

Table S1. Results of ANCOVA examining effects on kinematic, dynamic and electromyographic variables over the 11-25°C range in four *Bufo terrestris*. Prey distance was included as a covariate only when it showed a significant effect for that variable. Bold values with asterisks indicate significant effects at the Bonferroni-corrected alpha (0.0019 for 27 variables). Data from four individual toads were included in all analyses.

	Individual				Temperature				Prey Distance			
	# Trials	F-ratio	df	P-value	# Trials	F-ratio	df	P-value	# Trials	F-ratio	df	P-value
Kinematic variables												
Duration of ballistic mouth opening	56	0.481	3,51	0.6973	56	2.192	1,51	0.1449	35	2.689	1,29	0.1119
Duration of tongue projection	55	4.947	3,50	0.0044	55	1.969	1,50	0.1668	35	0.844	1,29	0.3659
Gape distance at end of ballistic opening	31	6.485	3,26	0.0020	31	0.028	1,26	0.8688	28	7.712	1,22	0.0110
Maximum tongue reach	34	4.037	3,28	0.0167	34	2.232	1,28	0.1464	34	40.302	1,28	<0.0001*
Duration of mouth opening during transport	56	0.725	3,51	0.5418	56	15.203	1,51	0.0003*	35	0.203	1,29	0.6559
Final gape distance	34	19.786	3,29	<0.0001*	34	1.251	1,29	0.2725	34	8.539	1,28	0.0068
Duration of tongue retraction	55	3.369	3,50	0.0256	55	11.834	1,50	0.0012*	35	5.004	1,29	0.0331
Duration of mouth closing	56	1.248	3,51	0.3021	56	114.627	1,51	<0.0001*	35	0.342	1,29	0.5633
Dynamic variables												
Average velocity of ballistic mouth opening	34	50.055	3,29	<0.0001*	34	7.157	1,29	0.0121	34	3.660	1,28	0.0660
Maximum velocity of ballistic opening	31	85.455	3,26	<0.0001*	31	2.287	1,26	0.1425	28	5.683	1,22	0.0262
Maximum acceleration of ballistic opening	31	34.044	3,26	<0.0001*	31	0.018	1,26	0.8950	28	0.229	1,22	0.6371
Maximum power of ballistic opening	31	32.061	3,26	<0.0001*	31	0.631	1,26	0.4343	28	3.782	1,22	0.0647
Average velocity of tongue projection	34	12.927	3,29	<0.0001*	34	3.164	1,29	0.0857	34	1.252	1,28	0.2727
Average velocity of mouth opening during transport	34	0.611	3,29	0.6133	34	35.580	1,29	<0.0001*	34	3.110	1,28	0.0887
Average velocity of tongue retraction	34	2.742	3,28	0.0619	34	28.270	1,28	<0.0001*	34	20.899	1,28	<0.0001*
Average velocity of mouth closing	34	7.098	3,29	0.0010*	34	122.424	1,29	<0.0001*	34	0.000	1,28	0.9841
Electromyographic variables												
Depressor EMG integrated area	35	14.494	3,29	<0.0001*	35	125.225	1,29	<0.0001*	35	125.225	1,29	<0.0001*
Depressor EMG duration	52	18.795	3,47	<0.0001*	52	244.604	1,47	<0.0001*	35	2.245	1,29	0.1449
Depressor EMG RMS	52	5.189	3,47	0.0035	52	5.328	1,47	0.0254	35	8.836	1,29	0.0059
Depressor EMG integrated area/duration	52	1.676	3,47	0.1850	52	1.979	1,47	0.1661	35	10.332	1,29	0.0032
Depressor EMG RMS max. amplitude	52	0.427	3,47	0.7349	52	2.400	1,47	0.1280	35	4.014	1,29	0.0545
Levator EMG (second burst) RMS max. amplitude	53	29.468	3,48	<0.0001*	53	3.315	1,48	0.0749	35	0.868	1,29	0.3593
Depressor EMG start to start of ballistic opening	52	4.964	3,47	0.0045	52	91.734	1,47	<0.0001*	35	8.439	1,29	0.0070
Depressor EMG end to start of ballistic opening	52	5.243	3,47	0.0033	52	1.120	1,47	0.2954	35	0.002	1,29	0.9636
Depressor EMG max. amp. to start of ballistic opening	52	0.086	3,47	0.9674	52	20.159	1,47	<0.0001*	35	0.590	1,29	0.4487
Levator EMG (first burst) max. amp to end ballistic open	52	1.590	3,47	0.2043	52	5.338	1,47	0.0253	35	0.306	1,29	0.5845
Levator EMG (second burst) max. amp to mouth closed	53	6.371	3,48	0.0010*	53	11.640	1,48	0.0013*	35	0.011	1,29	0.9162

Table S2. Results of ANCOVA examining effects on kinematic, dynamic and electromyographic variables over the 20-35°C range in four *Bufo terrestris*. Prey distance was included as a covariate only when it showed a significant effect for that variable. Bold values with asterisks indicate significant effects at the Bonferroni-corrected alpha (0.0019 for 27 variables). Data from four individual toads were included in all analyses.

	Individual				Temperature				Prey Distance			
	# Trials	F-ratio	df	P-value	# Trials	F-ratio	df	P-value	# Trials	F-ratio	df	P-value
Kinematic variables												
Duration of ballistic mouth opening	38	45.012	3,33	<0.0001*	38	24.722	1,33	<0.0001*	23	3.556	1,17	0.0765
Duration of tongue projection	38	10.853	3,33	<0.0001*	38	1.324	1,33	0.2582	23	0.027	1,17	0.8717
Gape distance at end of ballistic opening	23	3.552	3,18	0.0353	23	2.895	1,18	0.1061	22	1.541	1,16	0.2323
Maximum tongue reach	23	7.660	3,17	0.0019	23	5.649	1,17	0.0295	23	42.591	1,17	<0.0001*
Duration of mouth opening during transport	38	3.959	3,33	0.0162	38	17.192	1,33	0.0002*	23	0.432	1,17	0.5201
Final gape distance	24	4.073	3,19	0.0216	24	28.035	1,19	<0.0001*	24	1.204	1,18	0.287
Duration of tongue retraction	38	12.449	3,33	<0.0001*	38	5.739	1,33	0.0224	23	1.161	1,17	0.2962
Duration of mouth closing	38	11.509	3,33	<0.0001*	38	1.183	1,33	0.2846	23	3.847	1,17	0.0664
Dynamic variables												
Average velocity of ballistic mouth opening	24	5.586	3,19	0.0064	24	0.122	1,19	0.7305	23	5.939	1,17	0.0261
Maximum velocity of ballistic opening	23	75.977	3,18	<0.0001*	23	2.573	1,18	0.1261	22	2.617	1,16	0.1253
Maximum acceleration of ballistic opening	23	25.565	3,18	<0.0001*	23	1.038	1,18	0.3219	22	0.167	1,16	0.688
Maximum power of ballistic opening	23	27.777	3,18	<0.0001*	23	2.041	1,18	0.1702	22	0.393	1,16	0.5394
Average velocity of tongue projection	24	6.753	3,19	0.0027	24	6.985	1,19	0.0160	23	1.517	1,17	0.2348
Average velocity of mouth opening during transport	22	0.403	3,17	0.7525	22	0.008	1,17	0.9304	22	0.072	1,16	0.7919
Average velocity of tongue retraction	24	4.122	3,19	0.0207	24	0.035	1,19	0.8545	23	2.544	1,17	0.1292
Average velocity of mouth closing	24	13.190	3,19	<0.0001*	24	2.944	1,19	0.1025	24	3.025	1,18	0.0991
Electromyographic variables												
Depressor EMG integrated area	37	12.311	3,32	<0.0001*	37	17.048	1,32	0.0002*	22	2.002	1,16	0.1762
Depressor EMG duration	37	7.316	3,32	0.0007*	37	2.673	1,32	0.1119	22	5.646	1,16	0.0303
Depressor EMG RMS	37	35.935	3,32	<0.0001*	37	7.825	1,32	0.0086	22	0.214	1,16	0.6499
Depressor EMG integrated area/duration	37	30.517	3,32	<0.0001*	37	6.227	1,32	0.0179	22	1.368	1,16	0.2593
Depressor EMG RMS max. amplitude	37	26.974	3,32	<0.0001*	37	7.505	1,32	0.0100	22	0.192	1,16	0.667
Levator EMG (second burst) RMS max. amplitude	37	56.100	3,32	<0.0001*	37	4.743	1,32	0.0369	22	1.268	1,16	0.2768
Depressor EMG start to start of ballistic opening	37	1.652	3,32	0.1970	37	5.408	1,32	0.0265	22	13.542	1,16	0.0020
Depressor EMG end to start of ballistic opening	37	3.902	3,32	0.0175	37	3.136	1,32	0.0861	22	2.500	1,16	0.1334
Depressor EMG max. amp. to start of ballistic opening	37	0.215	3,32	0.8851	37	0.286	1,32	0.5968	22	1.542	1,16	0.2322
Levator EMG (first burst) max. amp to end ballistic open	37	2.527	3,32	0.0749	37	0.100	1,32	0.7538	22	0.655	1,16	0.4303
Levator EMG (second burst) max. amp to mouth closed	37	4.188	3,32	0.0131	37	0.041	1,32	0.8417	22	3.904	1,16	0.0657