Tables:

Table S1
Results for the main and interactive effects of morph, sex, and treatment (water and temperature) on (A) survivorship (binary logistic generalized linear model; n=1001) and (B) total water content (% of live mass; mixed model; n=393) in adult *G. lineaticeps*. Initial body mass was included as a covariate for survival analysis. Significant effects are bolded.

A. Survivorship

	Wald Chi-Square	**df**	**P**
Morph	0.89	1	0.35
Sex	0.71	1	0.40
Water Treatment	2.3	1	0.13
Temperature Treatment	**6.1**	**1**	**0.013**
Water * Temperature	0.042	1	0.84
Morph * Sex	**3.9**	**1**	**0.048**
Morph * Water	2.3	1	0.13
Morph * Temperature	0.012	1	0.91
Sex * Water	3.4	1	0.066
Sex * Temperature	0.79	1	0.38
Morph * Sex * Water	0.20	1	0.66
Morph * Sex * Temperature	0.20	1	0.65
Morph * Water * Temperature	0.054	1	0.82
Sex * Water * Temperature	0.39	1	0.53
Morph * Sex * Water * Temperature	0.48	1	0.49
Initial Body Mass	**45**	**1**	**<0.001**

B. Total Water Content

	F	**df**	**P**
Morph	**96**	**1, 375**	**<0.001**
Sex	**8.9**	**1, 375**	**0.003**
Water Treatment	**154**	**1, 375**	**<0.001**
Temperature Treatment	**13**	**1, 375**	**<0.001**
Water * Temperature	**4.1**	**1, 375**	**0.044**
Morph * Sex	0.18	1, 375	0.67
Morph * Water	0.15	1, 375	0.7
Morph * Temperature	0.63	1, 375	0.43
Sex * Water	0.31	1, 375	0.56
Sex * Temperature	1.2	1, 375	0.27
Morph * Sex * Water	0	1, 375	0.99
Morph * Sex * Temperature	0.002	1, 375	0.96
Morph * Water * Temperature	0.013	1, 375	0.91
Sex * Water * Temperature	1.6	1, 375	0.2
Morph * Sex * Water * Temperature	0.002	1, 375	0.97

Table S2
Results for the main and interactive effects of morph, sex, and treatment (water and temperature) on (A) final body mass (mixed model; n=284), (B) dry gonad mass (mixed model; n=265), and (C) flight muscle status (ordinal logistic generalized linear mixed model; n=273) in adult *G. lineaticeps.* Initial body mass was included as a covariate for final body mass and dry gonad mass analysis. Significant effects are bolded.

A. Final Body Mass

	F	**df**	**P**
Morph-DLM	1.9	1, 244	0.15
Sex	**3.9**	**1, 244**	**0.046**
Water Treatment	**170**	**1, 244**	**<0.001**
Temperature Treatment	**45**	**1, 244**	**<0.001**
Water * Temperature	**15**	**1, 244**	**<0.001**
Morph-DLM * Sex	0.93	1, 244	0.40
Morph-DLM * Water	**4.1**	**1, 244**	**0.018**
Morph-DLM * Temperature	2.0	1, 244	0.14
Sex * Water	2.5	1, 244	0.12
Sex * Temperature	0.13	1, 244	0.72
Morph-DLM * Sex * Water	0.048	1, 244	0.95
Morph-DLM * Sex * Temperature	0.26	1, 244	0.77
Morph-DLM * Water * Temperature	0.98	1, 244	0.38
Sex * Water * Temperature	0.20	1, 244	0.64
Morph-DLM * Sex * Water * Temperature	0.25	1, 244	0.78
Initial Body Mass	**1325**	**1, 244**	**<0.001**

B. Dry Gonad Mass

	F	**df**	**P**
Morph-DLM	2.5	1, 221	0.08
Sex	**128**	**1, 221**	**<0.001**
Water Treatment	1.7	1, 221	0.197
Temperature Treatment	0.35	1, 221	0.56
Water * Temperature	0.34	1, 221	0.55
Morph-DLM * Sex	1.9	1, 221	0.16
Morph-DLM * Water	0.47	1, 221	0.62
Morph-DLM * Temperature	2.5	1, 221	0.086
Sex * Water	0.69	1, 221	0.41
Sex * Temperature	1	1, 221	0.31
Morph-DLM * Sex * Water	0.14	1, 221	0.87
Morph-DLM * Sex * Temperature	1.76	1, 221	0.18
Morph-DLM * Water * Temperature	0.46	1, 221	0.63
Sex * Water * Temperature	0.36	1, 221	0.55

Morph-DLM * Sex * Water * Temperature	2.3	1, 221	0.11
Initial Body Mass	**39**	**1, 221**	**<0.001**

C. Flight Muscle Status

	Wald Chi-Square	df	P
Morph	**99**	**1**	**<0.001**
Sex	0.37	1	0.54
Water Treatment	0.98	1	0.32
Temperature Treatment	3.0	1	0.081
Water * Temperature	0.67	1	0.41
Morph * Sex	1.5	1	0.22
Morph * Water	0.67	1	0.41
Morph * Temperature	0.010	1	0.92
Sex * Water	3.0	1	0.09
Sex * Temperature	0.19	1	0.66
Morph * Sex * Water	0.16	1	0.69
Morph * Sex * Temperature	1.5	1	0.23
Morph * Water * Temperature	0.47	1	0.49
Sex * Water * Temperature	0.057	1	0.81
Morph * Sex * Water * Temperature	0.083	1	0.77

Table S3
Mixed model results for the main and interactive effects of morph, sex, and treatment (water and temperature) on (A) metabolic rate ($\dot{V}CO_2$; n=190) and (B) evaporative water loss rate ($\dot{V}H_2O$; n=190) at 28ºC in adult *G. lineaticeps*. Final body mass was included as a covariate. Significant effects are bolded.

A. $\dot{V}CO_2$

	F	df	P
Morph	**10**	**1, 167**	**0.0016**
Sex	**7.5**	**1, 167**	**0.0067**
Water Treatment	1.4	1, 167	0.23
Temperature Treatment	1.6	1, 167	0.21
Water * Temperature	**4.6**	**1, 167**	**0.041**
Morph * Sex	0.89	1, 167	0.35
Morph * Water	0.22	1, 167	0.64
Morph * Temperature	0.0065	1, 167	0.94
Sex * Water	0.23	1, 167	0.63
Sex * Temperature	0.52	1, 167	0.47
Morph * Sex * Water	1.2	1, 167	0.28
Morph * Sex * Temperature	0.96	1, 167	0.33
Morph * Water * Temperature	0.0045	1, 167	0.95
Sex * Water * Temperature	0.37	1, 167	0.55
Morph * Sex * Water * Temperature	1.3	1, 167	0.26
Final Body Mass	**31**	**1, 167**	**<0.001**

B. $\dot{V}H_2O$

	F	df	P
Morph	1.7	1, 162	0.20
Sex	0.74	1, 162	0.39
Water Treatment	2.4	1, 162	0.12
Temperature Treatment	0.022	1, 162	0.88
Water * Temperature	0.58	1, 162	0.45
Morph * Sex	0.38	1, 162	0.54
Morph * Water	0.27	1, 162	0.60
Morph * Temperature	0.29	1, 162	0.59
Sex * Water	0.85	1, 162	0.36
Sex * Temperature	0.026	1, 162	0.87
Morph * Sex * Water	0.0018	1, 162	0.97
Morph * Sex * Temperature	0.025	1, 162	0.87
Morph * Water * Temperature	0.32	1, 162	0.57
Sex * Water * Temperature	0.92	1, 162	0.34
Morph * Sex * Water * Temperature	0.014	1, 162	0.91
Final Body Mass	**4.6**	**1, 162**	**0.034**

Table S4
Mixed model results for the main and interactive effects of morph, sex, and treatment (water and temperature) on (A) boldness (n=264) and (B) on total phenoloxidase activity (n=148) in adult *G. lineaticeps.* Total protein content was included as a covariate for total phenoloxidase activity analysis. Significant effect is bolded.

A. Boldness

	F	**df**	**P**
Morph	0.99	1, 245	0.32
Sex	1.5	1, 245	0.22
Water Treatment	0.57	1, 245	0.45
Temperature Treatment	0.45	1, 245	0.51
Water * Temperature	2.9	1, 245	0.089
Morph * Sex	0.20	1, 245	0.65
Morph * Water	0.30	1, 245	0.59
Morph * Temperature	0.046	1, 245	0.83
Sex * Water	1.8	1, 245	0.18
Sex * Temperature	0.24	1, 245	0.63
Morph * Sex * Water	0.52	1, 245	0.47
Morph * Sex * Temperature	0.054	1, 245	0.82
Morph * Water * Temperature	**4.0**	**1, 245**	**0.048**
Sex * Water * Temperature	0.0081	1, 245	0.93
Morph * Sex * Water * Temperature	0.47	1, 245	0.49

B. Total Phenoloxidase Activity

	F	**df**	**P**
Morph	0.018	1, 142	0.89
Water Treatment	1.3	1, 142	0.26
Temperature Treatment	2.8	1, 142	0.10
Water * Temperature	0.23	1, 142	0.63
Morph * Water	0.53	1, 142	0.47
Morph * Temperature	**4.3**	**1, 142**	**0.044**
Morph * Water * Temperature	0.42	1, 142	0.52
Total Protein Content	1.5	1, 142	0.23