Tables S1-S12

Table S1. Climate change vulnerability traits for all three dimensions for amphibian species, including descriptions, thresholds, and the number of species scored 'low', 'high', and 'unknown' for each trait.

Trait group	Trait	Description	Threshold	Low vulnerability	High vulnerability	Unknown
				No. spp	No. spp	No. spp
Sensitivity						
A. Specialized habitat and/or microhabitat requirements	Habitat specialization	Number of IUCN habitat types a species occurs in by expert criterion	Low > 1 High = 1	39	9	0
	Dependence on a particular microhabitat	Freshwater-dependent and Larval development and occurs exclusively in an un-buffered habitat (i.e. not forest)	Low = False High = True	36	12	0
B. Narrow environmental tolerances or thresholds that are likely to be exceeded due to climate change at any stage in the life cycle	Physiological tolerance (distributional range and latitude)	Species that present moderate regional distribution (i.e. north limit of it is ≥ 26° S)	Low = False High = True	26	22	0
C. Dependence on a specific environmental trigger or triggers likely to be disrupted by climate change	Dependence on an environmental trigger	Explosive breeder on rainfall or increased water availability cue and with few reproductive events per year (not in forest)	Low = False High = True	26	22	0
D. Dependence on interspecific interactions which are likely to be disrupted by climate change	Increasing negative interactions with other species	Increasing negative interactions with other species (i.e. competition and predation)	Low = False High = True	45	0	3
	Diet specialist	Diet composed mainly of up to 3 categories of prey listed below[1]	Low > 3 categories High ≤ 3	41	5	2

[1] Diet categories: Spiders, ticks, other mites, cockroaches, mantises, butterflies, moths, beetles, bees, aphids, cicadas, fleas, flies, dragonflies, ants, centipedes, millipedes, non-arthropod invertebrates, amphibians, fish and birds.

			categories			
	Increasing susceptibility to diseases	Record of infection by *B. dendrobatidis* or probable future infection or other pathogen	Low = False High = True	4	14	30
Total				**17**	**31**	**0**
Percentage				**35.4%**	**64.6%**	**0.0%**
Low adaptive capacity						
A. Poor dispersability	Low intrinsic dispersal capacity	Species has not become established outside its natural range, and not associated with flowing water, and range size ≤ 4,000 km^2	Low = False High = True	36	12	0
	Extrinsic barriers to dispersal	Verification of fragmented distribution in Uruguay due to barriers (including urbanization) and/or inadequate microhabitats, and/or occurs only in the hilly range (in Uruguay)	Low = False High = True	43	5	0
B. Poor evolvability	Low reproductive capacity	Annual reproductive output ≤ 50 or viviparous	Low = False High = True	47	1	0
Total				**35**	**13**	**0**
Percentage				**72.9%**	**27.1%**	**0.0%**
Exposure						
A. Exposure to sea level rise	Habitat types exposed to sea level inundation	Occurs largely in inundation exposed coastal habitats and in no or only one other habitat type in Uruguay (i.e. coasts of Rio de la Plata, Atlantic Ocean or rivers)	Low = False High = True	42	6	0
B. Range decline due to shift in climatic conditions	Latitudinal range of the species	Species have a northern limit of distribution in Uruguay (≥ 30° South latitude)	Low = False High = True	42	6	0
Total				**40**	**8**	**0**
Percentage				**83.3%**	**16.7%**	**0.0%**

Table S2. Climate change vulnerability traits for all three dimensions for reptile species, including descriptions, thresholds, and the number of species scored 'low', 'high', and 'unknown' for each trait.

Trait group	Trait	Description	Threshold	Low vulnerability	High vulnerability	Unknown
				No. spp	No. spp	No. spp
Sensitivity						
A. Specialized habitat and/or microhabitat requirements	Habitat specialization	Number of IUCN habitat types a species occurs in by expert criterion	Low > 1 High = 1	55	9	0
	Dependence on a particular microhabitat	Species is dependent in one or more of the identified microhabitats[2]	Low = False High = True	46	18	0
B. Narrow environmental tolerances or thresholds that are likely to be exceeded due to climate change at any stage in the life cycle	Physiological tolerance (distributional range and latitude)	Species that present moderate regional distribution (i.e. north limit of it is ≥ 26°S)	Low = False High = True	56	8	0
	Tolerance of flooding/ waterlogging	Species relies upon a specific flooding regime (or lack of) across its entire range	Low = False High = True	64	0	0
	Temperature dependent gender	Gender of offspring is known to be dependent on temperature during incubation	Low = False High = True	13	43	8
C. Dependence on a specific environmental trigger or triggers likely to be disrupted by climate change	Dependence on an environmental trigger	Species relies upon a change in weather/climate to initiate one or more of the following: Breeding; egg deposition; arrival of prey (e.g. following tree fruiting); aestivation (or emergence from)	Low = False High = True	0	63	1
D. Dependence on interspecific	Diet specialist	Species diet consists of a low number of	Low = False	51	9	4

[2] Identified microhabitats: Streams or ravines in Uruguayan hilly range; ephemeral ponds, vines, fallen trees, dead wood, tree hollows, trees at the water's edge, gallery or riparian forests, anthills, termite mounds, dunes, open patches in grasslands, rocky areas and outcrops, cliffs, and caves; freshwater or forest dependent.

interactions which are likely to be disrupted by climate change		species from a single dietary category[3]	High = True			
	Interspecific habitat creation/ modification	Species is dependent upon another to modify or create habitat suitable for itself	Low = False High = True	64	0	0
Total				**0**	**64**	**0**
Percentage				**0.0%**	**100%**	**0.0%**
Low adaptive capacity						
A. Poor dispersability	Low intrinsic dispersal capacity	Species has not become established outside its natural range and is not associated with water flow, and the size of the range ≤ 4,000 km^2; or species is fossorial	Low = False High = True	52	12	0
	Extrinsic barriers to dispersal	Verification of fragmented distribution in Uruguay due to barriers (including urbanization) and/or inadequate microhabitats, and/or occurs only in the hilly range (in Uruguay)	Low = False High = True	58	6	0
B. Poor evolvability	Low reproductive capacity	Reproductive output (mean litter size x mean litters per year)	L = highest 75%; H = Lowest 25%	46	14	4
	Genetic turnover	Generation length (here replaced by longevity as a proxy for generation length)	Low = Shortest 75% High = Longest 25%	10	7	47
Total				**38**	**26**	**0**
Percentage				**59.4%**	**40.6%**	**0.0%**
Exposure						
A. Exposure to sea level rise	Habitat types exposed to sea level inundation	Occurs largely in inundation exposed coastal habitats and in no or only one other habitat type in Uruguay (i.e. coasts of Rio de la Plata, Atlantic Ocean	Low = False High = True	61	3	0

[3] Food categories: Leaf matter; fruit; seeds; nectar; a single taxonomic group of arthropod; a range of arthropods; other invertebrates; small mammals ≤ 300 mm SVL; large mammals N 300 mm SVL; adult / sub adult birds; bird eggs / juveniles; adult / juvenile reptiles; reptile eggs; adult amphibians; amphibian larvae; freshwater fish; faeces; and an "other" category for anything outside of these parameters.

		or rivers)				
B. Range decline due to shift in climatic conditions	Latitudinal range of the species	Species have a northern limit of distribution in Uruguay (≥ 30° South latitude)	Low = False High = True	59	5	0
Total				**57**	**7**	**0**
Percentage				**89.1%**	**10.9%**	**0.0%**

Table S3. Traits assessed for amphibians. Number of species (and percentage) having 100% expert consensus in responses, and number of species (and percentage) scored as 'high', 'low', and 'unknown' for each trait, are shown.

	Spp. 100% consensus		**Spp. scored 'high'**		**Spp. scored 'low'**		**Spp. scored 'unknown'**	
	No.	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**
Sensitivity	Species scored as 'high': 31 (64.6%)							
Habitat specialization	30	62.5	9	18.8	39	81.3	0	0
Dependence on a particular microhabitat	6	12.5	12	25.0	36	75.0	0	0
Physiological tolerance	33	68.8	22	45.8	26	54.2	0	0
Dependence on a specific environmental trigger	9	18.8	22	45.8	26	54.2	0	0
Increasing negative interactions with other species	0	0.0	0	0.0	45	93.8	3	6.3
Diet specialist	23	47.9	5	10.4	41	85.4	2	4.2
Increasing susceptibility to diseases	3	6.3	14	29.2	4	8.3	30	62.5
Low adaptive capacity	Species scored as 'high': 13 (27.1%)							
Low intrinsic dispersal capacity	29	60.4	12	25.0	36	75.0	0	0
Extrinsic barriers to dispersal	1	2.1	5	10.4	43	89.6	0	0
Low reproductive capacity	44	91.7	1	2.1	47	97.9	0	0
Exposure	Species scored as 'high': 8 (16.7%)							
Habitat types exposed to sea level inundation	42	87.5	6	12.5	42	87.5	0	0
Latitudinal range of the species	42	87.5	6	12.5	42	87.5	0	0

Table S4. Traits assessed for reptiles. Number of species (and percentage) having 100% expert consensus in responses, and number of species (and percentage) scored as 'high', 'low', and 'unknown' for each trait, are shown. Consensus numbers in parentheses indicate 100% of consensus when excluding traits scored as 'unknown' by all experts.

	Spp. 100% consensus		Spp. scored 'high'		Spp. scored 'low'		Spp. scored 'unknown'	
	No.	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**
Sensitivity	Species scored as 'high': 64 (100%)							
Habitat specialization	46	71.9	9	14.1	55	85.9	0	0
Dependence on a particular microhabitat	31	48.4	18	28.1	46	71.9	0	0
Physiological tolerance	57	89.1	8	12.5	56	87.5	0	0
Tolerance of flooding/waterlogging	62	96.9	0	0	64	100	0	0
Temperature-dependent gender	11 (4)	17.2 (6.3)	43	67.2	13	20.3	8	12.5
Dependence on a specific environmental trigger	34	53.1	63	98.4	0	0	1	1.6
Diet specialist	43 (42)	67.2 (65.6)	9	14.1	51	79.7	4	6.3
Interspecific habitat creation/modification	59	92.2	0	0	64	100	0	0
Low adaptive capacity	Species scored as 'high': 26 (40.6%)							
Low intrinsic dispersal capacity	51	79.7	12	18.8	52	81.3	0	0
Extrinsic barriers to dispersal	52	81.3	6	9.4	58	90.6	0	0
Low reproductive capacity	50 (49)	78.1 (76.6)	14	21.9	46	71.9	4	6.3
Generation length	1	1.6	7	10.9	10	15.6	47	73.4
Exposure	Species scored as 'high': 7 (10.9%)							
Habitat types exposed to sea level inundation	60	93.8	3	4.7	61	95.3	0	0
Latitudinal range of the species	60	93.8	5	7.8	59	92.2	0	0

Table S5. Climate change vulnerability traits for all three dimensions for amphibian species, including descriptions, thresholds, and the number of species scored 'high' for each trait under optimistic and pessimistic scenarios of missing trait data.

Trait group	Trait	Description	Threshold	Optimistic scenario	Pessimistic scenario
				No. spp	**No. spp**
Sensitivity					
A. Specialized habitat and/or microhabitat requirements	Habitat specialization	Number of IUCN habitat types a species occurs in by expert criterion	Low > 1 High = 1	9	9
	Dependence on a particular microhabitat	Freshwater-dependent and Larval development and occurs exclusively in an un-buffered habitat (i.e. not forest)	Low = False High = True	12	12
B. Narrow environmental tolerances or thresholds that are likely to be exceeded due to climate change at any stage in the life cycle	Physiological tolerance (distributional range and latitude)	Species that present moderate regional distribution (i.e. north limit of it is ≥ 26° S)	Low = False High = True	22	22
C. Dependence on a specific environmental trigger or triggers likely to be disrupted by climate change	Dependence on an environmental trigger	Explosive breeder on rainfall or increased water availability cue and with few reproductive events per year (not in forest)	Low = False High = True	22	22
D. Dependence on interspecific interactions which are likely to be disrupted by climate change	Increasing negative interactions with other species	Increasing negative interactions with other species (i.e. competition and predation)	Low = False High = True	0	3
	Diet specialist	Diet composed mainly of up to 3 categories of prey listed below[4]	Low > 3 categories High ≤ 3 categories	5	7
	Increasing susceptibility to diseases	Record of infection by *B. dendrobatidis* or probable future infection or other pathogen	Low = False High = True	14	44

[4] Diet categories: Spiders, ticks, other mites, cockroaches, mantises, butterflies, moths, beetles, bees, aphids, cicadas, fleas, flies, dragonflies, ants, centipedes, millipedes, non-arthropod invertebrates, amphibians, fish and birds.

Low adaptive capacity					
A. Poor dispersal ability	Low intrinsic dispersal capacity	Species has not become established outside its natural range, and not associated with flowing water, and range size ≤ 4,000 km^2	Low = False High = True	12	12
	Extrinsic barriers to dispersal	Verification of fragmented distribution in Uruguay due to barriers (including urbanization) and/or inadequate microhabitats, and/or occurs only in the hilly range (in Uruguay)	Low = False High = True	5	5
B. Poor evolvability	Low reproductive capacity	Annual reproductive output ≤ 50 or viviparous	Low = False High = True	1	1
Exposure					
A. Exposure to sea level rise	Habitat types exposed to sea level inundation	Occurs largely in inundation exposed coastal habitats and in no or only one other habitat type in Uruguay (i.e. coasts of Rio de la Plata, Atlantic Ocean or rivers)	Low = False High = True	6	6
B. Range decline due to shift in climatic conditions	Latitudinal range of the species	Species have a northern limit of distribution in Uruguay (≥ 30° South latitude)	Low = False High = True	6	6

Table S6. Climate change vulnerability traits for all three dimensions for reptile species, including descriptions, thresholds, and the number of species scored 'high' for each trait under optimistic and pessimistic scenarios of missing trait data.

Trait group	Trait	Description	Threshold	Optimistic scenario	Pessimistic scenario
				No. spp	**No. spp**
Sensitivity					
A. Specialized habitat and/or microhabitat requirements	Habitat specialization	Number of IUCN habitat types a species occurs in by expert criterion	Low > 1 High = 1	9	9

	Dependence on a particular microhabitat	Species is dependent in one or more of the identified microhabitats[5]	Low = False High = True	18	18
B. Narrow environmental tolerances or thresholds that are likely to be exceeded due to climate change at any stage in the life cycle	Physiological tolerance (distributional range and latitude)	Species that present moderate regional distribution (i.e. north limit of it is ≥ 26° S)	Low = False High = True	8	8
	Tolerance of flooding/ waterlogging	Species relies upon a specific flooding regime (or lack of) across its entire range	Low = False High = True	0	0
	Temperature dependent gender	Gender of offspring is known to be dependent on temperature during incubation	Low = False High = True	43	53
C. Dependence on a specific environmental trigger or triggers likely to be disrupted by climate change	Dependence on an environmental trigger	Species relies upon a change in weather/climate to initiate one or more of the following: Breeding; egg deposition; arrival of prey (e.g. following tree fruiting); aestivation (or emergence from)	Low = False High = True	63	64
D. Dependence on interspecific interactions which are likely to be disrupted by climate change	Diet specialist	Species diet consists of a low number of species from a single dietary category[6]	Low = False High = True	9	13
	Interspecific habitat creation/ modification	Species is dependent upon another to modify or create habitat suitable for itself	Low = False High = True	0	0
Low adaptive capacity					
A. Poor dispersal ability	Low intrinsic dispersal capacity	Species has not become established outside its natural range and is not associated with water flow, and the size of the range ≤ 4,000 km^2; or species is fossorial	Low = False High = True	12	12
	Extrinsic barriers to dispersal	Verification of fragmented distribution in Uruguay due to barriers (including	Low = False High = True	6	6

[5] Identified microhabitats: Streams or ravines in Uruguayan hilly range; ephemeral ponds, vines, fallen trees, dead wood, tree hollows, trees at the water's edge, gallery or riparian forests, anthills, termite mounds, dunes, open patches in grasslands, rocky areas and outcrops, cliffs, and caves; freshwater or forest dependent.

[6] Food categories: Leaf matter; fruit; seeds; nectar; a single taxonomic group of arthropod; a range of arthropods; other invertebrates; small mammals ≤ 300 mm SVL; large mammals N 300 mm SVL; adult / sub adult birds; bird eggs / juveniles; adult / juvenile reptiles; reptile eggs; adult amphibians; amphibian larvae; freshwater fish; faeces; and an “other” category for anything outside of these parameters.

		urbanization) and/or inadequate microhabitats, and/or occurs only in the hilly range (in Uruguay)			
B. Poor evolvability	Low reproductive capacity	Reproductive output (mean litter size x mean litters per year)	L = highest 75%; H = Lowest 25%	14	18
	Genetic turnover	Generation length (here replaced by longevity as a proxy for generation length)	Low = Shortest 75% High = Longest 25%	7	54
Exposure					
A. Exposure to sea level rise	Habitat types exposed to sea level inundation	Occurs largely in inundation exposed coastal habitats and in no or only one other habitat type in Uruguay (i.e. coasts of Rio de la Plata, Atlantic Ocean or rivers)	Low = False High = True	3	3
B. Range decline due to shift in climatic conditions	Latitudinal range of the species	Species have a northern limit of distribution in Uruguay (≥ 30° South latitude)	Low = False High = True	5	5

Table S7. Amphibian species classed into the climate change categories in an optimistic scenario of missing data traits, and the IUCN National categories for each species (Carreira & Maneyro, 2015)[7].

Gender	Species	Common name		IUCN N
		Spanish name (Uruguay)	English name	
1- Highly vulnerable				
Melanophryniscus	*langonei*	Sapito de Langone	Redbelly Toad	CR
Melanophryniscus	*montevidensis*	Sapito de Darwin	Montevideo Redbelly Toad	CR
Melanophryniscus	*sanmartini*	Sapito de San Martín	San Martin Redbelly Toad	NT
Ceratophrys	*ornata*	Escuerzo	Ornate Horned Frog	VU
Odontophrynus	*maisuma*	Escuercito	-	NT
Nyctimantis	*siemersi*	Rana Motor	Red-spotted Argentina Frog	DD
Physalaemus	*fernandezae*	Ranita de Fernández	Whistling Dwarf Frog	EN
2 - Potential adapters				
Rhinella	*arenarum*	Sapo Común	Argentine Toad	LC
4 -High latent risk				
Chthonerpeton	*indistinctum*	Cecilia	Argentine Caecilian	LC
Melanophryniscus	*devincenzii*	Sapito de Devincenzi	Rivera Redbelly Toad	EN
Melanophryniscus	*pachyrhynus*	Sapito de São Lourenço	-	EN
Rhinella	*achavali*	Achavalito de las Sierras	Achaval's Toad	NT
Limnomedusa	*macroglossa*	Rana de las Piedras	Rapids Frog	LC
Pleurodema	*bibroni*	Ranita de Bibron	Four-eyed Frog	NT
Sensitive only				
Melanophryniscus	*atroluteus*	Sapito Banderita Española	Uruguay Redbelly Toad	LC
Rhinella	*dorbignyi*	Sapito de Jardín de D´Orbigny	Dorbigny's Toad	LC
Rhinella	*fernandezae*	Sapito de Jardín de Fernández	Bella Vista Toad	LC
Rhinella	*diptycha*	Sapo Cururú	Cope's Toad	LC
Boana	*pulchella*	Ranita Trepadora	Montevideo Treefrog	LC
Lysapsus	*limellum*	Rana Boyadora Chica	Uruguay Harlequin Frog	EN
Pseudis	*minuta*	Rana Boyadora Grande	Lesser Swimming Frog	LC
Ololygon	*aromothyella*	Ranita de las Tormentas	-	EN
Scinax	*squalirostris*	Ranita Hocicuda	Striped Snouted Treefrog	LC
Scinax	*uruguayus*	Ranita Uruguaya	Schmidt's Uruguay Treefrog	LC
Phyllomedusa	*iheringii*	Rana Monito	Southern Walking Leaf Frog	LC
Physalaemus	*biligonigerus*	Ranita de Cuatro Ojos	Weeping Frog	LC
Physalaemus	*gracilis*	Ranita Gato	Graceful Dwarf Frog	LC
Physalaemus	*henselii*	Ranita de Hensel	Hensel's Dwarf Frog	LC
Physalaemus	*riograndensis*	Ranita de Rio Grande	Rio Grande Dwarf Frog	LC
Leptodactylus	*luctator*	Rana común	South American Spotted	LC

[7] Carreira S, Maneyro R (2015) Lista Roja de los Anfibios y Reptiles del Uruguay. Una evaluación del estado de conservación de la herpetofauna de Uruguay sobre la base de los criterios de la Unión Internacional para la Conservación de la Naturaleza. Dirección Nacional de Medio Ambiente (DINAMA), Montevideo.

			Grassfrog	
Elachistocleis	*bicolor*	Sapito oval	Two-colored Oval Frog	LC
None				
Odontophrynus	*americanus*	Escuerzo Chico	Common Lesser Escuerzo	LC
Dendropsophus	*minutus*	Ranita Rayada	Lesser Treefrog	EN
Dendropsophus	*nanus*	Ranita Enana del Chaco	Dwarf treefrog	EN
Dendropsophus	*sanborni*	Ranita Enana de Sanborn	Sanborn's Treefrog	LC
Boana	*albopunctata*	Rana Punteada de Blanco	-	DD
Ololygon	*berthae*	Ranita de Pintas Naranjas	Dwarf Snouted Treefrog	LC
Scinax	*fuscovarius*	Ranita de Flancos Amarillos	Snouted Treefrog	LC
Scinax	*granulatus*	Ranita Roncadora	-	LC
Scinax	*nasicus*	Ranita de Pecho Manchado	Lesser Snouted Treefrog	EN
Physalaemus	*cuvieri*	Rana Perro	Barker Frog	DD
Pseudopaludicola	*falcipes*	Macaquito	Hensel's Swamp Frog	LC
Leptodactylus	*chaquensis*	Rana del Chaco	-	LC
Leptodactylus	*furnarius*	Rana de Campo Grande	Potter Foam Frog	CR
Leptodactylus	*gracilis*	Rana Saltadora	Dumeril's Striped Frog	LC
Leptodactylus	*latinasus*	Rana Piadora	Oven Frog	LC
Leptodactylus	*mystacinus*	Rana de Bigotes	Moustached Frog	LC
Leptodactylus	*podicipinus*	Rana de Vientre Moteado	Pointedbelly Frog	DD

Table S8. Reptile species classed into the climate change categories in an optimistic scenario of missing data traits, and the IUCN National categories for each species (Carreira & Maneyro, 2015)[8].

Gender	**Species**	**Common name**		**IUCN N**
		Spanish name (Uruguay)	**English name**	
1- Highly vulnerable				
Phrynops	*williamsi*	Tortuga de la Herradura	Williams' Side-necked Turtle	NT
Anisolepis	*undulatus*	Lagartija de los Arboles	Wiegmann's Tree Lizard	DD
Liolaemus	*wiegmannii*	Lagartija de la Arena de Weigmann	-	VU
Liolaemus	*occipitalis*	Lagartija de la Arena	Skull Tree Iguana	EN
Liolaemus	*gardeli*		-	NE
Amphisbaena	*darwinii*	Víbora Ciega de Darwin	Darwin's Ringed Worm Lizard	LC
Amphisbaena	*munoai*	Víbora Ciega Chica	Munoa Worm Lizard	LC
4 -High latent risk				
Trachemys	*dorbigni*	Morrocoyo	D'Orbigny's slider	LC

[8] Carreira S, Maneyro R (2015) Lista Roja de los Anfibios y Reptiles del Uruguay. Una evaluación del estado de conservación de la herpetofauna de Uruguay sobre la base de los criterios de la Unión Internacional para la Conservación de la Naturaleza. Dirección Nacional de Medio Ambiente (DINAMA), Montevideo.

Acanthochelys	*spixii*	Tortuga de Canaleta	Black Spine-necked Swamp Turtle	LC
Hydromedusa	*tectifera*	Tortuga Cabeza de Víbora	South-American Snake-headed Turtle	LC
Phrynops	*hilarii*	Campanita	Hilaire's Toadhead Turtle	LC
Caiman	*latirostris*	Yacaré	Broad-snouted caiman	LC
Salvator	*merianae*	Lagarto	Argentine Black and White Tegu	LC
Tropidurus	*catalanensis*	Camaleón de Cola Espinosa	-	NT
Homonota	*uruguayensis*	Geko de las Piedras	Uruguay Marked Gecko	VU
Amphisbaena	*trachura*	Víbora Ciega de Cola Tuberculada	-	LC
Amphisbaena	*kingii*	Víbora Ciega de Cabeza en Cuña	King's Worm Lizard	LC
Leposternon	*microcephalum*	Víbora Ciega de Cabeza Chica	Smallhead Worm Lizard	DD
Cercosaura	*schreibersii*	Camaleón Marrón	Long-tailed little lizard	LC
Ophiodes	*vertebralis*	Víbora de Cristal Común	Jointed Worm Lizard	LC
Epictia	*munoai*	Viborita de dos Cabezas	Rio Grande do Sul Blind Snake	LC
Liotyphlops	*ternetzii*	Víbora Ciega de Ternetz	Ternetz's Blind Snake	DD
Leptophis	*ahaetulla*	Culebra Arborícora	Parrot Snake	DD
Tantilla	*melanocephala*	Culebra Roja de Cabeza Negra	Neotropical Black-headed Snake	LC
Atractus	*reticulatus*	Culebra Reticulada	Reticulate Ground Snake	DD
Xenodon	*histricus*	Falsa Coral de Hocico Respingado	Jan's Hognose Snake	DD
Sensitive only				
Stenocercus	*azureus*	Lagartija Manchada	-	NT
Contomastix	*lacertoides*	Lagartija Verde de Cinco Dedos	Bibron's Whiptail	LC
Teius	*oculatus*	Lagartija Verde de Cuatro Dedos	-	LC
Aspronema	*dorsivittatum*	Lagartija Brillante	Paraguay Mabuya	LC
Ophiodes	*intermedius*	Víbora de Cristal Castaña	-	LC
Ophiodes	*striatus*	Víbora de Cristal Verde	Striped Worm Lizard	LC
Eunectes	*notaeus*	Anaconda Amarilla	Yellow Anaconda	NA
Chironius	*bicarinatus*	Culebra Papapintos	Two-headed Sipo	LC
Boiruna	*maculata*	Musurana	Mussurana	LC
Calamodontophis	*paucidens*	Culebra Jaspeada	Tropical Forest Snake	DD
Paraphimophis	*rusticus*	Musurana Marrón	Culebra	LC
Helicops	*infrataeniatus*	Culebra de Agua	-	LC
Erythrolamprus	*almadensis*	Culebra de Almada	Almaden Ground Snake	LC
Erythrolamprus	*jaegeri*	Culebra Verde de Vientre Rojo	Jaeger's Ground Snake	LC
Erythrolamprus	*semiaureus*	Culebra Parda de Agua	-	LC
Erythrolamprus	*poecilogyrus sublineatus*	Culebra de Peñarol	Goldbauch-Buntnatter	LC
Lygophis	*anomalus*	Culebra de Líneas Amarillas	-	LC
Lygophis	*flavifrenatus*	Culebra Listada	Fronted Ground Snake	LC
Oxyrhopus	*rhombifer*	Falsa Coral	Amazon False Coral Snake	LC
Phalotris	*lemniscatus*	Culebra de Collar Blanco	Dumeril's Diadem Snake	LC

Philodryas	*aestiva*	Culebra Verde Esmeralda	Brazilian Green Racer	LC
Philodryas	*olfersii*	Culebra de Olfers	Lichtenstein's Green Racer	LC
Pseudablabes	*patagoniensis*	Parejera	Patagonia Green Racer	LC
Pseudablabes	*agassizii*	Culebra Verde Listada	Burrowing Night Snake	LC
Psomophis	*obtusus*	Culebra Castaña de Vientre Rojo	Wide Ground Snake	LC
Dipsas	*turgida*	Culebra Duerme-Duerme	-	LC
Taeniophallus	*occipitalis*	Culebra de Pintas	-	LC
Taeniophallus	*poecilopogon*	Culebra Acintada	-	VU
Thamnodynastes	*hypoconia*	Culebra de la Arena	-	LC
Thamnodynastes	*strigatus*	Culebra Sepia	Coastal House Snake	LC
Tomodon	*dorsatus*	Falsa Crucera Parda	Pampas Snake	DD
Tomodon	*ocellatus*	Falsa Crucera	Ocellated Pampas Snake	LC
Xenodon	*dorbignyi*	Falsa Crucera de Hocico Respingado	South American Hognose Snake	LC
Xenodon	*merremi*	Culebra Sapera	Wagler's Snake	LC
Micrurus	*altirostris*	Víbora de Coral	Uruguayan coral snake	LC
Bothrops	*alternatus*	Crucera	Crossed pit viper	LC
Bothrops	*pubescens*	Yara	-	LC
Crotalus	*durissus terrificus*	Cascabel	Cascabel Rattlesnake	EN

Table S9. Amphibian species classed into the climate change categories in a pessimistic scenario of missing data traits.

Gender	**Species**	**Common name**	
		Spanish name (Uruguay)	**English name**
1- Highly vulnerable			
Melanophryniscus	*langonei*	Sapito de Langone	Redbelly Toad
Melanophryniscus	*montevidensis*	Sapito de Darwin	Montevideo Redbelly Toad
Melanophryniscus	*sanmartini*	Sapito de San Martín	San Martin Redbelly Toad
Ceratophrys	*ornata*	Escuerzo	Ornate Horned Frog
Odontophrynus	*maisuma*	Escuercito	-
Nyctimantis	*siemersi*	Rana Motor	Red-spotted Argentina Frog
Physalaemus	*fernandezae*	Ranita de Fernández	Whistling Dwarf Frog
2 - Potential adapters			
Rhinella	*arenarum*	Sapo común	Argentine Toad
4 -High latent risk			
Chthonerpeton	*indistinctum*	Cecilia	Argentine Caecilian
Melanophryniscus	*devincenzii*	Sapito de Devincenzi	Rivera Redbelly Toad
Melanophryniscus	*pachyrhynus*	Sapito de Sao Lorenco	-
Rhinella	*achavali*	Achavalito de las Sierras	Achaval's Toad

Limnomedusa	*macroglossa*	Rana de las Piedras	Rapids Frog
Pleurodema	*bibroni*	Ranita de Bibron	Four-eyed Frog
Sensitive only			
Melanophryniscus	*atroluteus*	Sapito Banderita Española	Uruguay Redbelly Toad
Rhinella	*dorbignyi*	Sapito de Jardín de D´Orbigny	Dorbigny's Toad
Rhinella	*fernandezae*	Sapito de Jardín de Fernández	Bella Vista Toad
Rhinella	*diptycha*	Sapo Cururú	Cope's Toad
Odontophrynus	*americanus*	Escuerzo Chico	Common Lesser Escuerzo
Dendropsophus	*minutus*	Ranita Rayada	Lesser Treefrog
Dendropsophus	*nanus*	Ranita Enana del Chaco	Dwarf treefrog
Dendropsophus	*sanborni*	Ranita Rnana de Sanborn	Sanborn's Treefrog
Boana	*albopunctata*	Rana Punteada de Blanco	-
Boana	*pulchella*	Ranita Trepadora	Montevideo Treefrog
Lysapsus	*limellum*	Rana Boyadora Chica	Uruguay Harlequin Frog
Pseudis	*minuta*	Rana Boyadora Grande	Lesser Swimming Frog
Ololygon	*aromothyella*	Ranita de las Tormentas	-
Ololygon	*berthae*	Ranita de Pintas Naranjas	Dwarf Snouted Treefrog
Scinax	*fuscovarius*	Ranita de Flancos Amarillos	Snouted Treefrog
Scinax	*granulatus*	Ranita Roncadora	-
Scinax	*nasicus*	Ranita de Pecho Manchado	Lesser Snouted Treefrog
Scinax	*squalirostris*	Ranita Hocicuda	Striped Snouted Treefrog
Scinax	*uruguayus*	Ranita Uruguaya	Schmidt's Uruguay Treefrog
Phyllomedusa	*iheringii*	Rana Monito	Southern Walking Leaf Frog
Physalaemus	*biligonigerus*	Ranita de Cuatro Ojos	Weeping Frog
Physalaemus	*cuvieri*	Rana Perro	Barker Frog
Physalaemus	*gracilis*	Ranita Gato	Graceful Dwarf Frog
Physalaemus	*henselii*	Ranita de Hensel	Hensel's Dwarf Frog
Physalaemus	*riograndensis*	Ranita de Rio Grande	Rio Grande Dwarf Frog
Pseudopaludicola	*falcipes*	Macaquito	Hensel’s Swamp Frog
Leptodactylus	*luctator*	Rana Común	South American Spotted Grassfrog
Leptodactylus	*chaquensis*	Rana del Chaco	-
Leptodactylus	*furnarius*	Rana de campo Grande	Potter Foam Frog
Leptodactylus	*gracilis*	Rana Saltadora	Dumeril's Striped Frog
Leptodactylus	*latinasus*	Rana Piadora	Oven Frog
Leptodactylus	*mystacinus*	Rana de Bigotes	Moustached Frog
Leptodactylus	*podicipinus*	Rana de Vientre Moteado	Pointedbelly Frog
Elachistocleis	*bicolor*	Sapito Oval	Two-colored Oval Frog

Table S10. Reptile species classed into the climate change categories in a pessimistic scenario of missing data traits.

Gender	Species	Common name	
		Spanish name (Uruguay)	**English name**
1- Highly vulnerable			
Phrynops	*williamsi*	Tortuga de la Herradura	Williams' Side-necked Turtle
Anisolepis	*undulatus*	Lagartija de los Arboles	Wiegmann's Tree Lizard
Liolaemus	*wiegmannii*	Lagartija de la Arena de Weigmann	-
Liolaemus	*occipitalis*	Lagartija de la Arena	Skull Tree Iguana
Liolaemus	*gardeli*		-
Amphisbaena	*darwinii*	Víbora Ciega de Darwin	Darwin's Ringed Worm Lizard
Amphisbaena	*munoai*	Víbora Ciega Chica	Munoa Worm Lizard
4 -High latent risk			
Trachemys	*dorbigni*	Morrocoyo	D'Orbigny's slider
Acanthochelys	*spixii*	Tortuga de Canaleta	Black Spine-necked Swamp Turtle
Hydromedusa	*tectifera*	Tortuga Cabeza de Víbora	South-American Snake-headed Turtle
Phrynops	*hilarii*	Campanita	Hilaire's Toadhead Turtle
Caiman	*latirostris*	Yacaré	Broad-snouted caiman
Salvator	*merianae*	Lagarto	Argentine Black and White Tegu
Tropidurus	*catalanensis*	Camaleón de Cola Espinosa	-
Homonota	*uruguayensis*	Geko de las Piedras	Uruguay Marked Gecko
Amphisbaena	*trachura*	Víbora Ciega de Cola Tuberculada	-
Amphisbaena	*kingii*	Víbora Ciega de Cabeza en Cuña	King's Worm Lizard
Leposternon	*microcephalum*	Víbora Ciega de Cabeza Chica	Smallhead Worm Lizard
Cercosaura	*schreibersii*	Camaleón Marrón	Long-tailed little lizard
Ophiodes	*vertebralis*	Víbora de Cristal Común	Jointed Worm Lizard
Epictia	*munoai*	Viborita de Dos Cabezas	Rio Grande do Sul Blind Snake
Liotyphlops	*ternetzii*	Víbora Ciega de Ternetz	Ternetz's Blind Snake
Leptophis	*ahaetulla*	Culebra Arborícora	Parrot Snake
Tantilla	*melanocephala*	Culebra Roja de Cabeza Negra	Neotropical Black-headed Snake
Atractus	*reticulatus*	Culebra Reticulada	Reticulate Ground Snake
Xenodon	*histricus*	Falsa Coral de Hocico Respingado	Jan's Hognose Snake
Stenocercus	*azureus*	Lagartija Manchada	-
Contomastix	*lacertoides*	Lagartija Verde de Cinco Dedos	Bibron's Whiptail
Teius	*oculatus*	Lagartija Verde de Cuatro Dedos	-
Aspronema	*dorsivittatum*	Lagartija Brillante	Paraguay Mabuya
Ophiodes	*intermedius*	Víbora de Cristal Castaña	-
Ophiodes	*striatus*	Víbora de Cristal Verde	Striped Worm Lizard

Eunectes	*notaeus*	Anaconda Amarilla	Yellow Anaconda
Chironius	*bicarinatus*	Culebra Papapintos	Two-headed Sipo
Boiruna	*maculata*	Musurana	Mussurana
Calamodontophis	*paucidens*	Culebra Jaspeada	Tropical Forest Snake
Paraphimophis	*rusticus*	Musurana Marrón	Culebra
Helicops	*infrataeniatus*	Culebra de Agua	-
Erythrolamprus	*almadensis*	Culebra de Almada	Almaden Ground Snake
Erythrolamprus	*jaegeri*	Culebra Verde de Vientre Rojo	Jaeger's Ground Snake
Erythrolamprus	*semiaureus*	Culebra Parda de Agua	-
Erythrolamprus	*poecilogyrus sublineatus*	Culebra de Peñarol	Goldbauch-Buntnatter
Lygophis	*anomalus*	Culebra de Líneas Amarillas	-
Lygophis	*flavifrenatus*	Culebra Listada	Fronted Ground Snake
Oxyrhopus	*rhombifer*	Falsa Coral	Amazon False Coral Snake
Phalotris	*lemniscatus*	Culebra de Collar Blanco	Dumeril's Diadem Snake
Philodryas	*aestiva*	Culebra Verde Esmeralda	Brazilian Green Racer
Philodryas	*olfersii*	Culebra de Olfers	Lichtenstein's Green Racer
Pseudablabes	*patagoniensis*	Parejera	Patagonia Green Racer
Pseudablabes	*agassizii*	Culebra Verde Listada	Burrowing Night Snake
Psomophis	*obtusus*	Culebra Castaña de Vientre Rojo	Wide Ground Snake
Dipsas	*turgida*	Culebra Duerme-Duerme	-
Taeniophallus	*occipitalis*	Culebra de Pintas	-
Taeniophallus	*poecilopogon*	Culebra Acintada	-
Thamnodynastes	*hypoconia*	Culebra de la Arena	-
Thamnodynastes	*strigatus*	Culebra Sepia	Coastal House Snake
Tomodon	*dorsatus*	Falsa Crucera Parda	Pampas Snake
Tomodon	*ocellatus*	Falsa Crucera	Ocellated Pampas Snake
Xenodon	*dorbignyi*	Falsa Crucera de Hocico Respingado	South American Hognose Snake
Xenodon	*merremi*	Culebra Sapera	Wagler's Snake
Sensitive only			
Micrurus	*altirostris*	Víbora de Coral	Uruguayan coral snake
Bothrops	*alternatus*	Crucera	Crossed pit viper
Bothrops	*pubescens*	Yara	-
Crotalus	*durissus terrificus*	Cascabel	Cascabel Rattlesnake

Table S11. Assessments of vulnerability to CC for the Uruguayan herpetofauna. NA – Not applicable. Crosses indicate species considered vulnerable to CC, lines indicate species considered not vulnerable, or not assessed.

Species	Laufer 2012[9]	Toranza et al. 2012[10]	Foden et al. 2013[11]	The present study
Amphibians				
Melanophryniscus atroluteus	x	-	-	-
Melanophryniscus devincenzii	x	-	-	-
Melanophryniscus langonei	x	-	-	x
Melanophryniscus montevidensis	x	x	-	x
Melanophryniscus pachyrhynus	x	-	x	-
Melanophryniscus sanmartini	x	-	-	x
Rhinella arenarum	-	x	-	-
Rhinella dorbignyi	-	x	x	-
Ceratophrys ornata	-	-	-	x
Odontophrynus maisuma	-	-	-	x
Nyctimantis siemersi	-	-	-	x
Phyllomedusa iheringii	-	-	x	-
Physalaemus fernandezae	-	-	-	x
Pleurodema bibroni	-	x	-	-
Reptiles				
Phrynops williamsi	-	NA	NA	x
Anisolepis undulatus	-	NA	NA	x
Liolaemus wiegmannii	x	NA	NA	x
Liolaemus occipitalis	-	NA	NA	x
Liolaemus gardeli	-	NA	NA	x
Amphisbaena darwinii	-	NA	NA	x
Amphisbaena munoai	-	NA	NA	x

[9] Laufer G (2012) *Lista de especies de anfibios y reptiles de Uruguay vulnerables al cambio climático global*. IIBCE, MEC. *Technical report*, pp. 22. Montevideo.

[10] Toranza C, Maneyro R, Brazeiro A (2012) Efectos del Cambio Climático sobre la Biodiversidad: El caso de los anfibios de Uruguay. In: *Cambio y Variabilidad Climática: Respuestas Interdisciplinarias*, eds. V Picasso, G Cruz, L Astigarraga, R Terra, pp. 35–50. Espacio Interdisciplinario, Montevideo.

[11] Foden WB, Butchart SHM, Stuart SN, Vié JC, Akçakaya HR, Angulo A, DeVantier LM et al. (2013) Identifying the World's Most Climate Change Vulnerable Species: A Systematic Trait-Based Assessment of all Birds, Amphibians and Corals. *PLoS ONE* 8: e65427.

Table S12. Amphibian and reptile species classified as threatened for Uruguay and their categories (Carreira & Maneyro, 2015)[12], and classed as highly vulnerable under an optimistic scenario of missing data traits.

Species	IUCN N	Highly vulnerable
Amphibians		
Melanophryniscus langonei	CR	x
Melanophryniscus montevidensis	CR	x
Leptodactylus furnarius	CR	-
Physalaemus fernandezae	EN	x
Melanophryniscus devincenzii	EN	-
Melanophryniscus pachyrhynus	EN	-
Dendropsophus nanus	EN	-
Lysapsus limellum	EN	-
Ololygon aromothyella	EN	-
Dendropsophus minutus	EN	-
Scinax nasicus	EN	-
Ceratophrys ornata	VU	x
Reptiles		
Liolaemus occipitalis	EN	x
Crotalus durissus terrificus	EN	
Liolaemus wiegmannii	VU	x
Homonota uruguayensis	VU	-
Taeniophallus poecilopogon	VU	-

[12] Carreira S, Maneyro R (2015) Lista Roja de los Anfibios y Reptiles del Uruguay. Una evaluación del estado de conservación de la herpetofauna de Uruguay sobre la base de los criterios de la Unión Internacional para la Conservación de la Naturaleza. Dirección Nacional de Medio Ambiente (DINAMA), Montevideo.