

**Supplementary Table S2.** List of *Bufo viridis* specimens sampled for population genetic analysis. Red-highlighted samples were excluded from the analysis due to a high proportion (>20%) of missing data.

Date	Sampling site	Sex	Tissue-ID	Weight [g]	TL [mm]
09.04.2016	Immendorf	m	MVTIS 4027	21.0	58.2
09.04.2016	Immendorf	m	MVTIS 4028	24.3	63.0
09.04.2016	Immendorf	m	MVTIS 4029	24.2	64.9
09.04.2016	Immendorf	m	MVTIS 4030	29.2	67.7
09.04.2016	Immendorf	m	MVTIS 4031	25.0	65.3
09.04.2016	Immendorf	m	MVTIS 4032	28.8	68.9
09.04.2016	Immendorf	m	MVTIS 4033	31.9	72.2
09.04.2016	Immendorf	m	MVTIS 4034	31.9	69.1
09.04.2016	Immendorf	m	MVTIS 4035	18.7	60.7
09.04.2016	Immendorf	m	MVTIS 4036	19.0	62.0
09.04.2016	Immendorf	f	MVTIS 4037	31.7	70.9
09.04.2016	Immendorf	m	MVTIS 4038	20.9	62.1
09.04.2016	Immendorf	m	MVTIS 4039	32.7	69.8
09.04.2016	Immendorf	m	MVTIS 4040	19.4	60.7
09.04.2016	Immendorf	m	MVTIS 4041	23.6	66.5
12.04.2016	Westhovener Aue	m	MVTIS 4045	29.2	70.1
12.04.2016	Westhovener Aue	m	MVTIS 4046	36.4	73.8
12.04.2016	Westhovener Aue	m	MVTIS 4047	35.2	77.3
12.04.2016	Westhovener Aue	m	MVTIS 4048	32.8	75.1
12.04.2016	Westhovener Aue	m	MVTIS 4049	29.0	68.1
12.04.2016	Westhovener Aue	m	MVTIS 4050	35.1	73.6
12.04.2016	Porz-Wahn	m	MVTIS 4051	18.9	62.8
12.04.2016	Porz-Wahn	m	MVTIS 4052	18.3	65.4
12.04.2016	Porz-Wahn	m	MVTIS 4053	15.9	64.1
12.04.2016	Porz-Wahn	m	MVTIS 4054	18.3	59.6
12.04.2016	Porz-Wahn	m	MVTIS 4055	22.3	64.9
12.04.2016	Porz-Wahn	m	MVTIS 4056	18.6	59.9
12.04.2016	Porz-Wahn	m	MVTIS 4057	24.2	61
12.04.2016	Porz-Wahn	m	MVTIS 4058	24.4	66.9
12.04.2016	Porz-Wahn	m	MVTIS 4059	17.3	68.3
21.04.2016	Immendorf	m	MVTIS 4060	22.4	62.3
21.04.2016	Immendorf	m	MVTIS 4061	21.1	62.4
21.04.2016	Immendorf	m	MVTIS 4062	18.8	61.3
21.04.2016	Immendorf	m	MVTIS 4063	14.2	59.9
21.04.2016	Immendorf	m	MVTIS 4064	19.6	64.1
21.04.2016	Immendorf	m	MVTIS 4065	22.2	65.0
21.04.2016	Immendorf	m	MVTIS 4066	18.9	61.5
21.04.2016	Immendorf	f	MVTIS 4067	23.3	65.5
21.04.2016	Immendorf	f	MVTIS 4068	14.1	60.8
21.04.2016	Immendorf	m	MVTIS 4069	23.5	67.7
21.04.2016	Immendorf	m	MVTIS 4070	22.8	65.8
21.04.2016	Immendorf	m	MVTIS 4071	19.7	61.9
21.04.2016	Immendorf	m	MVTIS 4072	16.8	59.1
21.04.2016	Immendorf	m	MVTIS 4073	16.3	60.6
21.04.2016	Immendorf	m	MVTIS 4074	27.4	69.2
21.04.2016	Immendorf	m	MVTIS 4075	19.2	61.3
21.04.2016	Immendorf	m	MVTIS 4076	23.1	68.6
21.04.2016	Immendorf	m	MVTIS 4077	20.3	63.8
21.04.2016	Immendorf	f	MVTIS 4078	27.4	70.0

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Date	Sampling site	Sex	Tissue-ID	Weight [g]	TL [mm]
21.04.2016	Immendorf	m	MVTIS 4079	19.5	64.5
21.04.2016	Immendorf	f	MVTIS 4080	17.4	60.8
23.04.2016	R2.12	m	MVTIS 4081	19.8	62.6
02.05.2016	Ginsterpfad	m	MVTIS 4082	19.5	59.0
02.05.2016	Ginsterpfad	m	MVTIS 4083	20.6	68.2
02.05.2016	R2.12	m	MVTIS 4084	24.1	61.3
05.05.2016	Ginsterpfad	m	MVTIS 4085	25.0	62.9
05.05.2016	Ginsterpfad	m	MVTIS 4086	32.3	70.9
05.05.2016	Ginsterpfad	m	MVTIS 4087	19.7	60.1
05.05.2016	Ginsterpfad	m	MVTIS 4088	26.1	69.9
05.05.2016	Ginsterpfad	m	MVTIS 4089	23.5	61.7
05.05.2016	Ginsterpfad	m	MVTIS 4090	19.6	58.3
06.05.2016	Ginsterpfad	m	MVTIS 4091	19.9	59.6
06.05.2016	Ginsterpfad	f	MVTIS 4092	34.2	73.6
08.05.2016	Westhovener Aue	m	MVTIS 4093	31.6	71.0
08.05.2016	Westhovener Aue	m	MVTIS 4094	33.8	71.3
08.05.2016	Westhovener Aue	m	MVTIS 4095	34.4	73.1
08.05.2016	Westhovener Aue	m	MVTIS 4096	33.5	68.2
08.05.2016	Westhovener Aue	m	MVTIS 4097	31.3	68.1
08.05.2016	Westhovener Aue	m	MVTIS 4098	37.1	77.6
08.05.2016	Westhovener Aue	m	MVTIS 4099	38.3	72.2
08.05.2016	Westhovener Aue	m	MVTIS 4100	36.3	74.6
08.05.2016	Porz-Wahn	m	MVTIS 4101	19.1	59.7
08.05.2016	Porz-Wahn	m	MVTIS 4102	16.2	56.1
08.05.2016	Porz-Wahn	m	MVTIS 4103	29.5	66.0
08.05.2016	Porz-Wahn	m	MVTIS 4104	31.1	70.3
11.05.2016	Kiesgrube Esser	m	MVTIS 4105	21.5	60.7
11.05.2016	Kiesgrube Esser	m	MVTIS 4106	15.9	54.8
11.05.2016	Kiesgrube Esser	m	MVTIS 4107	20.4	64.0
11.05.2016	Kiesgrube Esser	m	MVTIS 4108	22.0	62.2
11.05.2016	Kiesgrube Esser	m	MVTIS 4109	23.8	62.9
11.05.2016	Kiesgrube Esser	m	MVTIS 4110	21.2	63.1
11.05.2016	Kiesgrube Esser	m	MVTIS 4111	26.2	65.7
11.05.2016	Kiesgrube Esser	m	MVTIS 4112	15.7	57.4
11.05.2016	Kiesgrube Esser	m	MVTIS 4113	21.3	60.8
11.05.2016	Kiesgrube Esser	m	MVTIS 4114	24.9	66.2
11.05.2016	Kiesgrube Esser	m	MVTIS 4115	27.1	64.6
11.05.2016	Kiesgrube Esser	m	MVTIS 4116	21.7	61.9
11.05.2016	R2.12	m	MVTIS 4117	26.8	64.3
11.05.2016	R2.12	m	MVTIS 4118	19.1	58.6
20.05.2016	Westhovener Aue	m	MVTIS 4119	36.0	74.1
20.06.2016	Westhovener Aue	f	MVTIS 4120	66.4	82.7
02.06.2016	Immendorf	m	MVTIS 4121	21.3	65.9
02.06.2016	Immendorf	m	MVTIS 4122	19.1	61.8
15.06.2016	Immendorf	m	MVTIS 4123	30.0	67.7
10.05.2017	Ginsterpfad	m	MVTIS4301	25.3	66.0
10.05.2017	Ginsterpfad	m	MVTIS4302	31.4	68.0
10.05.2017	Ginsterpfad	m	MVTIS4303	30.5	70.5
16.05.2017	Ginsterpfad	m	MVTIS4304	21.8	66.6
16.05.2017	Ginsterpfad	m	MVTIS4305	27.9	68.1
16.05.2017	Ginsterpfad	m	MVTIS4306	31.6	70.1

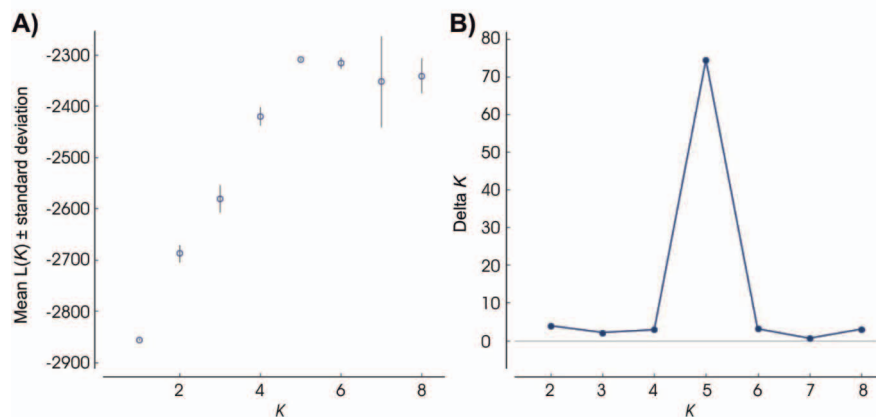
Date	Sampling site	Sex	Tissue-ID	Weight [g]	TL [mm]
16.05.2017	Ginsterpfad	m	MVTIS4307	26.9	62.7
16.05.2017	Ginsterpfad	m	MVTIS4308	21.3	61.5
16.05.2017	Ginsterpfad	m	MVTIS4309	21.7	59.3
16.05.2017	Ginsterpfad	m	MVTIS4310	20.6	62.6
16.05.2017	Ginsterpfad	m	MVTIS4311	25.7	65.8
18.05.2017	Westhovener Aue	m	MVTIS4312	31.1	68.3
18.05.2017	Westhovener Aue	m	MVTIS4313	18.7	58.2
18.05.2017	Westhovener Aue	m	MVTIS4314	19.8	58.1
18.05.2017	Westhovener Aue	m	MVTIS4315	38.6	75.6
18.05.2017	Westhovener Aue	m	MVTIS4316	11.93	48.7
18.05.2017	Westhovener Aue	m	MVTIS4317	15.9	44.4
18.05.2017	Westhovener Aue	m	MVTIS4318	33.7	72.6
18.05.2017	Westhovener Aue	m	MVTIS4319	36.6	74.1
18.05.2017	Westhovener Aue	m	MVTIS4320	19.4	58.6
18.05.2017	Westhovener Aue	m	MVTIS4321	12.4	50.8
18.05.2017	Westhovener Aue	m	MVTIS4322	18.1	58.1
18.05.2017	Westhovener Aue	m	MVTIS4323	23.5	68.6
18.05.2017	Westhovener Aue	m	MVTIS4324	33.0	72.0
18.05.2017	Westhovener Aue	m	MVTIS4325	13.0	52.1
05.06.2017	Immendorf	m	MVTIS4326	22.5	61.6
25.07.2017	Porz-Wahn	m	MVTIS4327	33.3	69.8
25.07.2017	Porz-Wahn	m	MVTIS4328	26.6	64.2
25.07.2017	Porz-Wahn	m	MVTIS4329	33.7	69.3
25.07.2017	Porz-Wahn	m	MVTIS4330	29.4	68.2
25.07.2017	Porz-Wahn	f	MVTIS4331	38.6	76.6
25.07.2017	Porz-Wahn	m	MVTIS4332	28.9	65.5
29.07.2017	Porz-Wahn	f	MVTIS4333	22.9	66.4
29.07.2017	Porz-Wahn	f	MVTIS4334	26.7	66.6
29.07.2017	Porz-Wahn	m	MVTIS4335	36.9	68.6
29.07.2017	Porz-Wahn	f	MVTIS4336	33.3	67.9
-	Schöningen	-	BVTIS 4126	-	-
-	Schöningen	-	MVTIS 4124	-	-
-	Schöningen	-	MVTIS 4125	-	-
-	Fehmarn	-	WKF1	-	-
-	Fehmarn	-	WKF2	-	-

**Supplementary Table S3.** Number of specimens per site sequenced for fragments of the mitochondrial 16S and cytochrome b genes.

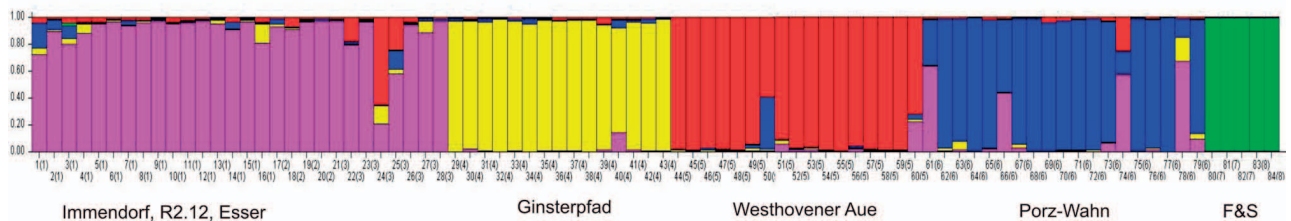
Location	16S	Cytochrome b
Ginsterpfad	8	9
Immendorf	17	17
R2.12	5	4
Kiesgrube Esser	11	12
Westhovener Aue	3	4
Porz-Wahn	11	13
Schöningen	3	3
Fehmarn	0	0

**Supplementary Table S4.** Expected (He) and observed (Ho) heterozygosities for all microsatellite loci and sites sampled for *Bufo viridis*.

Locus	Bvir 15979	Bvir 23976	Bvir 19382	Bvir 11064	Bvir 10561	Bvir 5761	Bvir 3372	Bvir 11600	Bvir 3022	Bvir 16861	Bvir 29737	Bvir 13782
He Immendorf	0.731	0.497	0.609	0.121	0.808	0.712	0.694	0.454	0.552	0.696	0.883	0.660
Ho Immendorf	0.800	0.467	0.667	0.125	1.000	0.875	0.750	0.313	0.500	0.357	0.846	0.600
He R2.12	0.833	0.500	0.750	0.000	0.786	0.607	0.786	0.429	0.750	0.750	1.000	0.679
Ho R2.12	1.000	0.500	0.750	0.000	0.750	0.750	0.750	0.500	0.750	0.750	1.000	0.250
He Kiesgrube Esser	0.792	0.542	0.575	0.400	0.817	0.342	0.808	0.508	0.517	0.692	0.894	0.692
Ho Kiesgrube Esser	0.875	0.500	0.500	0.500	1.000	0.375	0.750	0.375	0.500	0.500	1.000	0.750
He Ginsterpfad	0.570	0.618	0.431	0.495	0.793	0.559	0.476	0.167	0.641	0.526	0.575	0.577
Ho Ginsterpfad	0.667	0.467	0.417	0.500	0.600	0.733	0.467	0.167	0.800	0.400	0.692	0.500
He Westhovener Aue	0.714	0.522	0.348	0.433	0.674	0.647	0.508	0.398	0.000	0.604	0.605	0.565
Ho Westhovener Aue	0.813	0.438	0.235	0.529	0.529	0.588	0.294	0.455	0.000	0.588	0.667	0.353
He Porz-Wahn	0.683	0.665	0.471	0.056	0.700	0.832	0.722	0.379	0.805	0.494	0.870	0.652
Ho Porz-Wahn	0.842	0.722	0.500	0.056	0.737	0.889	0.824	0.333	0.895	0.579	1.000	0.471
He Schöningen	0.533	0.733	0.000	0.533	0.800	0.000	0.733	0.533	0.000	0.333	0.333	0.333
Ho Schöningen	0.667	0.667	0.000	0.667	0.667	0.000	0.333	0.000	0.000	0.333	0.333	0.333
He Fehmarn	1.000	0.667	1.000	0.000	0.000	0.000	0.667	0.000	0.667	0.833	0.667	0.833
Ho Fehmarn	1.000	1.000	1.000	0.000	0.000	0.000	1.000	0.000	1.000	1.000	1.000	1.000



**Supplementary Figure S1.** Comparison of STRUCTURE runs from K=1 to K=8. A) Mean L(K) ( $\pm$  standard deviation) over ten runs for each value of K from 1 to 8. B) Delta K calculated as  $\Delta K = \text{mean}(|L'(K)|) / \text{standard deviation} [L(K)]$ , and K=5 had the highest  $\Delta K$  versus K peak height.



**Supplementary Figure S2.** Barplot from an analysis with STRUCTURE excluding locus Bvir16861 with K=5 for 84 individuals. Each individual is represented by a single vertical line broken into K coloured segments, with height proportional to each of the K inferred clusters. Note that the colours of clusters in this figure do not correspond to those used in Figure 1.