

Supplemental Table S1. Estimated fragmentation of Peruvian primate taxa distributions. Red highlights taxa with > 50% fragmented habitat.

Taxa	Distribution Km ²	% Distribution Fragmented	IUCN Status
<i>Alouatta palliata aequatorialis</i>	358	11.9	VU
<i>Alouatta puruensis</i>	6,421	17.7	VU
<i>Alouatta seniculus</i>	135,039	23.4	LC
<i>Aotus azarae boliviensis</i>	12,736	45.5	DD
<i>Aotus miconax</i>	17,480	63.2	EN
<i>Aotus nigriceps</i>	68,099	30.1	LC
<i>Aotus nancymae</i>	86,156	33.3	VU
<i>Aotus vociferans</i>	26,342	12.9	LC
<i>Ateles belzebuth</i>	44,524	22.5	EN
<i>Ateles chamek</i>	134,673	33.4	EN
<i>Cacajao calvus ucayalii</i>	35,152	20.3	VU
<i>Callimico goeldii</i>	88,752	23.0	VU
<i>Cebuella (pygmaea) niveiventris</i>	59,974	22.3	VU
<i>Cebuella (pygmaea) pygmaea</i>	24,636	11.7	VU
<i>Cebus aequatorialis</i>	246	13.2	CR
<i>Cebus cucinus</i>	9,294	41.8	NT
<i>Cebus unicolor</i>	61,760	21.2	VU
<i>Cebus yuracus</i>	103,805	27.3	NT
<i>Cheracebus lucifer</i>	9,543	10.6	LC
<i>Lagothrix flavicauda</i>	15,375	63.6	CR
<i>Lagothrix (lagotricha) lagotricha</i>	7,631	10.0	VU
<i>Lagothrix (lagotricha) poeppigii</i>	78,914	22.0	EN
<i>Lagothrix (lagotricha) tschudii</i>	83,371	35.4	DD
<i>Leontocebus fuscicollis</i>	1,368	15.3	LC
<i>Leontocebus illigeri</i>	34,431	35.1	NT
<i>Leontocebus lagonotus</i>	21,788	15.1	LC
<i>Leontocebus leucogenys</i>	59,402	56.0	LC

<i>Leontocebus nigricolis graellsii</i>	258	5.2	NT
<i>Leontocebus nigricollis nigricollis</i>	5,432	8.0	LC
<i>Leontocebus nigrifrons</i>	7,984	16.7	LC
<i>Leontocebus tripartitus</i>	781	10.0	NT
<i>Leontocebus weddelli melanoleucus</i>	436	12.4	LC
<i>Leontocebus weddelli weddelli</i>	50,834	28.4	LC
<i>Pithecia aequatorialis</i>	8,447	15.5	LC
<i>Pithecia hirsuta</i>	7,350	11.0	DD
<i>Pithecia inusta</i>	60,513	47.8	LC
<i>Pithecia irrorata</i>	20,473	28.4	DD
<i>Pithecia isabella</i>	8,136	25.1	DD
<i>Pithecia monachus</i>	13,643	19.8	LC
<i>Pithecia napensis</i>	9,931	12.9	LC
<i>Pithecia rylandsi</i>	3,497	43.5	VU
<i>Plecturocebus aureipalatii</i>	338	14.6	LC
<i>Plecturocebus cupreus</i>	27,919	19.7	LC
<i>Plecturocebus discolor</i>	95,240	30.8	LC
<i>Plecturocebus oenanthe</i>	6,973	76.5	CR
<i>Plecturocebus toppini</i>	16,291	19.8	LC
<i>Plecturocebus urubambensis</i>	33,643	44.9	LC
<i>Saguinus imperator imperator</i>	1,117	14.5	LC
<i>Saguinus imperator subgriseus</i>	22,646	21.8	LC
<i>Saguinus labiatus labiatus</i>	1,652	45.3	LC
<i>Saguinus mystax mystax</i>	46,017	21.6	LC
<i>Saimiri boliviensis boliviensis</i>	98,642	34.2	LC
<i>Saimiri boliviensis peruviansis</i>	81,001	43.4	LC
<i>Saimiri cassiquiarensis macrodon</i>	78,268	21.3	LC
<i>Sapagus macrocephalus</i>	179,975	27.3	LC (As <i>Sapajus apella</i>)

Supplemental Table S2. Details of layers used for GIS based assessments.

Layer	Format (Cell size for raster layers)	Source
Primate distributions	ESRI Polygon Shapefile	IUCN Red List - https://www.iucnredlist.org/resources/files/3551b381-e6cf-48a7-8ae0-ef8869f4ad84
		All the worlds primates - https://alltheworldsprimates.org/Home.aspx
		S. Shanee un-published data
Forest degradation/ Deforestation	GeoTIFF (30x30 m)	Perú, Ministerio del Ambiente - https://www.datosabiertos.gob.pe/dataset/%C3%A1reas-degradadas-brecha-nacional-ministerio-del-ambiente
Towns and villages	ESRI Point Shapefile	Perú, Instituto Nacional de Estadística e Informática https://www.geogpsperu.com/2017/08/descarga-gratis-centros-poblados-censo.html
Urban centres	ESRI Polygon Shapefile	Perú, Ministerio de Educación
Roads	ESRI Polyline Shapefile	United Nations Office for the Coordination of Humanitarian Affairs (Open Street Map) - http://export.hotosm.org/downloads/b6f1ae17-8a4a-472a-b4f2-a0904196a06f/hotosm_per_roads_lines_shp.zip
Petrol concessions	ESRI Polygon Shapefile	Perú, PETROPERU - https://drive.google.com/open?id=1-p9wVww0rJAW0F0A9hgPAhDd-ryaQYDZ
Mining concessions	ESRI Polygon Shapefile	Perú, Ministerio de Energía y Minas
Forestry concessions (Timber)	ESRI Polygon Shapefile	Perú, Ministerio del Ambiente - https://drive.google.com/open?id=1N4tU8-jsIEJeKozPOTv584JzoCqKfDXB
Forestry concessions (NTFP)	ESRI Polygon Shapefile	Perú, Ministerio del Ambiente - https://drive.google.com/open?id=1N4tU8-jsIEJeKozPOTv584JzoCqKfDXB
Temperature (Current/Historic)	GeoTIFF (30 arc seconds, ~1km ²)	WorldClim - http://biogeo.ucdavis.edu/data/worldclim/v2.1/base/wc2.1_30s_tavg.zip
Temperature (Future)	GeoTIFF (30 arc seconds, ~1km ²)	WorldClim - https://www.worldclim.org/data/v1.4/cmip5_30s.html
Precipitation (Current/Historic)	GeoTIFF (30 arc seconds, ~1km ²)	WorldClim - http://biogeo.ucdavis.edu/data/worldclim/v2.1/base/wc2.1_30s_prec.zip
Precipitation (Future)	GeoTIFF (30 arc seconds, ~1km ²)	WorldClim - https://www.worldclim.org/data/v1.4/cmip5_30s.html

Supplemental Table S3. Taxa and specialists primarily responsible for non-GIS based assessments (All other taxa evaluated with GIS by Shane, Nestor Allgas and Lorena Fernandez).

Taxa	Specialist assessors
<i>Alouatta palliata aequatorialis</i>	Zoila Vega, Cindy Huertado, Alvaro García Olachea
<i>Aotus miconax</i>	Sam Shane, Nestor Allgas, Lorena Fernandez
<i>Ateles belzebuth</i>	Sam Shane, Nestor Allgas, Lorena Fernandez
<i>Ateles chamek</i>	Raul Bello Santa Cruz
<i>Cacajao calvus ucayalii</i>	Mark Bowler
<i>Callimico goeldii</i>	Mrinalini Erkenwick Watsa
<i>Cebus aequatorialis</i>	Zoila Vegas, Cindy Hurtado, Alvaro García Olachea
<i>Cebus yuracus</i>	Sam Shane, Nestor Allgas, Lorena Fernandez
<i>Cheracebus lucifer</i>	Gabriel Garcia Mendoza
<i>Lagothrix flavicauda</i>	Sam Shane, Nestor Allgas, Lorena Fernandez
<i>Leontocebus leucogenys</i>	Sam Shane, Nestor Allgas, Lorena Fernandez
<i>Leontocebus weddelli weddelli</i>	Mrinalini Erkenwick Watsa
<i>Pithecia aequatorialis</i>	Gabriel Garcia Mendoza
<i>Pithecia discolor</i>	Gabriel Garcia Mendoza
<i>Pithecia hirsuta</i>	Gabriel Garcia Mendoza
<i>Pithecia monachus</i>	Gabriel Garcia Mendoza
<i>Pithecia napensis</i>	Gabriel Garcia Mendoza
<i>Plecturocebus oenanthe</i>	Sam Shane, Nestor Allgas, Lorena Fernandez
<i>Saguinus imperator imperator</i>	Mrinalini Erkenwick Watsa
<i>Saguinus imperator subgrisecens</i>	Mrinalini Erkenwick Watsa