







Supp. Table 1: Genetic data source sites for each morphological population collected in this study. For each gene, each morphological population (left) was matched with the closest genetic population from the three source studies. All GenBank data from that population for that gene were then collected. Finally, all data for a gene were concatenated for later analysis.

Morph. Population	Genetic Population	gene	Source study
Tallassee	Blount (AC37)	mtDNA	Tollis 2012
Tallassee	Blount (AC33)	TERT	Tollis 2012
Tallassee	Blount (AC38)	RALGAPA	Tollis 2012
Tallassee	Blount (AC39)	HMGCS	Tollis 2012
Bald Head Island	Holden Beach (AC22)	mtDNA	Tollis 2012
Bald Head Island	Holden Beach (AC22)	TERT	Tollis 2012
Bald Head Island	Holden Beach (AC22)	RALGAPA	Tollis 2012
Bald Head Island	Holden Beach (AC22)	HMGCS	Tollis 2012
Augusta	Augusta (GA)	mtDNA	Tollis 2012
Augusta	Augusta (GA)	TERT	Tollis 2012
Augusta	Augusta (GA)	RALGAPA	Tollis 2012
Augusta	Augusta (GA)	HMGCS	Tollis 2012
Slidell	St. Tammany (AC3)	mtDNA	Tollis 2012
Slidell	St. Tammany (AC3)	TERT	Tollis 2012
Slidell	St. Tammany (AC3)	RALGAPA	Tollis 2012
Slidell	St. Tammany (AC3)	HMGCS	Tollis 2012
Arlington	Wood (TX)	mtDNA	Tollis 2012
Arlington	Wood (TX)	TERT	Tollis 2012
Arlington	Wood (TX)	RALGAPA	Tollis 2012
Arlington	Wood (TX)	HMGCS	Tollis 2012
Cedar Creek	Ogden (AR2)	mtDNA	Tollis 2012
Cedar Creek	Ogden(AR2)	TERT	Tollis 2012
Cedar Creek	Ogden(AR2)	RALGAPA	Tollis 2012
Cedar Creek	Ogden(AR2)	HMGCS	Tollis 2012
Oak Hill	Titusville	mtDNA	Tollis 2014
Oak Hill	Titusville	TERT	Tollis 2014
Oak Hill	Titusville	RALGAPA	Tollis 2014
Oak Hill	Titusville	HMGCS	Tollis 2014
Oxford	Pickwick, TN	mtDNA	SCS 2012
Oxford	Bibb, AL (AC40)	HMGCS	Tollis 2012
Washington	Washington/Goose Creek	mtDNA	SCS 2012
Washington	Morehead (AC20)	TERT	Tollis 2012
Washington	Morehead (AC20)	RALGAPA	Tollis 2012
Washington	Morehead (AC20)	HMGCS	Tollis 2012
Hobe Sound	Corbett	mtDNA	SCS 2012

Hobe Sound	South Bay	TERT	Tollis 2014
Hobe Sound	South Bay	RALGAPA	Tollis 2014
Hobe Sound	South Bay	HMGCS	Tollis 2014
Sinton	Corpus Christi	mtDNA	SCS 2012
Brownsville	Brownsville	mtDNA	SCS 2012
Austin	Houston	mtDNA	SCS 2012
Punta Gorda	Collier	mtDNA	Tollis 2012
Punta Gorda	Collier	TERT	Tollis 2012
Punta Gorda	Collier	RALGAPA	Tollis 2012
Punta Gorda	Collier	HMGCS	Tollis 2012

Supp. Table 2: Mitochondrial genetic distance matrix used in the MCMCglimm regressions.

	Arlington	Augusta	Austin	BHI	Brownsville
Arlington	0	0.00588036	0.0042325	0.03264789	0.00482417
Augusta	0.00588036	0	0.00662114	0.03354769	0.00679463
Austin	0.0042325	0.00662114	0	0.03481949	0.00540528
BHI	0.03264789	0.03354769	0.03481949	0	0.03409753
Brownsville	0.00482417	0.00679463	0.00540528	0.03409753	0
Cedar_Creek	0.00310267	0.00422676	0.00342463	0.03344925	0.0039407
Hobe_Sound	0.06533728	0.06483946	0.06547625	0.06843472	0.06589453
Oak_Hill	0.03013166	0.03172572	0.03228212	0.01775037	0.0318415
Oxford	0.00697258	0.00787814	0.00772725	0.03394669	0.00824638
Punta_Gorda	0.06164772	0.06236009	0.06181073	0.06110339	0.06226613
Sinton	0.00382347	0.00603417	0.00414848	0.03406451	0.00449761
Slidell	0.00482062	0.00692945	0.00514341	0.03392281	0.00554527
Tallassee	0.00490934	0.00542313	0.00549046	0.03256258	0.00600804
Washington	0.03084543	0.03181477	0.03299792	0.0053425	0.03228504

	Cedar_Creek	Hobe_Sound	Oak_Hill	Oxford	Punta_Gorda	Sinton
0.00310267	0.06533728	0.03013166	0.00697258	0.06164772	0.00382347	
0.00422676	0.06483946	0.03172572	0.00787814	0.06236009	0.00603417	
0.00342463	0.06547625	0.03228212	0.00772725	0.06181073	0.00414848	
0.03344925	0.06843472	0.01775037	0.03394669	0.06110339	0.03406451	
0.0039407	0.06589453	0.0318415	0.00824638	0.06226613	0.00449761	
0	0.06398744	0.03109227	0.00600054	0.06240572	0.00241683	
0.06398744	0	0.06825663	0.06833998	0.03152626	0.06690736	
0.03109227	0.06825663	0	0.03157228	0.05891133	0.03162322	
0.00600054	0.06833998	0.03157228	0	0.06327005	0.00674859	
0.06240572	0.03152626	0.05891133	0.06327005	0	0.06335523	
0.00241683	0.06690736	0.03162322	0.00674859	0.06335523	0	
0.00342345	0.06588942	0.03132068	0.00772544	0.06283369	0.00414712	

	0.00376906	0.06544067	0.03015174	0.0046267	0.06141576	0.00449619
	0.03163947	0.06684756	0.01812945	0.03249769	0.05917081	0.03245272
Slidell	Tallassee	Washington				
	0.00482062	0.00490934	0.03084543			
	0.00692945	0.00542313	0.03181477			
	0.00514341	0.00549046	0.03299792			
	0.03392281	0.03256258	0.0053425			
	0.00554527	0.00600804	0.03228504			
	0.00342345	0.00376906	0.03163947			
	0.06588942	0.06544067	0.06684756			
	0.03132068	0.03015174	0.01812945			
	0.00772544	0.0046267	0.03249769			
	0.06283369	0.06141576	0.05917081			
	0.00414712	0.00449619	0.03245272			
	0	0.00548872	0.03247062			
	0.00548872	0	0.03090646			
	0.03247062	0.03090646	0			

Supp. Table 3: Nuclear genetic distance matrix used in the MCMCglmm regressions.

	Arlington	Augusta	BHI	Cedar_Creek	Hobe_Sound	Oak_Hill
Arlington	0	0.00022336	0.00155706	0.00028541	0.00091801	0.00091301
Augusta	0.00022336	0	0.0009766	0.00039431	0.00092103	0.00058344
BHI	0.00155706	0.0009766	0	0.002413	0.00160662	0.00062016
Cedar_Creek	0.00028541	0.00039431	0.002413	0	0.0012235	0.00149687
Hobe_Sound	0.00091801	0.00092103	0.00160662	0.0012235	0	0.00048544
Oak_Hill	0.00091301	0.00058344	0.00062016	0.00149687	0.00048544	0
Oxford	0.00038856	0.00058344	0.00280573	0.0003885	0.00054393	0.00116788
Punta_Gorda	0.00338387	0.00258715	0.00304162	0.00413578	0.00195419	0.00160156
Slidell	0.00019027	0.00027602	0.00172357	0	0.00133422	0.00152256
Tallassee	0.0001427	0.00021232	0.00144287	0	0.00129373	0.00097864
Washington	0.00252542	0.00169292	0	0.00357423	0.00215755	0.00119888
Oxford	Punta_Gorda	Slidell	Tallassee	Washington		
	0.00038856	0.00338387	0.00019027	0.0001427	0.00252542	
	0.00058344	0.00258715	0.00027602	0.00021232	0.00169292	
	0.00280573	0.00304162	0.00172357	0.00144287	0	
	0.0003885	0.00413578	0	0	0.00357423	
	0.00054393	0.00195419	0.00133422	0.00129373	0.00215755	
	0.00116788	0.00160156	0.00152256	0.00097864	0.00119888	
	0	0.00480607	0.0003885	0.0003885	0.00376739	
	0.00480607	0	0.00319486	0.00317129	0.0037821	

0.0003885	0.00319486	0	0	0.00285939
0.0003885	0.00317129	0	0	0.00285939
0.00376739	0.0037821	0.00285939	0.00285939	0

Supp. Table 4: Posterior mean intercept, mean and bounds of coefficient, and p-value for significant regressions between environment and morphology (nDNA).

Formula	Post. Mean Intercept	Post. Mean Coeff.	Coef. 95% Lower	Coeff. 95% Upper	p	Agrees with mtDNA
Full PC2 ~ Temp PC1	0.272	-0.384	-0.590	-0.188	0.004	X
Full PC2 ~ Ann Temp	0.145	-1.016	-1.515	-0.368	0.002	X
Full PC2 ~ Precip PC2	0.387	0.594	0.300	0.883	0.006	X
Full PC2 ~ Latitude	-9.972	0.324	0.164	0.500	<0.001	X
Limb PC1 ~ AnnTemp	0.215	-0.543	-1.057	-0.003	0.042	X
Limb PC1 ~ Latitude	-4.838	0.162	0.006	0.311	0.028	X



