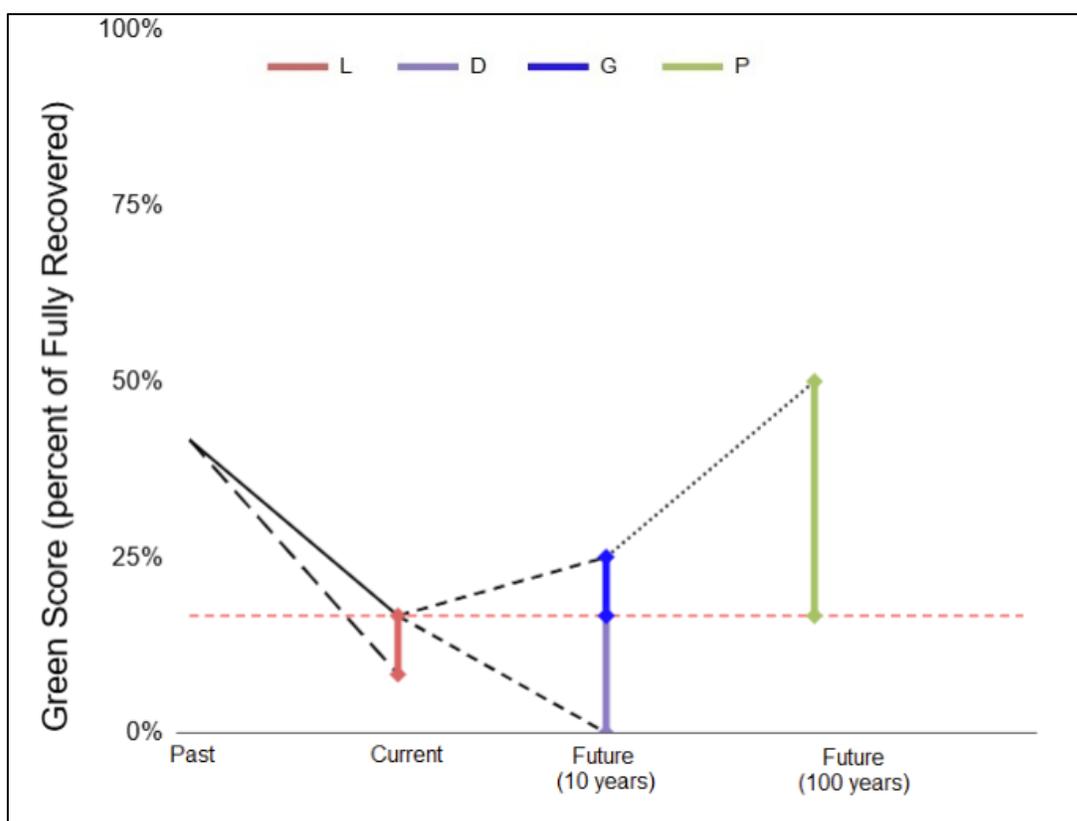
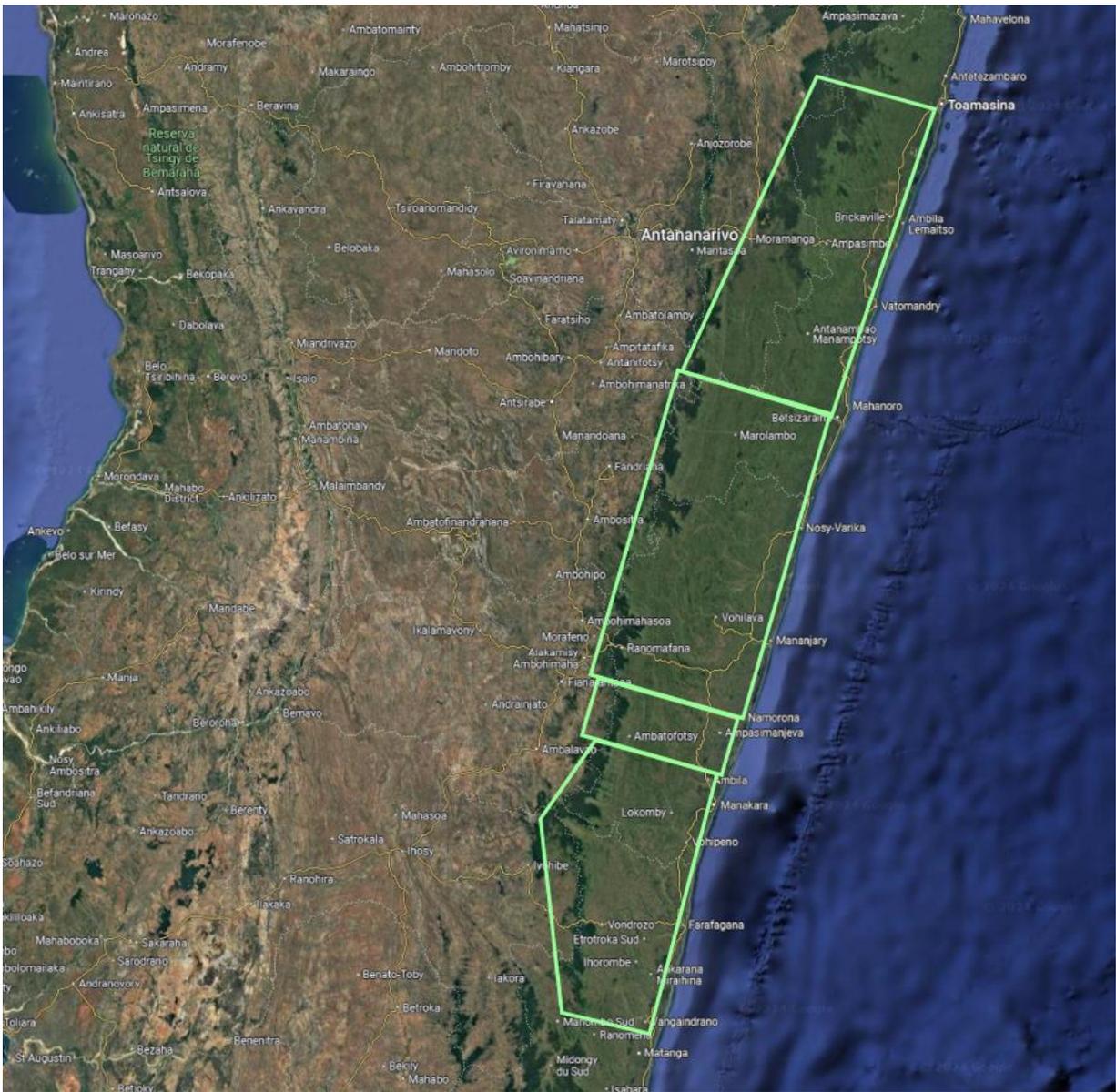


## Tarzan Chameleon (*Calumma tarzan*)



**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		

<b>Classification</b>	<b>Full Description</b>	<b>Relevant to species?</b>	<b>Details</b>
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		