## **Supporting Information**

3 Fig. S1. Hindlimb length in relation to snout-vent length (SVL) for brown anoles introduced to

**experimental islands.** Solid lines show simple linear regressions for each treatment group (long-

limbed vs. short-limbed lizards); vertical dashed line shows median snout-vent length; points

are jittered to avoid overplotting.

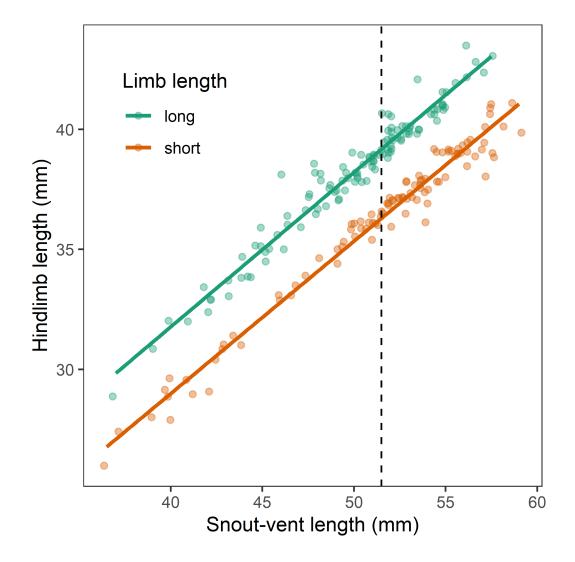


Table S1. Summary of attributes for islands used in the experiment. We identified 16 islands without brown anoles present and grouped them into four blocks based on vegetative area.

Limb-length and density treatments were assigned randomly within blocks. Relative hindlimb length is the mean value for the lizards released on each island using the residuals from a regression of In[hindlimb length] on In[SVL] for all lizards. Density is the number of lizards released divided by the vegetated area. Lizards released is the number of lizards released at the start of the experiment in September 2018, and lizards surviving is the number of lizards recaptured 8 months later in May 2019, including the five lizards seen but not captured.

Island	Block	Island area (m²)	Limb- length treatment	Density treatment	Relative hindlimb length	Density (lizards/m²)	Lizards released	Lizards surviving
Z0	Α	312.0	long	low	1.283	0.038	12	2
Z01	Α	270.3	long	high	1.338	0.159	43	7
Z04	Α	216.5	short	high	-1.322	0.162	35	6
X03	Α	202.0	short	low	-1.313	0.040	8	2
A18	В	168.6	long	high	1.531	0.160	27	11
X06	В	145.9	short	low	-1.739	0.041	6	3
X03*	В	143.7	short	high	-1.493	0.160	23	7
N01	В	137.9	long	low	1.608	0.044	6	2
A05	С	135.0	long	low	1.692	0.037	5	3
XO	С	104.0	short	low	-1.359	0.038	4	2
N02	С	103.3	short	high	-1.578	0.165	17	8
W14	С	87.6	long	high	1.363	0.160	14	10
N100	D	54.1	long	high	1.649	0.166	9	1
B102	D	41.6	short	high	-1.355	0.168	7	2
N101	D	40.4	long	low	1.108	0.050	2	0
N0	D	35.0	short	low	-1.735	0.057	2	1

Table S2. Locality information for brown anoles used in the experiment. We collected 488 adult male lizards from locations in and around Marsh Harbour, Great Abaco, Bahamas. Sites ranged from 10 km northwest of Marsh Harbour to 30 km south at Bahama Palm Shores. We provide locality information along with the number of lizards captured for each locality, number of lizards released in the experiment (total number, long-limbed treatment, and short-limbed treatment), and the latitude/longitude.

		Lizards released in the experiment				
	Lizards		Long	Short		
Locality	captured	Total	limb	limb	Latitude	Longitude
Bahama Palm Shores	117	55	14	41	26.265724	-77.131742
Regattas	115	43	29	14	26.545670	-77.050348
Bliss	86	42	30	12	26.549414	-77.048465
Memorial Park	73	29	18	11	26.547072	-77.050775
Jaime's Place	23	14	10	4	26.548126	-77.047593
Abaco Big Bird Farm	20	10	0	10	26.391942	-77.096797
Friends	20	9	5	4	26.531827	-77.058840
Snappas	14	9	8	1	26.546485	-77.052147
Coast Trail	13	8	4	4	26.540130	-77.051947
Northwest	5	1	0	1	26.600566	-77.175656
Snake Creek Ramp	2	0	0	0	26.450924	-77.053194
Total	488	220	118	102		