

Recent and future threats to an Endangered Cuban toad: potential additive impacts of climate change and habitat loss

MARLON E. COBOS COBOS and ROBERTO ALONSO BOSCH

TABLE S1 Forest cover of various vegetation types in areas suitable for *Peltophryne longinasus* in the western, central and eastern regions of Cuba, and throughout the species' distribution range in 2000, and the area of forest lost during 2000–2012.

Vegetation type	Western region		Central region		Eastern region		Distribution range of <i>Peltophryne longinasus</i>	
	Forest cover (km ²)	Forest loss (km ²)	Forest cover (km ²)	Forest loss (km ²)	Forest cover (km ²)	Forest loss (km ²)	Forest cover (km ²)	Forest loss (km ²)
Montane rainforest			79.55	0.58			79.55	0.58
Semi-deciduous mesophyllous forest			58.66	0.62			58.66	0.62
Submontane mesophyllous evergreen forest			433.68	3.90	129.31	0.84	562.99	4.74
Secondary vegetation	172.54	13.36	145.24	2.48			317.79	15.84
Mogotes complex			29.24	0.10			29.24	0.10
Uncategorized	27.37	2.45			10.17	0.26	37.54	2.71
Pine forest (<i>Pinus caribaea</i>)	5.49	1.27					5.49	1.27
Pine forest (<i>Pinus caribaea</i> & <i>Pinus tropicalis</i>)	116.95	7.95					116.95	7.95
Young pine plantations	20.91	3.36					20.91	3.36
<i>Total</i>	343.26	28.39	746.37	7.68	139.48	1.10	1229.12	37.17

TABLE S2 Areas of suitable habitat for *Peltophryne longinasus* in protected areas in Cuba in 2000, and predicted suitable areas in 2050 and 2070 under two climate change scenarios, RCP 2.6 and RCP 8.5.

Year (Scenario)	Area of suitable habitat (km ²)				% of total suitable habitat	% decrease with respect to 2000
	Western region	Central region	Eastern region	Total		
2000	264.48	260.22	682.39	1,207.08	36.60	
2050 (RCP 2.6)	14.50	193.99	634.64	843.14	47.14	30.15
2070 (RCP 2.6)	30.16	201.49	673.84	905.49	49.74	24.99
2050 (RCP 8.5)	3.47	175.02	675.41	853.90	57.31	29.26
2070 (RCP 8.5)	0.00	139.98	388.33	528.30	56.69	56.23

TABLE S3 Predicted loss in suitable habitat for *Peltophryne longinasus* in protected areas in Cuba by 2050 and 2070 under the climate scenarios RCP 2.6 and RCP 8.5.

Year (Scenario)	Area of habitat loss (km ²)				% of total potential loss in range
	Western region	Central region	Eastern region	Total	
2050 (RCP 2.6)	250.15	66.24	161.01	477.40	28.36
2070 (RCP 2.6)	234.42	58.73	132.32	425.48	26.34
2050 (RCP 8.5)	261.01	85.20	213.03	559.24	27.07
2070 (RCP 8.5)	264.48	120.24	460.77	845.49	32.77

TABLE S4 Forest cover loss during 2000–2012 in the potential distribution range of *Peltophryne longinasus*, within and outside Cuba's national system of protected areas.

Evaluated area	Forest cover lost (km ²)				% of total
	Eastern region	Central region	Western region	Total	
Total potential distribution range	61.53	13.62	38.42	113.57	100.00
Potential distribution range within the national system of protected areas	2.95	2.31	4.50	9.77	8.60
Potential distribution range outside the national system of protected areas	58.58	11.31	33.92	103.80	91.40