsbach	Düren	22.05.2015	no *Bsal*-screening	109	151.5 (138; 166)	150.3 (137; 165)	56	15	
		27.05.2016	no *Bsal*-screening	66	136.0 (114; 158)	146.3 (124; 162)	4	213	
		13.05.2017	no *Bsal*-screening	78	159.1 (137; 178)	162.1 (140; 179)	16	50	
		08.05.2018	0% (0–16%)	170	191.4 (189; 192)	191.1 (188; 192)	26	80	
		12.05.2019	0% (0–31%)	119	148.6 (137; 161)	146.3 (136; 158)	51	130	
North Rhine-Westphalia, Weiße Wehe	Düren	17.05.2015	18% (5–50%)	160	167.7 (166; 168)	167.7 (166; 168)	49	70	
		28.05.2016	30% (11–61%)	100	152.3 (138; 163)	152.5 (138; 163)	19	90	
		20.05.2017	0% (0–8%)	15	21.8 (17; 29)	21.9 (17; 29)	34	125	
		11.05.2018	0% (0–11%)	80	120.0 (106; 136)	165.8 (142; 189)	31	77	
		18.05.2019	0% (0–6%)	27	40.7 (33; 50)	37.1 (31; 45)	25	112	
North Rhine-Westphalia, Billerbach	NP Eifel	22.05.2015	no *Bsal*-screening	41	57.3 (49; 67)	56.9 (49; 67)	8	80	
		24.05.2016	no *Bsal*-screening	37	55.2 (46; 66)	54.6 (46; 65)	22	110	
		10.05.2017	no *Bsal*-screening	26	53.0 (40; 69)	54.6 (41; 71)	17	140	
		07.05.2018	0% (0–31%)	98	132.9 (120; 147)	127.2 (116; 140)	46	95	
		13.05.2019	0% (0–20%)	35	45.0 (39; 53)	43.8 (38; 51)	35	120	

Site	County	Capture occasion	*Bsal*-record* (prevalence with Bayesian 95%-credible intervals)	Captured larvae	Estimated larvae ± 95%-credible interval** (considered variables: date, pools, creek width)	Estimated larvae ± 95%-credible interval** (considered variables: date, pools, creek width, *Bsal*-presence)	N of pools	Creek width (cm)	Remarks
North Rhine-Westphalia, Härtgessief	NP Eifel	2014	0% (0–19%)	no monitoring	no monitoring	no monitoring	no monitoring	no monitoring	since 2015, no more adult salamanders could be found
		25.05.2017	no *Bsal*-screening	6	12.5 (7; 21)	13.1 (7; 22)	18	130	
		10.05.2018	no *Bsal*-screening	3	4.6 (3; 8)	4.2 (3; 7)	24	197	
		23.05.2019	0%	6	11.4 (7; 19)	9.4 (6; 15)	11	190	
North Rhine-Westphalia, Haftenbach	NP Eifel	01.06.2015	0–8%	88	163.3 (152; 168)	162.3 (149; 168)	19	90	
		12.05.2016	0–14%	147	162.3 (160; 163)	162.2 (159; 163)	32	90	
		17.05.2017	10% (3–25%)	65	145.4 (121; 173)	167.3 (147; 180)	22	200	
		23.05.2018	0–11%	77	164.9 (143; 180)	135.8 (114; 161)	13	70	
		29.05.2019	0% (0–26%)	10	25.9 (16; 40)	18.7 (12; 28)	20	170	
North Rhine-Westphalia, Lorbach	NP Eifel	01.06.2015	no *Bsal*-screening	37	81.9 (64; 103)	no *Bsal*-screening	10	230	
		12.05.2016	no *Bsal*-screening	32	55.6 (44; 69)	no *Bsal*-screening	13	230	
		17.05.2017	no *Bsal*-screening	26	68.3 (50; 91)	no *Bsal*-screening	7	70	
		23.05.2018	no *Bsal*-screening	10	23.0 (14; 35)	no *Bsal*-screening	11	90	
		12.06.2019	no *Bsal*-screening	5	6.4 (5; 9)	no *Bsal*-screening	11	70	
North Rhine-Westphalia, Riffelsbach	NP Eifel	24.06.2015	no *Bsal*-screening	0	5.4 (0; 26)	no *Bsal*-screening	16	170	
North Rhine-Westphalia, Sauerbach	NP Eifel	01.06.2015	0% (0–14%)	21	46.8 (34; 63)	44.9 (33; 60)	11	80	
		12.05.2016	0% (0–15%)	18	29.9 (22; 39)	30.5 (23; 40)	16	90	
		17.05.2017	22% (7–55%)	11	27.3 (17; 41)	28.7 (18; 43)	10	60	
		28.05.2018	100%	3	9.2 (3; 19)	7.4 (3; 15)	4	80	
		29.05.2019	no *Bsal*-screening	1	3.9 (1; 10)	2.6 (1; 7)	12	90	
North Rhine-Westphalia, Walbigbach	NP Eifel	24.06.2015	no *Bsal*-screening	11	107.3 (59; 160)	95.1 (52; 149)	4	40	
		24.05.2016	no *Bsal*-screening	37	56.0 (47; 67)	55.7 (46; 67)	21	35	
		10.05.2017	no *Bsal*-screening	14	34.5 (23; 50)	36.2 (24; 52)	10	30	
		07.05.2018	0% (0–26%)	49	66.6 (58; 77)	63.8 (56; 73)	28	35	
		13.05.2019	0% (0–26%)	26	33.2 (28; 40)	32.3 (28; 38)	21	40	
Total sites Northern Eifel Mts.: 40 (21 with 5 year data)			Total captured larvae:	5498					

Site	County	Capture occasion	*Bsal*-record* (prevalence with Bayesian 95%-credible intervals)	Captured larvae	Estimated larvae ± 95%-credible interval** (considered variables: date, pools, creek width)	Estimated larvae ± 95%-credible interval** (considered variables: date, pools, creek width, *Bsal*-presence)	N of pools	Creek width (cm)	Remarks
Southern Eifel Mts.									
Rhineland-Palatinate, Arzfeld	Bitburg-Prüm	18.06.2016	0% (0–43%)	5	7.5 (5; 12)	first *Bsal*-detection in the Southern Eifel Mts. in 2017	50	50	
		12.06.2017	0% (0–70%)	4	6.5 (4; 11)	6.5 (4; 11)	25	60	
		07.06.2018	no *Bsal*-screening	20	31.8 (24; 41)	28.9 (23; 37)	27	50	
		30.05.2019	0% (0–70%)	45	61.5 (53; 72)	62.6 (54; 73)	62	50	
Rhineland-Palatinate, Ernzen Gutenbach	Bitburg-Prüm	28.05.2015	0% (0–51%)	44	46.5 (44; 50)	first *Bsal*-detection in the Southern Eifel Mts. in 2017	8	350	
		26.05.2016	0% (0–20%)	2	2.9 (2; 6)	first *Bsal*-detection in the Southern Eifel Mts. in 2017	50	300	
		24.05.2017	0% (0–43%)	18	28.1 (21; 37)	28.0 (21; 37)	23	250	
		14.05.2018	0%	2	4.1 (2; 9)	3.3 (2; 7)	11	77	
		16.05.2019	no *Bsal*-screening	23	40.5 (31; 52)	33.6 (27; 42)	52	180	
Rhineland-Palatinate, Ferschweiler 1	Bitburg-Prüm	03.06.2015	no *Bsal*-screening	66	128.3 (108; 151)	first *Bsal*-detection in the Southern Eifel Mts. in 2017	11	80	
		28.05.2016	no *Bsal*-screening	34	54.6 (44; 67)	first *Bsal*-detection in the Southern Eifel Mts. in 2017	29	70	
		21.05.2017	0% (0–11%)	91	129.2 (121; 133)	129.2 (120; 133)	60	30	
		22.05.2018	no *Bsal*-screening	108	143.2 (138; 145)	141.8 (134; 145)	41	45	
		18.05.2019	no *Bsal*-screening	22	36.5 (28; 47)	34.5 (27; 44)	38	100	
Rhineland-Palatinate, Ferschweiler 2	Bitburg-Prüm	03.06.2015	no *Bsal*-screening	362	excluded from analysis	first *Bsal*-detection in the Southern Eifel Mts. in 2017	11	130	
		28.05.2016	no *Bsal*-screening	51	88.7 (74; 106)	first *Bsal*-detection in the Southern Eifel Mts. in 2017	14	100	
		21.05.2017	0% (0–11%)	19	29.6 (23; 38)	29.6 (23; 38)	25	40	
		22.05.2018	no *Bsal*-screening	308	excluded from analysis	excluded from analysis	27	50	
		18.05.2019	no *Bsal*-screening	43	70.7 (59; 85)	69.6 (58; 83)	31	70	
Rhineland-Palatinate, Fleißbach	Bitburg-Prüm	04.06.2015	no *Bsal*-screening	20	47.2 (34; 64)	first *Bsal*-detection in the Southern Eifel Mts. in 2017	8	50	
		28.05.2016	no *Bsal*-screening	115	145.0 (139; 147)	first *Bsal*-detection in the Southern Eifel Mts. in 2017	52	50	
		29.05.2017	0% (0–51%)	0	0.3 (0; 2)	0.3 (0; 2)	14	10	
		16.05.2018	0% (0–44%)	5	9.2 (5; 15)	7.6 (5; 12)	15	95	
		16.05.2019	no *Bsal*-screening	0	0.6 (0; 3)	0.3 (0; 2)	58	15	
Rhineland-Palatinate, Fuhrbach	Bitburg-Prüm	02.07.2015	no *Bsal*-screening	92	156.0 (142; 163)	first *Bsal*-detection in the Southern Eifel Mts. in 2017	36	100	two swabbing site in the same forest (newts)
		04.06.2016	no *Bsal*-screening	2	4.0 (2; 9)	first *Bsal*-detection in the Southern Eifel Mts. in 2017	11	150	

Site	County	Capture occasion	*Bsal*-record* (prevalence with Bayesian 95%-credible intervals)	Captured larvae	Estimated larvae ± 95%-credible interval** (considered variables: date, pools, creek width)	Estimated larvae ± 95%-credible interval** (considered variables: date, pools, creek width, *Bsal*-presence)	N of pools	Creek width (cm)	Remarks
Rhineland-Palatinate, Fuhrbach	Bitburg-Prüm	05.06.2017	0% (0–51%), 33% (8–82%)	2	3.4 (2; 7)	3.4 (2; 7)	30	150	
		28.05.2018	no *Bsal*-screening	13	21.4 (15; 30)	93.1 (55; 136)	24	197	
		11.06.2019	0% (0–16%), 0% (0–31%)	2	1.3 (2; 4)	3.1 (2; 6)	57	40	
Rhineland-Palatinate, Gentingen, Grasmärchen	Bitburg-Prüm	04.06.2015	no *Bsal*-screening	36	78.0 (61; 97)	first *Bsal*-detection in the Southern Eifel Mts. in 2017	11	60	
		19.06.2016	0–43%	4	6.8 (4; 12)	first *Bsal*-detection in the Southern Eifel Mts. in 2017	30	50	
		2017	0–61%	no monitoring	no monitoring	no monitoring	no monitoring	no monitoring	
		17.05.2018	no *Bsal*-screening	104	138.1 (128; 145)	140.6 (131; 145)	10	107	
		20.05.2019	no *Bsal*-screening	65	105.5 (91; 122)	77.8 (71; 86)	104	40	
Rhineland-Palatinate, Gemünder Bach	Bitburg-Prüm	10.06.2015	no *Bsal*-screening	43	89.4 (72; 109)	no *Bsal*-screening	20	70	
		06.06.2016	no *Bsal*-screening	1	2.2 (1; 6)	no *Bsal*-screening	20	50	
		31.05.2017	no *Bsal*-screening	2	3.4 (2; 7)	no *Bsal*-screening	50	50	
		22.05.2018	no *Bsal*-screening	33	51.8 (42; 63)	no *Bsal*-screening	46	95	
		20.05.2019	no *Bsal*-screening	22	35.9 (28; 46)	no *Bsal*-screening	65	40	
Rhineland-Palatinate, Hauchenbach	Bitburg-Prüm	01.06.2015	no *Bsal*-screening	34	49.5 (41; 59)	first *Bsal*-detection in the Southern Eifel Mts. in 2017	11	170	
		28.05.2016	0% (0–15%)	2	4.0 (2; 9)	first *Bsal*-detection in the Southern Eifel Mts. in 2017	11	150	
		08.06.2017	0% (0–70%)	3	4.9 (3; 9)	4.9 (3; 9)	10	75	
		09.06.2018	0% (0–44%)	10	18.9 (12; 28)	14.6 (11; 20)	27	80	
		25.05.2019	0% (0–31%)	40	58.1 (49; 69)	66.6 (55; 81)	26	150	
Rhineland-Palatinate, Heimbach	Bitburg-Prüm	10.06.2015	no *Bsal*-screening	28	41.2 (34; 50)	no *Bsal*-screening	16	170	
		11.06.2016	no *Bsal*-screening	4	6.9 (4; 12)	no *Bsal*-screening	20	200	
		07.06.2017	no *Bsal*-screening	11	17.3 (12; 24)	no *Bsal*-screening	40	100	
		28.05.2018	no *Bsal*-screening	8	13.2 (9; 20)	no *Bsal*-screening	27	30	
		27.05.2019	no *Bsal*-screening	11	16.0 (12; 22)	no *Bsal*-screening	63	50	
Rhineland-Palatinate, Ingendorf	Bitburg-Prüm	01.07.2015	no *Bsal*-screening	43	93.2 (75; 115)	first *Bsal*-detection in the Southern Eifel Mts. in 2017	20	60	
		18.06.2016	no *Bsal*-screening	9	15.7 (10; 23)	first *Bsal*-detection in the Southern Eifel Mts. in 2017	19	80	
		11.06.2017	0%	0	0.3 (0; 2)	0.3 (0; 2)	3	40	
		11.06.2018	no *Bsal*-screening	3	5.3 (3; 10)	4.8 (3; 9)	40	50	
		25.05.2019	no *Bsal*-screening	0	0.3 (0; 2)	0.3 (0; 2)	42	50	

Site	County	Capture occasion	*Bsal*-record* (prevalence with Bayesian 95%-credible intervals)	Captured larvae	Estimated larvae ± 95%-credible interval** (considered variables: date, pools, creek width)	Estimated larvae ± 95%-credible interval** (considered variables: date, pools, creek width, *Bsal*-presence)	N of pools	Creek width (cm)	Remarks
Rhineland-Palatinate, Irrel 1	Bitburg-Prüm	28.05.2015	0%	49	92.0 (76; 110)	first *Bsal*-detection in the Southern Eifel Mts. in 2017	4	90	
		26.05.2016	0% (0–20%)	84	133.5 (118; 146)	first *Bsal*-detection in the Southern Eifel Mts. in 2017	28	40	
		21.05.2017	0% (0–19%)	13	20.3 (15; 28)	20.2 (15; 28)	8	30	
		22.05.2018	0% (0–22%)	61	100.3 (86; 117)	87.1 (76; 100)	28	35	
		15.05.2019	0% (0–30%)	36	63.0 (51; 78)	55.9 (46; 68)	39	40	
Rhineland-Palatinate, Irrel 2	Bitburg-Prüm	26.05.2016	0% (0–20%)	51	91.0 (76; 109)	first *Bsal*-detection in the Southern Eifel Mts. in 2017	11	60	
		21.05.2017	0% (0–19%)	5	8.1 (5; 13)	8.1 (5; 13)	40	55	
		22.05.2018	0% (0–22%)	31	52.4 (42; 65)	44.4 (37; 54)	26	80	
		15.05.2019	0% (0–30%)	8	14.5 (9; 22)	12.1 (8; 18)	48	70	
Rhineland-Palatinate, Läuskopfbach	Bitburg-Prüm	07.07.2015	no *Bsal*-screening	106	155.1 (142; 163)	first *Bsal*-detection in the Southern Eifel Mts. in 2017	18	150	two swabbing site in the same forest (newts)
		11.06.2016	no *Bsal*-screening	0	0.5 (0; 3)	first *Bsal*-detection in the Southern Eifel Mts. in 2017	16	50	
		07.06.2017	0% (0–14%), 33% (8–82%)	6	9.5 (6; 15)	9.5 (6; 15)	6	100	
		04.06.2018	0% (0–16%)	0	0.5 (0; 3)	7.1 (0; 26)	62	83	
		21.05.2019	0% (0–16%), 0% (0–31%)	6	9.7 (6; 15)	9.8 (6; 15)	36	80	
Rhineland-Palatinate, Lützkampen, Seisbach	Bitburg-Prüm	19.06.2015	0% (0–31%)	26	49.7 (38; 64)	first *Bsal*-detection in the Southern Eifel Mts. in 2017	31	100	
		20.06.2016	no *Bsal*-screening	12	16.7 (13; 22)	first *Bsal*-detection in the Southern Eifel Mts. in 2017	60	50	
		26.06.2017	0% (0–19%)	66	102.5 (89; 118)	102.2 (89; 118)	40	50	
		30.05.2018	no *Bsal*-screening	114	142.3 (136; 145)	143.2 (138; 145)	17	167	
		03.06.2019	0% (0–70%)	153	164.6 (163; 165)	164.5 (162; 165)	88	100	
Rhineland-Palatinate, Mauel, Steuenbach	Bitburg-Prüm	07.07.2015	no *Bsal*-screening	28	52.7 (41; 67)	first *Bsal*-detection in the Southern Eifel Mts. in 2017	17	100	
		11.06.2016	0% (0–36%)	18	31.4 (23; 42)	first *Bsal*-detection in the Southern Eifel Mts. in 2017	14	130	
		05.06.2017	no *Bsal*-screening	31	48.6 (39; 60)	48.5 (39; 60)	80	45	
		28.05.2018	no *Bsal*-screening	6	10.3 (6; 16)	9.0 (6; 14)	31	77	
		10.06.2019	no *Bsal*-screening	3	3.7 (3; 6)	4.8 (3; 9)	44	70	

Site	County	Capture occasion	*Bsal*-record* (prevalence with Bayesian 95%-credible intervals)	Captured larvae	Estimated larvae ± 95%-credible interval** (considered variables: date, pools, creek width)	Estimated larvae ± 95%-credible interval** (considered variables: date, pools, creek width, *Bsal*-presence)	N of pools	Creek width (cm)	Remarks
Rhineland-Palatinate, Olmscheid, Hof Klingendell	Bitburg-Prüm	16.06.2015	no *Bsal*-screening	34	53.0 (44; 64)	first *Bsal*-detection in the Southern Eifel Mts. in 2017	21	150	
		11.06.2016	0% (0–51%)	1	2.2 (1; 6)	first *Bsal*-detection in the Southern Eifel Mts. in 2017	20	50	
		07.06.2017	no *Bsal*-screening	60	93.2 (80; 108)	93.0 (80; 108)	40	80	
		28.05.2018	no *Bsal*-screening	82	116.7 (104; 131)	117.6 (105; 132)	16	100	
		27.05.2019	no *Bsal*-screening	20	28.8 (23; 37)	29.7 (23; 38)	49	40	
Rhineland-Palatinate, Reiff	Bitburg-Prüm	16.06.2015	no *Bsal*-screening	62	138.5 (116; 160)	first *Bsal*-detection in the Southern Eifel Mts. in 2017	33	50	
		18.06.2016	no *Bsal*-screening	35	47.1 (40; 56)	first *Bsal*-detection in the Southern Eifel Mts. in 2017	65	50	
		19.06.2017	0% (0–20%)	80	121.6 (108; 133)	121.4 (108; 132)	18	40	
		30.05.2018	no *Bsal*-screening	61	87.3 (76; 100)	87.6 (76; 100)	36	100	
		30.05.2019	no *Bsal*-screening	138	163.7 (159; 165)	162.9 (157; 165)	85	45	
Rhineland-Palatinate, Spielmannsholz	Bitburg-Prüm	19.06.2015	no *Bsal*-screening	8	20.1 (12; 31)	first *Bsal*-detection in the Southern Eifel Mts. in 2017	17	70	
		18.06.2016	no *Bsal*-screening	25	43.2 (34; 55)	first *Bsal*-detection in the Southern Eifel Mts. in 2017	16	100	
		06.06.2017	0% (0–43%)	0	0.3 (0; 2)	0.3 (0; 2)	5	30	
		31.05.2018	no *Bsal*-screening	45	79.0 (65; 95)	64.1 (55; 75)	9	122	
		19.06.2019	no *Bsal*-screening	5	5.6 (5; 8)	9.0 (5; 15)	21	40	
Rhineland-Palatinate, Watzbach	Bitburg-Prüm	23.06.2016	0% (0–44%)	52	86.4 (73; 102)	first *Bsal*-detection in the Southern Eifel Mts. in 2017	23	40	
		06.06.2017	0% (0–10%)	40	62.1 (52; 74)	62.0 (52; 74)	30	40	
		31.05.2018	0% (0–32%)	194	excluded from analysis	excluded from analysis	27	45	
		22.06.2019	23% (12–41%)	260	excluded from analysis	excluded from analysis	52	50	
Rhineland-Palatinate, Watzbachzufluss	Bitburg-Prüm	25.06.2015	no *Bsal*-screening	55	101.4 (85; 120)	first *Bsal*-detection in the Southern Eifel Mts. in 2017	34	100	
		23.06.2016	0% (0–44%)	95	143.0 (134; 147)	first *Bsal*-detection in the Southern Eifel Mts. in 2017	20	80	
		06.06.2017	0% (0–10%)	47	73.6 (62; 87)	73.4 (62; 87)	100	25	
		31.05.2018	0% (0–32%)	91	124.4 (112; 138)	130.0 (117; 143)	22	229	
		22.06.2019	23% (12–41%)	105	113.6 (108; 120)	160.0 (149; 165)	26	30	
Total sites Southern Eifel Mts.: 21 (17 with 5 year data)			Total captured larvae:	4542					

Supplementary document 2. Model selection overview of plausible hierarchical models with ΔAIC < 2 considering removal data from 35 creeks (Northern Eifel Mountains, 2015). Symbols: (Λ) means abundance; (p) means detection probability; (nb) negative-binomial distribution; arrows indicate positive (↑) or negative (↓) effects; (.) means no observed direction.

Model	AIC	ΔAIC	AIC weight
Λ=constant (.), p=date (↓), nb	-3601.16	0.00	0.37
Λ=date (↓), p=date (↓), nb	-3601.08	0.08	0.35
Λ=pools (.), p=date (↓), nb	-3599.30	1.90	0.14

Supplementary document 3. Model selection overview of plausible hierarchical models with ΔAIC < 2 considering removal data from 15 creeks with *Bsal screening* (Northern Eifel Mountains, 2015). Symbols as in Supplementary document 2. Red indicates effects of *Bsal*.

Model	AIC	ΔAIC	AIC weight
Λ=constant (.), p=date (↓), nb	-3176.79	0.00	0.34
Λ=creek width (↓), p=date (↓), nb	-3176.16	0.63	0.24
Λ=date (↓), p=date (↓), nb	-3174.98	1.81	0.14
Λ=*Bsal* (.), p=date (↓), nb	-3174.82	1.97	0.13
Λ=pools (↑), p=date (↓), nb	-3174.80	1.99	0.12

Supplementary document 4. Model selection overview of plausible hierarchical models with ΔAIC < 2 considering removal data from 29 creeks (Northern Eifel Mountains, 2016). Symbols as in Supplementary document 2.

Model	AIC	ΔAIC	AIC weight
Λ=constant (.), p=creek width (↑)	-4008.11	0.00	0.30
Λ=constant (.), p=creek width (↑), nb	-4008.11	0.00	0.30
Λ=creek width (.), p=creek width (↑), nb	-4006.67	1.44	0.15
Λ=pools (.), p=creek width (↑), nb	-4006.52	1.60	0.14
Λ=date (.), p=creek width (↑), nb	-4006.24	1.87	0.12

Supplementary document 5. Model selection overview of plausible hierarchical models with ΔAIC < 2 considering removal data from 17 creeks with *Bsal screening* (Northern Eifel Mountains, 2016). Symbols as in Supplementary document 2. Red indicates effects of *Bsal*.

Model	AIC	ΔAIC	AIC weight
Λ=constant (.), p=pools (↑), nb	-4008.11	0.00	0.30
Λ=creek width (↑), p=pools (↑), nb	-4008.11	0.00	0.30
Λ=pools (.), p=pools (↑), nb	-4006.67	1.44	0.15
Λ=*Bsal* (.), p=pools (↑), nb	-4006.24	1.87	0.12

Supplementary document 6. Model selection overview of plausible hierarchical models with ΔAIC < 2 considering removal data from 30 creeks (Northern Eifel Mountains, 2017). Symbols as in Supplementary document 2.

Model	AIC	ΔAIC	AIC weight
Λ=constant (.), p=pools (↑), nb	-4240.66	0.00	0.37
Λ=creek width (↓), p=pools (↑), nb	-4008.11	0.00	0.30
Λ=date (↓), p=pools (↑), nb	-4006.24	1.87	0.12

Supplementary document 7. Model selection overview of plausible hierarchical models with ΔAIC < 2 considering removal data from 18 creeks with *Bsal screening* (Northern Eifel Mountains, 2017). Symbols as in Supplementary document 2. Red indicates effects of *Bsal.*

Model	AIC	ΔAIC	AIC weight
Λ=constant (.), p=pools (↑), nb	-3425.06	0.00	0.32
Λ= creek width (↓), pools (↑), nb	-3424.43	0.63	0.23
Λ=date (↓), p=pools (↑), nb	-3423.66	1.40	0.16
Λ=*Bsal* (↓), p=pools (↑), nb	-3423.55	1.51	0.15
Λ=pools (↑), p= pools (↑), nb	-3423.43	1.63	0.14

Supplementary document 8. Model selection overview of plausible hierarchical models with ΔAIC < 2 considering removal data from 26 creeks (Northern Eifel Mountains, 2018). Symbols as in Supplementary document 2.

Model	AIC	ΔAIC	AIC weight
Λ=constant (.), p=date (↓), nb	-5615.84	0.00	0.44
Λ=date (↓), p=date (↓), nb	-5614.54	1.30	0.23
Λ=pools (↑), p=date (↓), nb	-5613.98	1.86	0.17
Λ=creek width (.), p=date (↓), nb	-5613.86	1.98	0.16

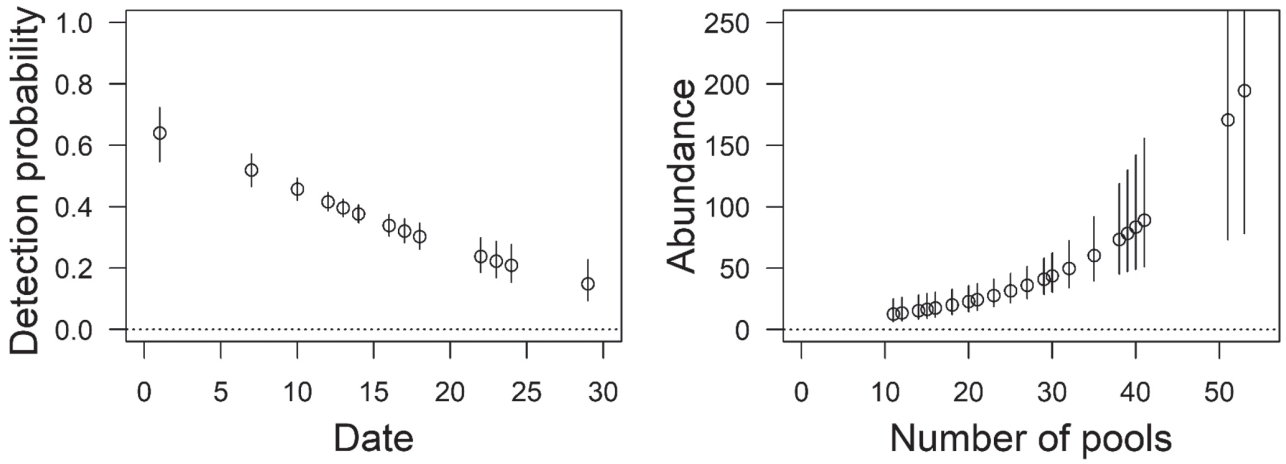
Supplementary document 9. Model selection overview of plausible hierarchical models with ΔAIC < 2 considering removal data from 17 creeks with *Bsal* screening (Northern Eifel Mountains, 2018). Symbols as in Supplementary document 2. Red indicates effects of *Bsal.*

Model	AIC	ΔAIC	AIC weight
Λ=constant (.), p=*Bsal* (.), nb	-4517.86	0.00	0.19
Λ=pools (.), p=*Bsal* (.), nb	-4517.77	0.09	0.18
Λ=date (↓), p=*Bsal* (.), nb	-4517.77	0.09	0.18
Λ=creek width (↓), p=*Bsal* (.), nb	-4517.58	0.28	0.17
Λ=*Bsal* (↓), p=*Bsal* (.), nb	-4516.44	1.42	0.10
Λ=constant (.), p=date (↓), nb	-4516.26	1.60	0.09

Supplementary document 10. Model selection overview of the only plausible hierarchical model with ΔAIC < 2 considering removal data from 28 creeks (Northern Eifel Mountains, 2019). Symbols as in Supplementary document 2.

Model	AIC	ΔAIC	AIC weight
Λ=pools (↑), p=date (↓), nb	-4151.21	0.00	0.97

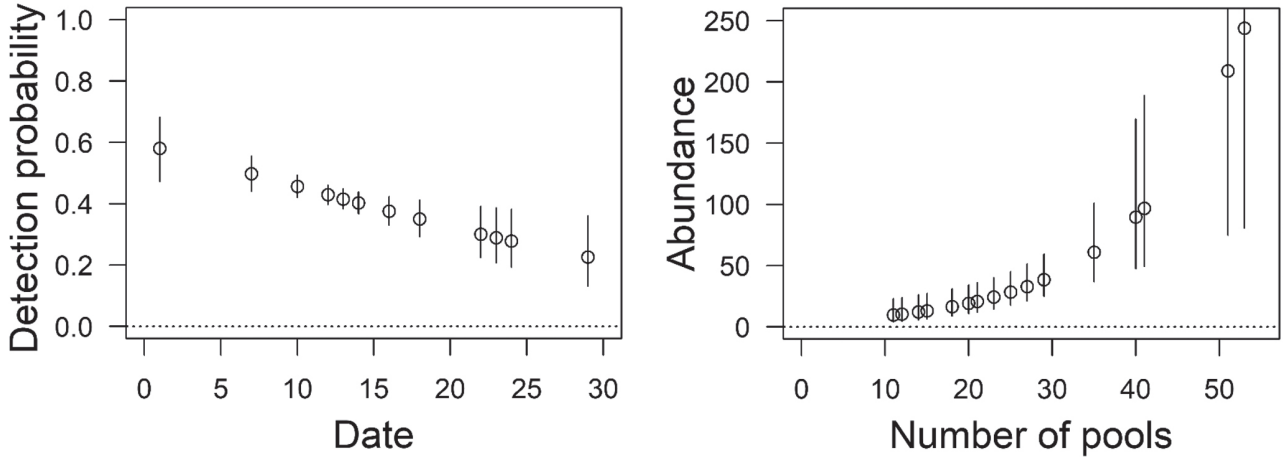
Supplementary document 11. Effect of date on detection probability and number of pools on larval abundance according to the best fitting model with ΔAIC = 0 considering removal data from 28 creeks (Northern Eifel Mountains, 2019).



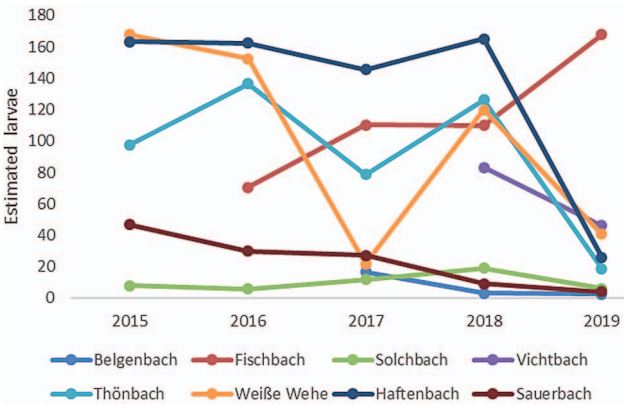
Supplementary document 12. Model selection overview of the only plausible hierarchical model with ΔAIC < 2 considering removal data from 21 creeks with *Bsal screening* (Northern Eifel Mountains, 2019). Symbols as in Supplementary document 2.

Model	AIC	ΔAIC	AIC weight
Λ=pools (↑), p=date (↓), nb	-3544.74	0.00	0.60

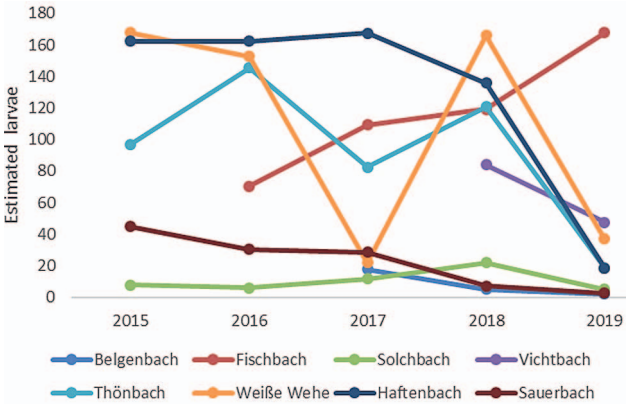
Supplementary document 13. Effect of date on detection probability and number of pools on larval abundance according to the best fitting model with ΔAIC = 0 considering removal data from 21 creeks with *Bsal screening* (Northern Eifel Mountains, 2019).



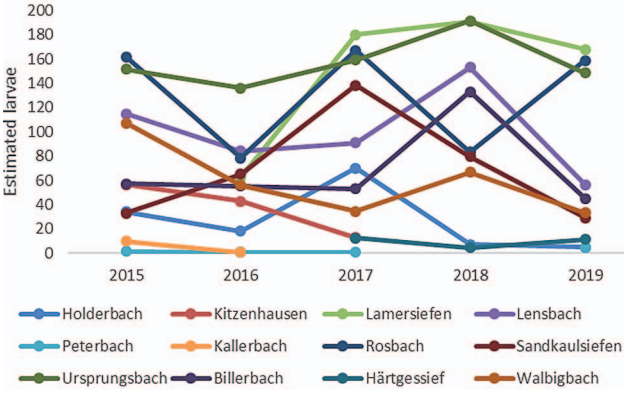
Supplementary document 14. Estimated larvae according to the first analysis of removal data from *Bsal*-infected sites from the Northern Eifel Mountains. In most creeks, *Bsal* was present from the beginning of the monitoring, but was first detected in 2017 in the Haftenbach and Sauerbach and in 2019 in the Thönbach. Confidence intervals can be found in Supplementary document 1.



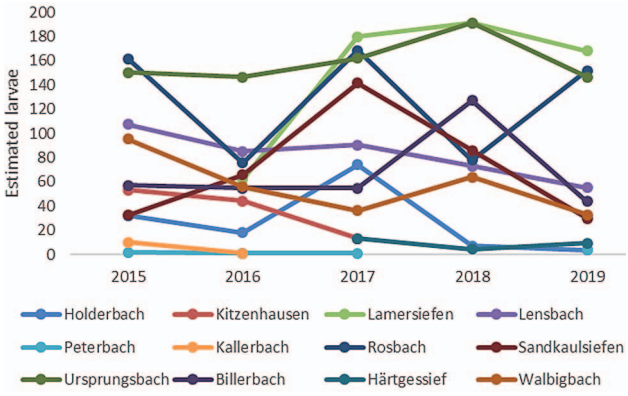
Supplementary document 15. Estimated larvae according to the second analysis of removal data from *Bsal*-infected sites from the Northern Eifel Mountains. In most creeks, *Bsal* was present from the beginning of the monitoring, but was first detected in 2017 in the Haftenbach and Sauerbach and in 2019 in the Thönbach. Confidence intervals can be found in in Supplementary document 1.



Supplementary document 16. Estimated larvae according to the first analysis of removal data from sites from the Northern Eifel Mountains where *Bsal* was not detected. Confidence intervals can be found in in Supplementary document 1.



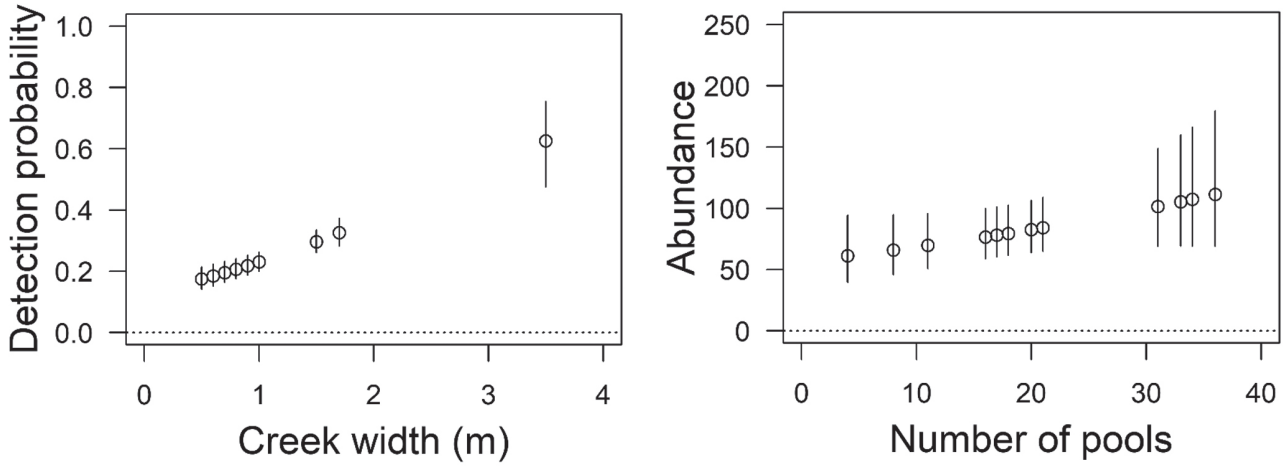
Supplementary document 17. Estimated larvae according to the second analysis of removal data from sites from the Northern Eifel Mountains where *Bsal* was not detected. Confidence intervals can be found in in Supplementary document 1.



Supplementary document 18. Model selection overview of plausible hierarchical models with ΔAIC < 2 considering removal data from 17 creeks (Southern Eifel Mountains, 2015) (first *Bsal* detection in 2017). Symbols as in Supplementary document 2.

Model	AIC	ΔAIC	AIC weight
Λ=pools (↑), p=creek width (↑), nb	-2827.00	0.00	0.25
Λ=constant (.), p=creek width (↑)	-2826.70	0.29	0.21
Λ=constant (.), p=creek width (↑), nb	-2826.70	0.29	0.21
Λ= creek width (↓), p=creek width (↑), nb	-2826.16	0.84	0.16
Λ=date (↑), p=creek width (↑), nb	-2825.76	1.23	0.13

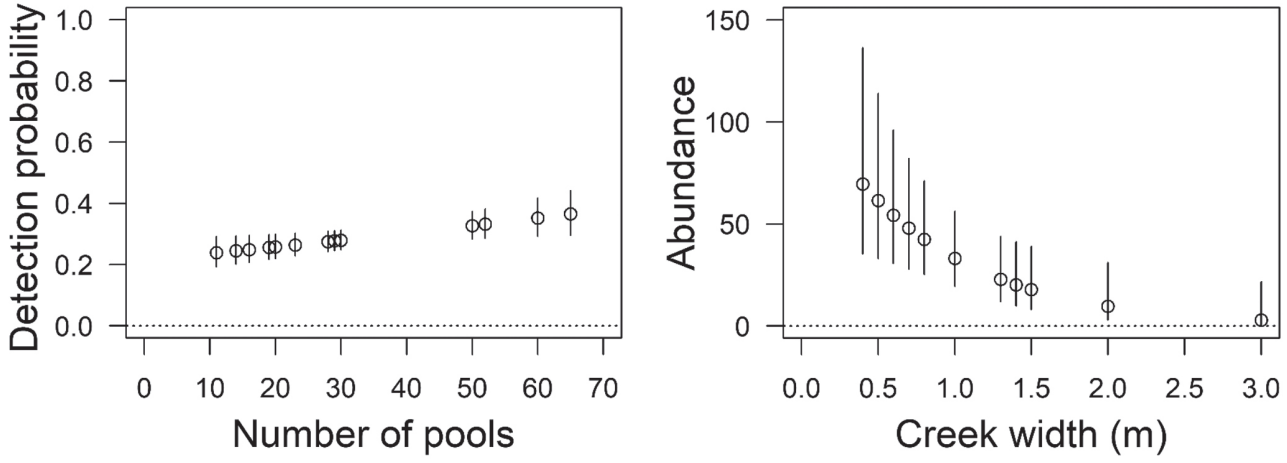
Supplementary document 19. Effect of creek width on detection probability and number of pools on larval abundance according to the best fitting model with ΔAIC = 0 considering removal data from 17 creeks (Southern Eifel Mountains, 2016) (first *Bsal* detection in 2017).



Supplementary document 20. Model selection overview of plausible hierarchical model with ΔAIC < 2 considering removal data from 21 creeks (Southern Eifel Mountains, 2016) (first *Bsal* detection in 2017). Symbols as in Supplementary document 2.

Model	AIC	ΔAIC	AIC weight
Λ=creek width (↓), p=pools (↑), nb	-2827.00	0.00	0.25

Supplementary document 21. Effect of number of pools on detection probability and creek width on larval abundance according to the best fitting model with ΔAIC = 0 considering removal data from 21 creeks (Southern Eifel Mountains, 2016) (first *Bsal* detection in 2017).



Supplementary document 22. Model selection overview of plausible hierarchical model with ΔAIC < 2 considering removal data from 20 creeks (Southern Eifel Mountains, 2017). Symbols as in Supplementary document 2.

Model	AIC	ΔAIC	AIC weight
Λ=pools (↑), p=constant (.), nb	-1655.19	0.00	0.18
Λ=constant (.), p=constant (.), nb	-1654.17	1.02	0.11
Λ=pools (↑), p=creek width (↑), nb	-1654.04	1.15	0.10
Λ=pools (↑), p=date (.), nb	-1653.53	1.66	0.10
Λ=pools (↑), p=pools (.), nb	-1653.33	1.86	0.08

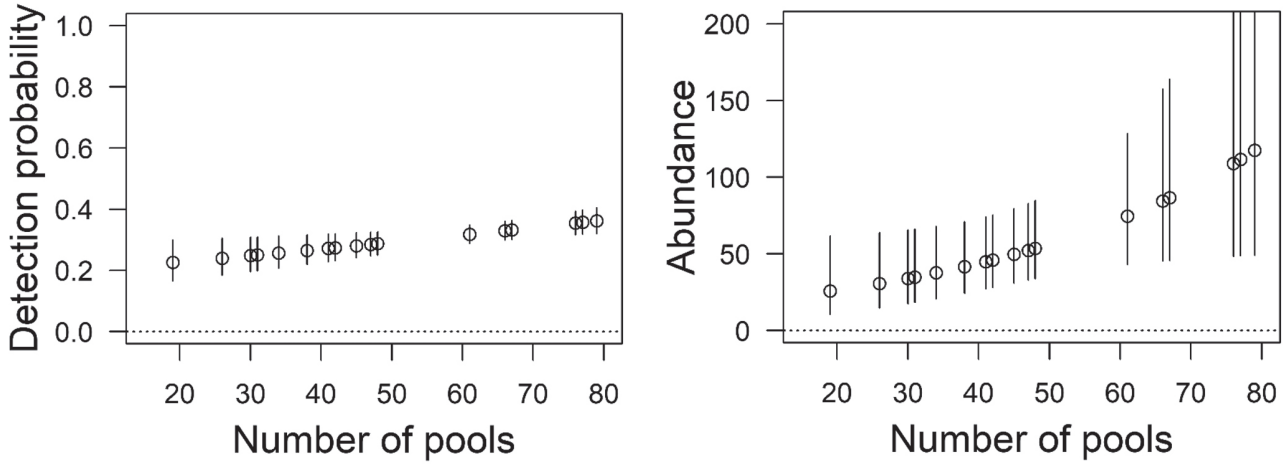
Supplementary document 23. Model selection overview of plausible hierarchical model with ΔAIC < 2 considering removal data from 18 creeks with *Bsal screening* (Southern Eifel Mountains, 2017). Symbols as in Supplementary document 2. Red indicates effects of *Bsal.*

Model	AIC	ΔAIC	AIC weight
Λ=pools (↑), p=constant (.), nb	-1661.95	0.00	0.12
Λ=constant (.), p=creek width (↑), nb	-1660.98	0.97	0.08
Λ=*Bsal* (↓), p=constant (.), nb	-1660.85	1.10	0.07
Λ=pools (↑), p=*Bsal* (↓), nb	-1660.79	1.16	0.07
Λ=constant (.), p=constant (.), nb	-1660.56	1.39	0.06
Λ=pools (↑), p= date (↓), nb	-1660.31	1.64	0.05
Λ=constant (.), p=*Bsal* (↓), nb	-1660.21	1.74	0.05
Λ=pools (↑), p=pools (↑), nb	-1660.09	1.86	0.05

Supplementary document 24. Model selection overview of plausible hierarchical model with ΔAIC < 2 considering removal data from 20 creeks (Southern Eifel Mountains, 2018). Symbols as in Supplementary document 2.

Model	AIC	ΔAIC	AIC weight
Λ=pools (↑), p=pools (.), nb	-1661.95	0.00	0.12
Λ=constant (.), p=pools (↑), nb	-1660.09	1.86	0.05

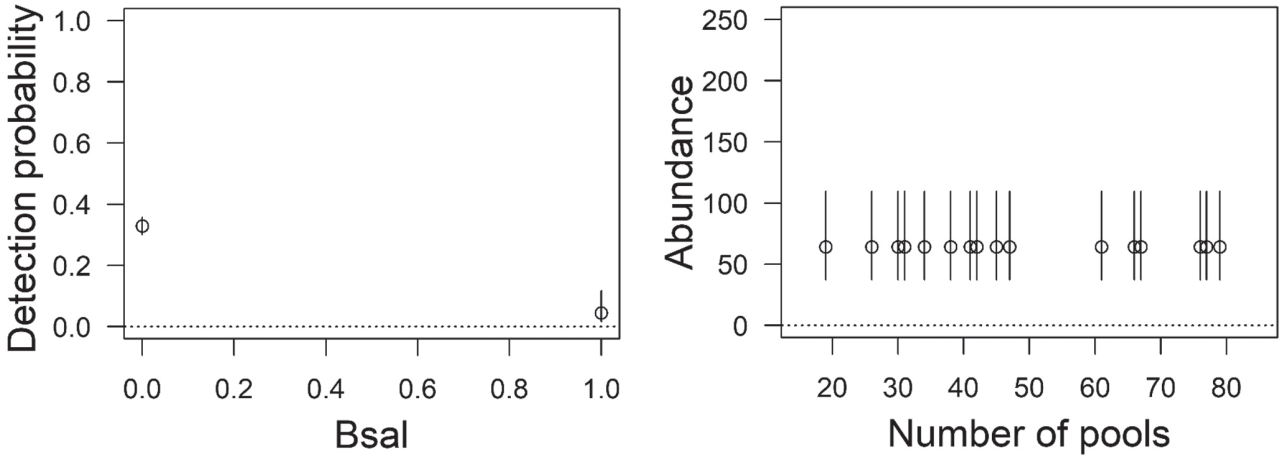
Supplementary document 25. Effect of number of pools on detection probability and on larval abundance according to the best fitting model with ΔAIC = 0 considering removal data from 20 creeks (Southern Eifel Mountains, 2018).



Supplementary document 26. Model selection overview of plausible hierarchical model with ΔAIC < 2 considering removal data from 17 creeks with *Bsal screening* (Southern Eifel Mountains, 2018). Symbols as in Supplementary document 2. Red indicates effects of *Bsal.*

Model	AIC	ΔAIC	AIC weight
Λ=pools (.), p=*Bsal* (.), nb	-3141.82	0.00	0.26
Λ=*Bsal* (↓), p=pools (↑), nb	-3140.69	1.13	0.15
Λ=pools (.), p=pools (↑), nb	-3140.65	1.16	0.15

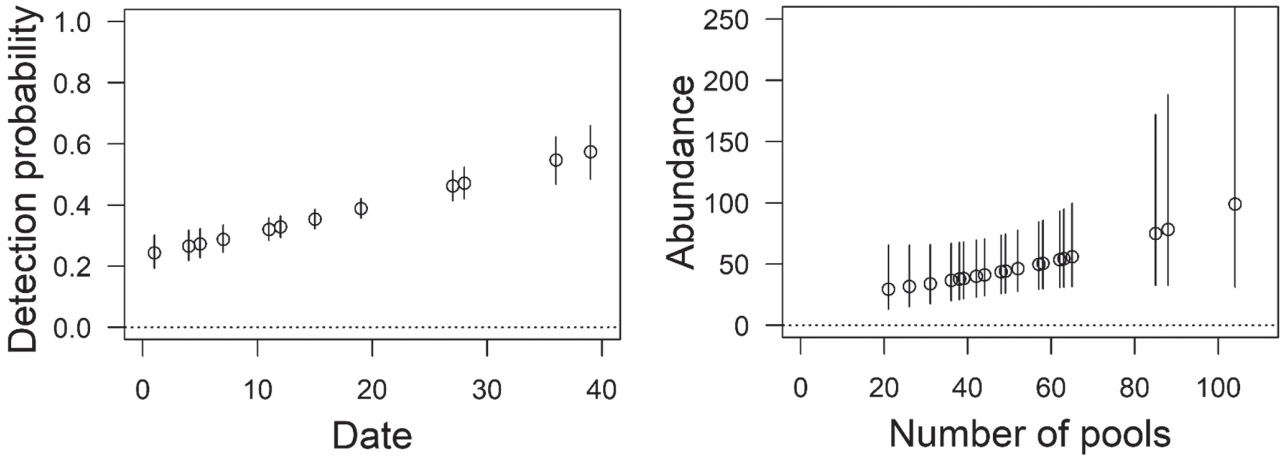
Supplementary document 27. Effect of *Bsal* on detection probability and number of pools on larval abundance according to the best fitting model with ΔAIC = 0 considering removal data from 17 creeks with *Bsal screening* (Southern Eifel Mountains, 2018).



Supplementary document 28. Model selection overview of plausible hierarchical model with ΔAIC < 2 considering removal data from 20 creeks (Southern Eifel Mountains, 2019). Symbols as in Supplementary document 2.

Model	AIC	ΔAIC	AIC weight
Λ=pools (↑), p=date (↑), nb	-2973.00	0.00	0.24
Λ=constant (.), p=date (↑), nb	-2972.87	0.13	0.22
Λ=constant (.), p=pools (↑), nb	-2971.94	1.06	0.14
Λ=date (↑), p=date(↑), nb	-2971.03	1.97	0.09

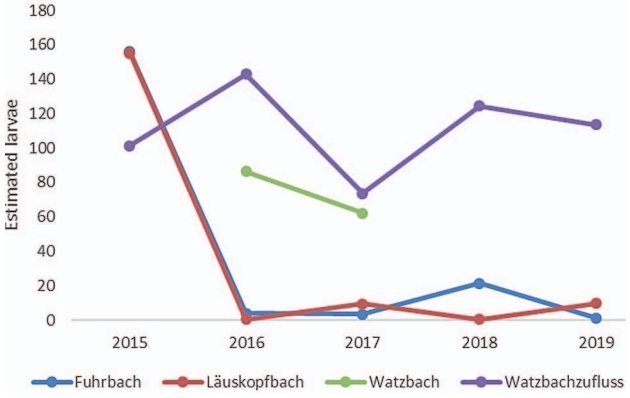
Supplementary document 29. Effect of date on detection probability and number of pools on larval abundance according to the best fitting model with ΔAIC = 0 considering removal data from 20 creeks (Southern Eifel Mountains, 2019).



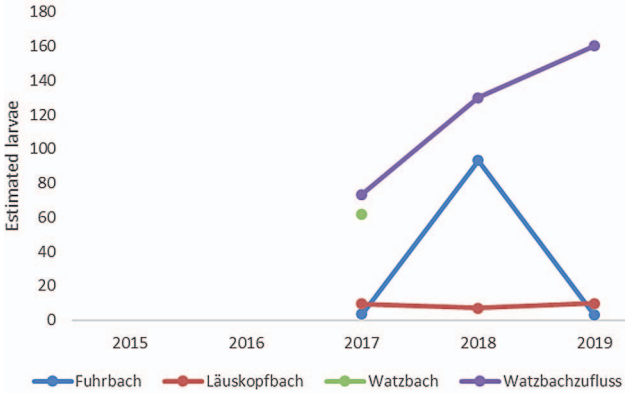
Supplementary document 30. Model selection overview of plausible hierarchical model with ΔAIC < 2 considering removal data from 18 creeks with *Bsal* screening (Southern Eifel Mountains, 2019). Symbols as in Supplementary document 2. Red indicates effects of *Bsal*.

Model	AIC	ΔAIC	AIC weight
Λ=constant (.), p=pools (↑), nb	-2934.18	0.00	0.18
Λ=pools (.), p=date(↑), nb	-2933.97	0.21	0.16
Λ=constant (.), p=date(↑), nb	-2933.85	0.33	0.15
Λ=pools (.), p=pools(↑), nb	-2933.32	0.86	0.12
Λ=date (↑), p=pools (↑), nb	-2932.87	1.31	0.09
Λ=*Bsal* (.), p=pools (↑), nb	-2932.20	1.99	0.07

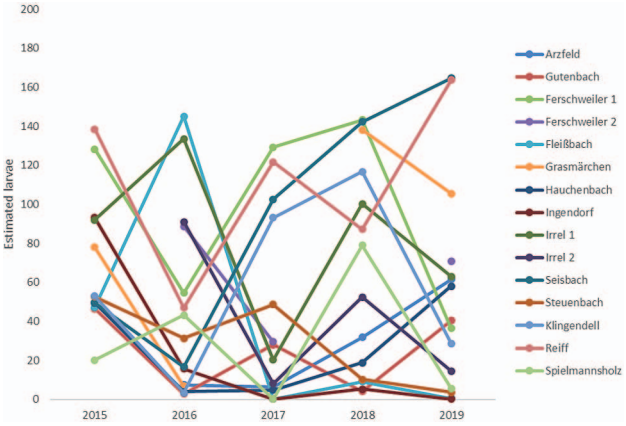
Supplementary document 31. Estimated larvae according to the first analysis of removal data from *Bsal*-infected sites from the Southern Eifel Mountains. In the Fuhrbach and Läuskopfbach, *Bsal* was first detected in 2017 and in 2019 in the Watzbach and Watzbachzufluss. Confidence intervals can be found in in Supplementary document 1.



Supplementary document 32. Estimated larvae according to the second analysis of removal data from *Bsal*-infected sites from the Southern Eifel Mountains. In the Fuhrbach and Läuskopfbach, *Bsal* was first detected in 2017 and in 2019 in the Watzbach and Watzbachzufluss. Confidence intervals can be found in in Supplementary document 1.



Supplementary document 33. Estimated larvae according to the first analysis of removal data from sites from the Southern Eifel Mountains where *Bsal* was not detected. Confidence intervals can be found in in Supplementary document 1.



Supplementary document 34. Estimated larvae according to the second analysis of removal data from sites from the Southern Eifel Mountains where *Bsal* was not detected. Confidence intervals can be found in in Supplementary document 1.