

Tarzan Chameleon (*Calumma tarzan*)

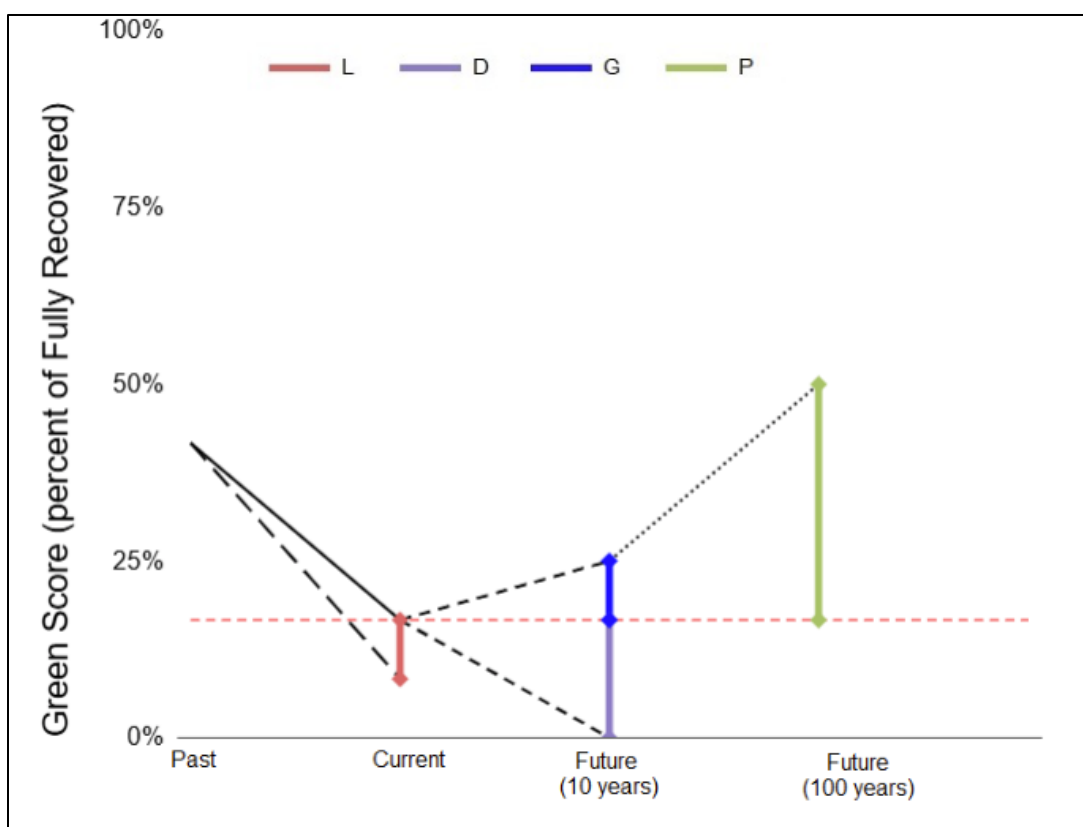


Figure S1. Graphical representation of the conservation metrics based on the Green Scores. Key: Vertical arrows represent the four conservation metrics: L – Conservation Legacy; D – Conservation Dependence; G – Conservation Gain; P – Recovery Potential. Horizontal red dashed line represents the Current Green Score. Solid black line: observed change in the Green Score of the species (ignore it if "Former" state is not specified). Long-dashed black line: (counterfactual) past change expected in the absence of past conservation efforts. Dashed black lines: future scenarios of change expected with and without current and future conservation efforts. Dotted black line: long-term potential change expected with future conservation innovation and efforts.

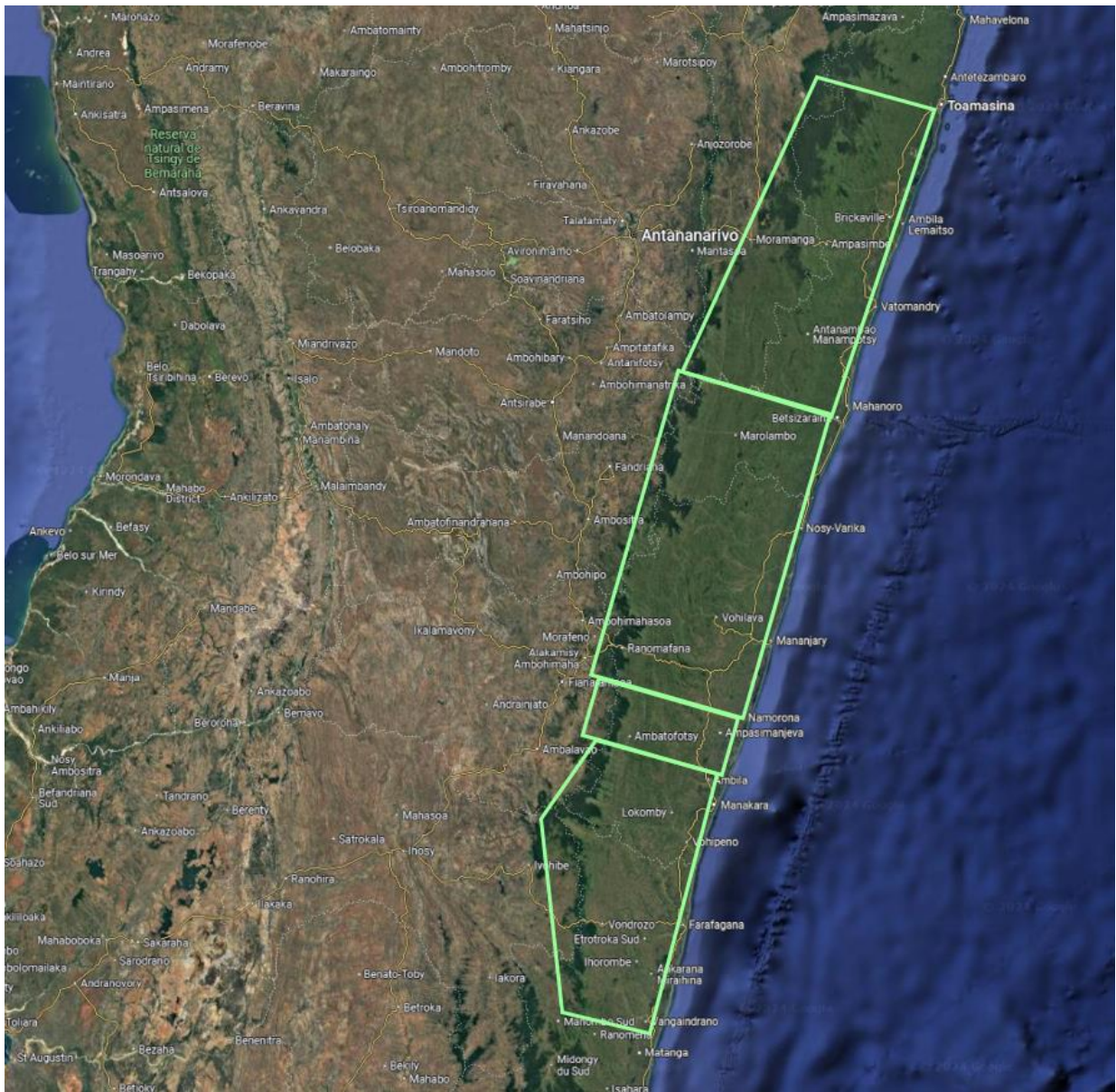


Figure S2. The indigenous range of *Calumma tarzan*. Spatial units (north to south) include: Toamasina to Mangoro River, Mangoro River to Namorona River, Namorona River to Faraony River, Faraony River to Manombo.

Table S1. Conservation actions relevant to the species in past, present, or future scenarios.

Classification	Full Description	Relevant to species?	Details
1.1.	1.1. Land/water protection: Site/area protection	X	
1.2.	1.2. Land/water protection: Resource & habitat protection		
2.1.	2.1. Land/water management: Site/area management	X	restoration of degraded habitat needed
2.2.	2.2. Land/water management: Invasive/problematic species control		
2.3.	2.3. Land/water management: Habitat & natural process restoration	X	necessary to improve connectivity
3.1.1.	3.1.1. Harvest management		
3.1.2.	3.1.2. Trade management	X	CITES Appendix II
3.1.3.	3.1.3. Limiting population growth		
3.2	3.2 Species recovery		
3.3.1.	3.3.1. Species re-introduction: Reintroduction	X	Not underway, but would be feasible and beneficial
3.3.2.	3.3.2. Species re-introduction: Benign introduction		
3.4.1.	3.4.1. Ex-situ conservation: Captive breeding/artificial propagation	X	Not underway, but would be feasible and beneficial
3.4.2.	3.4.2. Ex-situ conservation: Genome resource bank		
4.1.	4.1. Education and Awareness: Formal education	X	Underway now
4.2.	4.2. Education and Awareness: Training	X	Underway now
4.3.	4.3. Education and Awareness: Awareness & communications	X	Findings are reported to local communities. Leaflets distributed to local community. Awareness raised via social media.
5.1.1.	5.1.1. Legislation, International level	X	CITES Appendix II
5.1.2.	5.1.2. Legislation, National level	X	
5.1.3.	5.1.3. Legislation, Sub-national level		
5.1.4.	5.1.4. Legislation, scale unspecified		
5.2.	5.2. Policies and regulations		

Classification	Full Description	Relevant to species?	Details
5.3.	5.3. Private sector standards & codes		
5.4.1.	5.4.1. Compliance and enforcement- International level		
5.4.2.	5.4.2. Compliance and enforcement- National level		
5.4.3.	5.4.3. Compliance and enforcement- Sub-national level		
5.4.4.	5.4.4. Compliance and enforcement- Scale unspecified		
6.1.	6.1. Livelihood, economic & other incentives: Linked enterprises & livelihood alternatives	X	Project to train local communities at beekeeping to reduce slash-and-burn agriculture and logging
6.2.	6.2. Livelihood, economic & other incentives: Substitution		
6.3.	6.3. Livelihood, economic & other incentives: Market forces		
6.4.	6.4. Livelihood, economic & other incentives: Conservation payments		
6.5.	6.5. Livelihood, economic & other incentives: Non-monetary values		

Table S2. Threats relevant to the species in past, present, or future scenarios.

Classification	Full Description	Relevant to species?	Details
1.1	1.1 Residential & commercial development: Housing & urban areas		
1.2	1.2 Residential & commercial development: Commercial & industrial areas		
1.3	1.3 Residential & commercial development: Tourism & recreation areas		
2.1.1	2.1.1 Agriculture & aquaculture: Annual & perennial non-timber crops: Shifting agriculture		
2.1.2	2.1.2 Agriculture & aquaculture: Annual & perennial non-timber crops: Small-holder farming	X	
2.1.3	2.1.3 Agriculture & aquaculture: Annual & perennial non-timber crops: Agro-industry farming		
2.1.4	2.1.4 Agriculture & aquaculture: Annual & perennial non-timber crops: Scale Unknown/Unrecorded		
2.2.1	2.2.1 Agriculture & aquaculture: Wood & pulp plantations: Small-holder plantations		
2.2.2	2.2.2 Agriculture & aquaculture: Wood & pulp plantations: Agro-industry plantations		
2.2.3	2.2.3 Agriculture & aquaculture: Wood & pulp plantations: Scale Unknown/Unrecorded		
2.3.1	2.3.1 Agriculture & aquaculture: Livestock farming & ranching: Nomadic grazing		
2.3.2	2.3.2 Agriculture & aquaculture: Livestock farming & ranching: Small-holder grazing, ranching or farming	X	
2.3.3	2.3.3 Agriculture & aquaculture: Livestock farming & ranching: Agro-industry grazing, ranching or farming		
2.3.4	2.3.4 Agriculture & aquaculture: Livestock farming & ranching: Scale Unknown/Unrecorded		
2.4.1	2.4.1 Agriculture & aquaculture: Marine & freshwater aquaculture: Subsistence/artisanal aquaculture		
2.4.2	2.4.2 Agriculture & aquaculture: Marine & freshwater aquaculture: Industrial aquaculture		
2.4.3	2.4.3 Agriculture & aquaculture: Scale Unknown/Unrecorded		
3.1	3.1 Energy production & mining: Oil & gas drilling		
3.2	3.2 Energy production & mining: Mining & quarrying	X	

Classification	Full Description	Relevant to species?	Details
3.3	3.3 Energy production & mining: Renewable energy		
4.1	4.1 Transportation & service corridors: Roads & railroads		
4.2	4.2 Transportation & service corridors: Utility & service lines		
4.3	4.3 Transportation & service corridors: Shipping lanes		
4.4	4.4 Transportation & service corridors: Flight paths		
5.1.1	5.1.1 Biological resource use: Hunting & collecting terrestrial animals: Intentional use (species being assessed is the target)	X	
5.1.2	5.1.2 Biological resource use: Hunting & collecting terrestrial animals: Unintentional effects (species being assessed is not the target)	X	Sometimes mistaken for <i>C. gastroetania</i> , which can legally be harvested at a rate of 500 individuals per year.
5.1.3	5.1.3 Biological resource use: Hunting & collecting terrestrial animals: Persecution/control		
5.1.4	5.1.4 Biological resource use: Hunting & collecting terrestrial animals: Motivation Unknown/Unrecorded		
5.2.1	5.2.1 Biological resource use: Gathering terrestrial plants: Intentional use (species being assessed is the target)		
5.2.2	5.2.2 Biological resource use: Gathering terrestrial plants: Unintentional effects (species being assessed is not the target)		
5.2.3	5.2.3 Biological resource use: Gathering terrestrial plants: Persecution/control		
5.2.4	5.2.4 Biological resource use: Gathering terrestrial plants: Motivation Unknown/Unrecorded		
5.3.1	5.3.1 Biological resource use: Logging & wood harvesting: Intentional use: subsistence/small scale (species being assessed is the target) [harvest]		
5.3.2	5.3.2 Biological resource use: Logging & wood harvesting: Intentional use: large scale (species being assessed is the target) [harvest]		
5.3.3	5.3.3 Biological resource use: Logging & wood harvesting: Unintentional effects: subsistence/small scale (species being assessed is not the target) [harvest]	X	Logging for local construction
5.3.4	5.3.4 Biological resource use: Logging & wood harvesting: Unintentional effects: large scale		

Classification	Full Description	Relevant to species?	Details
	(species being assessed is not the target)[harvest]		
5.3.5	5.3.5 Biological resource use: Logging & wood harvesting: Motivation Unknown/Unrecorded		
5.4.1	5.4.1 Biological resource use: Fishing & harvesting aquatic resources: Intentional use: subsistence/small scale (species being assessed is the target)[harvest]		
5.4.2	5.4.2 Biological resource use: Fishing & harvesting aquatic resources: Intentional use: large scale (species being assessed is the target)[harvest]		
5.4.3	5.4.3 Biological resource use: Fishing & harvesting aquatic resources: Unintentional effects: subsistence/small scale (species being assessed is not the target)[harvest]		
5.4.4	5.4.4 Biological resource use: Fishing & harvesting aquatic resources: Unintentional effects: large scale (species being assessed is not the target)[harvest]		
5.4.5	5.4.5 Biological resource use: Fishing & harvesting aquatic resources: Persecution/control		
5.4.6	5.4.6 Biological resource use: Fishing & harvesting aquatic resources: Motivation Unknown/Unrecorded		
6.1	6.1 Human intrusions & disturbance: Recreational activities		
6.2	6.2 Human intrusions & disturbance: War, civil unrest & military exercises		
6.3	6.3 Human intrusions & disturbance: Work & other activities		
7.1.1	7.1.1 Natural system modifications: Fire & fire suppression: Increase in fire frequency/intensity	X	Slash-and-burn agriculture
7.1.2	7.1.2 Natural system modifications: Fire & fire suppression: Suppression in fire frequency/intensity		
7.1.3	7.1.3 Natural system modifications: Fire & fire suppression: Trend Unknown/Unrecorded		
7.2.1	7.2.1 Natural system modifications: Dams & water management/use: Abstraction of surface water (domestic use)		
7.2.2	7.2.2 Natural system modifications: Dams & water management/use: Abstraction of surface water (commercial use)		
7.2.3	7.2.3 Natural system modifications: Dams & water management/use: Abstraction of surface water (agricultural use)		

Classification	Full Description	Relevant to species?	Details
7.2.4	7.2.4 Natural system modifications: Dams & water management/use: Abstraction of surface water (unknown use)		
7.2.5	7.2.5 Natural system modifications: Dams & water management/use: Abstraction of ground water (domestic use)		
7.2.6	7.2.6 Natural system modifications: Dams & water management/use: Abstraction of ground water (commercial use)		
7.2.7	7.2.7 Natural system modifications: Dams & water management/use: Abstraction of ground water (agricultural use)		
7.2.8	7.2.8 Natural system modifications: Dams & water management/use: Abstraction of ground water (unknown use)		
7.2.9	7.2.9 Natural system modifications: Dams & water management/use: Small dams		
7.2.10	7.2.10 Natural system modifications: Dams & water management/use: Large dams		
7.2.11	7.2.11 Natural system modifications: Dams & water management/use: Dams (size unknown)		
7.3	7.3 Natural system modifications: Other ecosystem modifications		
8.1.1	8.1.1 Invasive & other problematic species, genes & diseases: Invasive non-native/alien species/diseases: Unspecified species		
8.1.2	8.1.2 Invasive & other problematic species, genes & diseases: Invasive non-native/alien species/diseases: Named species		
8.2.1	8.2.1 Invasive & other problematic species, genes & diseases: Problematic native species/diseases: Unspecified species		
8.2.2	8.2.2 Invasive & other problematic species, genes & diseases: Problematic native species/diseases: Named species		
8.3	8.3 Invasive & other problematic species, genes & diseases: Introduced genetic material		
8.4.1	8.4.1 Invasive & other problematic species, genes & diseases: Problematic species/diseases of unknown origin: Unspecified species		
8.4.2	8.4.2 Invasive & other problematic species, genes & diseases: Problematic species/diseases of unknown origin: Named species		
8.5.1	8.5.1 Invasive & other problematic species, genes & diseases: Viral/prion-induced diseases: Unspecified "species" (disease)		

Classification	Full Description	Relevant to species?	Details
8.5.2	8.5.2 Invasive & other problematic species, genes & diseases: Viral/prion-induced diseases: Named "species" (disease)		
8.6	8.6 Invasive & other problematic species, genes & diseases: Diseases of unknown cause		
9.1.1	9.1.1 Pollution: Domestic & urban waste water: Sewage		
9.1.2	9.1.2 Pollution: Domestic & urban waste water: Run-off		
9.1.3	9.1.3 Pollution: Domestic & urban waste water: Type Unknown/Unrecorded		
9.2.1	9.2.1 Pollution: Industrial & military effluents: Oil spills		
9.2.2	9.2.2 Pollution: Industrial & military effluents: Seepage from mining		
9.2.3	9.2.3 Pollution: Industrial & military effluents: Type Unknown/Unrecorded		
9.3.1	9.3.1 Pollution: Agricultural & forestry effluents: Nutrient loads		
9.3.2	9.3.2 Pollution: Agricultural & forestry effluents: Soil erosion, sedimentation		
9.3.3	9.3.3 Pollution: Agricultural & forestry effluents: Herbicides & pesticides		
9.3.4	9.3.4 Pollution: Agricultural & forestry effluents: Type Unknown/Unrecorded		
9.4	9.4 Pollution: Garbage & solid waste		
9.5.1	9.5.1 Pollution: Air-borne pollutants: Acid rain		
9.5.2	9.5.2 Pollution: Air-borne pollutants: Smog		
9.5.3	9.5.3 Pollution: Air-borne pollutants: Ozone		
9.5.4	9.5.4 Pollution: Air-borne pollutants: Type Unknown/Unrecorded		
9.6.1	9.6.1 Pollution: Excess energy: Light pollution		
9.6.2	9.6.2 Pollution: Excess energy: Thermal pollution		
9.6.3	9.6.3 Pollution: Excess energy: Noise pollution		
9.6.4	9.6.4 Pollution: Excess energy: Type Unknown/Unrecorded		
10.1	10.1 Geological events: Volcanoes		
10.2	10.2 Geological events: Earthquakes/tsunamis		
10.3	10.3 Geological events: Avalanches/landslides		
11.1	11.1 Climate change & severe weather: Habitat shifting & alteration		

Classification	Full Description	Relevant to species?	Details
11.2	11.2 Climate change & severe weather: Droughts	X	
11.3	11.3 Climate change & severe weather: Temperature extremes	X	
11.4	11.4 Climate change & severe weather: Storms & flooding		
11.5	11.5 Climate change & severe weather: Other impacts		
12.1	12.1 Other threat		