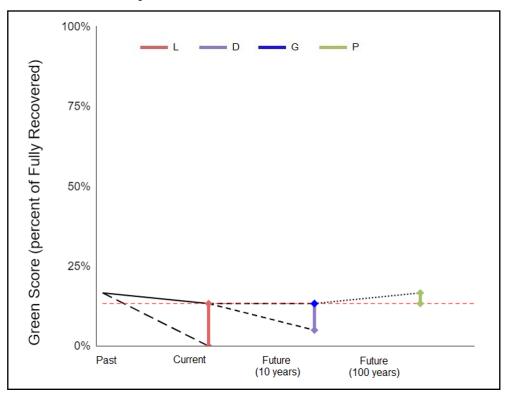
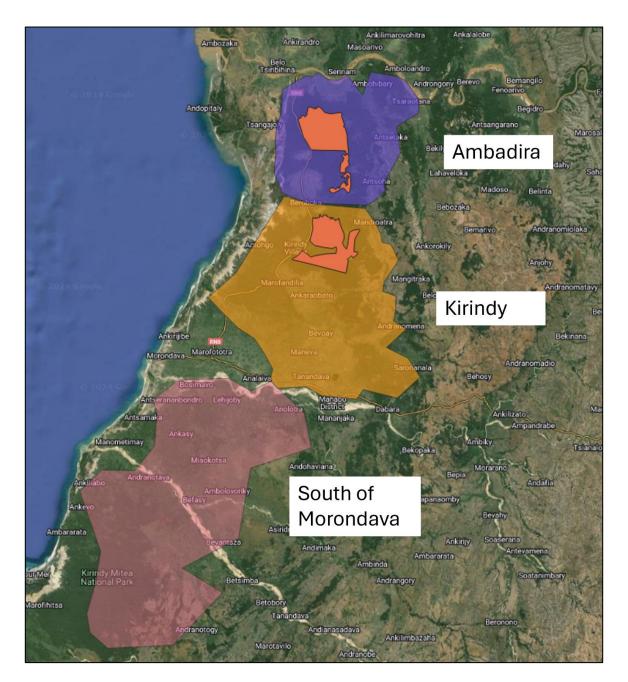


## Giant Jumping Rat (*Hypogeomys* antimena)



**Figure S1.** Graphical representation of the conservation metrics based on the Green Scores. Key: Vertical arrows represent the four conservation metrics: L – Conservation Legacy (may not appear if current and counterfactual states are the same); D – Conservation Dependence (may not appear if current and future-without-conservation states are the same); G – Conservation Gain (may not appear if current and future-with-conservation states are the same); P – Recovery Potential (may not appear if current and potential states are the same). The 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.** Solid orange polygons represent the current range of the species (Wilmet *et al.* 2022.) Translucent polygons indicate the three spatial units. Ambidira and Kirindy blocks estimated based on the remaining distribution of dry deciduous primary forest in 1990 (Sommer and Tichy 1999) and expanded based on remaining remote woodland habitat at the benchmark year of 1750, according to Anthromes 12K land use map (Anthroecology Lab 2022). The range of the spatial unit south of Morondava River is estimated based on land use maps (Anthroecology Lab 2022) to assess the extent of suitable habitat at the benchmark year. These sources are combined to infer the likely maximum indigenous range in 1750.

Table S1. Conservation Actions (list of action codes).

Classificatio	Full description	Past actions (no longer occurring)	Current actions	Actions planned within 10 years	Actions that could be implemented in the long-term aspiration scenario
<b>n</b> 1.1.	1.1. Land/water protection:	Ambadira, Kirindy		within 10 years	
1.1.	Site/area protection	Ambauna, Kinnuy			
	1.2. Land/water protection:				
1.2.	Resource & habitat protection				
1.2.	2.1. Land/water		Ambadira Kirindy	Ambadira, Kirindy	Ambadira, Kirindy
	management: Site/area				, and a dama, raining
2.1.	management				
	2.2. Land/water		Ambadira, Kirindy	Ambadira, Kirindy	Ambadira, Kirindy
	management:				
	Invasive/problematic species				
2.2.	control				
	2.3. Land/water		Ambadira, Kirindy	Ambadira, Kirindy	Ambadira, Kirindy
	management: Habitat &				
2.3.	natural process restoration				
3.1.1.	3.1.1. Harvest management				
3.1.2.	3.1.2. Trade management				
	3.1.3. Limiting population				
3.1.3.	growth				
3.2	3.2 Species recovery				
3.3.1.	3.3.1. Species re-				Ambadira, Kirindy
	introduction: Reintroduction				
	3.3.2. Species re-				
	introduction: Benign				
3.3.2.	introduction				
3.4.1.	3.4.1. Ex-situ conservation:		Ex situ	Ex situ	Ex situ
	Captive breeding/artificial				
	propagation				

Classificatio		Past actions (no longer		Actions planned	Actions that could be implemented in the long-term
n	Full description	occurring)	Current actions	within 10 years	aspiration scenario
3.4.2.	3.4.2. Ex-situ conservation: Genome resource bank				Ex situ
4.1.	4.1. Education and Awareness: Formal education				
4.2.	4.2. Education and Awareness: Training				
4.3.	4.3. Education and Awareness: Awareness & communications		Ambadira, Kirindy	Ambadira, Kirindy	Ambadira, Kirindy
5.1.1.	5.1.1. Legislation, International level				
5.1.2.	5.1.2. Legislation, National level				
5.1.3.	5.1.3. Legislation, Sub- national level		Ambadira, Kirindy	Ambadira, Kirindy	Ambadira, Kirindy
5.1.4.	5.1.4. Legislation, scale unspecified				
5.2.	5.2. Policies and regulations 5.3. Private sector standards		Ambadira, Kirindy	Ambadira, Kirindy	Ambadira, Kirindy
5.3.	& codes				
	5.4.1. Compliance and enforcement-International				
5.4.1.	level				
5.4.2.	5.4.2. Compliance and enforcement- National level				
	5.4.3. Compliance and enforcement- Sub-national		Ambadira, Kirindy	Ambadira, Kirindy	Ambadira, Kirindy
5.4.3.	level				

Classificatio n	Full description	Past actions (no longer occurring)	Current actions	Actions planned within 10 years	Actions that could be implemented in the long-term aspiration scenario
	5.4.4. Compliance and enforcement- Scale				
5.4.4.	unspecified				
6.1.	6.1. Livelihood, economic & other incentives: Linked enterprises & livelihood alternatives			Ambadira, Kirindy	Ambadira, Kirindy
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. Livelihood, economic & other incentives: Non-				
6.5.	monetary values				

Table S2. Threats	(list of threat codes).
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Spatial unit	Name	Past threats (no longer occurring)	Current threats	Threats expected to emerge or continue over next 10 years	Threats that would be relevant in the long-term aspiration scenario
	1.1 Residential & commercial				
	development: Housing & urban				
1.1	areas				
	1.2 Residential & commercial				
	development: Commercial &				
1.2	industrial areas				
	1.3 Residential & commercial development: Tourism & recreation				
1.3	areas				
	2.1.1 Agriculture & aquaculture: Annual & perennial non-timber		Ambadira, Kirindy, South of	Ambadira, Kirindy,	Ambadira, Kirindy,
2.1.1	crops: Shifting agriculture		Morondava	South of Morondava	South of Morondava
	2.1.2 Agriculture & aquaculture:		Ambadira,		
	Annual & perennial non-timber		Kirindy, South of	Ambadira, Kirindy,	Ambadira, Kirindy,
2.1.2	crops: Small-holder farming		Morondava	South of Morondava	South of Morondava
	2.1.3 Agriculture & aquaculture:		Ambadira,		
	Annual & perennial non-timber		Kirindy, South of	Ambadira, Kirindy,	Ambadira, Kirindy,
2.1.3	crops: Agro-industry farming		Morondava	South of Morondava	South of Morondava
	2.1.4 Agriculture & aquaculture:				
	Annual & perennial non-timber				
2.1.4	crops: Scale Unknown/Unrecorded				
	2.2.1 Agriculture & aquaculture:				
	Wood & pulp plantations: Small-				
2.2.1	holder plantations				
	2.2.2 Agriculture & aquaculture:				
	Wood & pulp plantations: Agro-				
2.2.2	industry plantations				

Spatial unit	Name	Past threats (no longer occurring)	Current threats	Threats expected to emerge or continue over next 10 years	Threats that would be relevant in the long-term aspiration scenario
	2.2.3 Agriculture & aquaculture: Wood & pulp plantations: Scale				
2.2.3	Unknown/Unrecorded				
	2.3.1 Agriculture & aquaculture: Livestock farming & ranching:				
2.3.1	Nomadic grazing				
	2.3.2 Agriculture & aquaculture: Livestock farming & ranching: Small-holder grazing, ranching or				
2.3.2	farming				
	2.3.3 Agriculture & aquaculture: Livestock farming & ranching: Agro- industry grazing, ranching or				
2.3.3	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				
2.4.1	2.4.2 Agriculture & aquaculture: Marine & freshwater aquaculture:				
2.4.2	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				

Spatial unit	Name	Past threats (no longer occurring)	Current threats	Threats expected to emerge or continue over next 10 years	Threats that would be relevant in the long-term aspiration scenario
	3.3 Energy production & mining:				
3.3	Renewable energy				
	4.1 Transportation & service				
4.1	corridors: Roads & railroads				
	4.2 Transportation & service				
4.2	corridors: Utility & service lines				
	4.3 Transportation & service				
4.3	corridors: Shipping lanes				
	4.4 Transportation & service				
4.4	corridors: Flight paths				
	5.1.1 Biological resource use:				
	Hunting & collecting terrestrial				
	animals: Intentional use (species				
5.1.1	being assessed is the target)		-		
	5.1.2 Biological resource use:				
	Hunting & collecting terrestrial				
	animals: Unintentional effects				
	(species being assessed is not the				
5.1.2	target)				
	5.1.3 Biological resource use:				
540	Hunting & collecting terrestrial				
5.1.3	animals: Persecution/control				
	5.1.4 Biological resource use:				
	Hunting & collecting terrestrial				
- 4 4	animals: Motivation				
5.1.4	Unknown/Unrecorded				
E 0 4	5.2.1 Biological resource use:				
5.2.1	Gathering terrestrial plants:				

Spatial unit	Name	Past threats (no longer occurring)	Current threats	Threats expected to emerge or continue over next 10 years	Threats that would be relevant in the long-term aspiration scenario
	Intentional use (species being assessed is the target)				
5.0.0	5.2.2 Biological resource use: Gathering terrestrial plants: Unintentional effects (species being				
5.2.2	assessed is not the target) 5.2.3 Biological resource use: Gathering terrestrial plants:				
5.2.3	Persecution/control 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]				

Spatial unit	Name	Past threats (no longer occurring)	Current threats	Threats expected to emerge or continue over next 10 years	Threats that would be relevant in the long-term aspiration scenario
	5.3.4 Biological resource use: Logging & wood harvesting: Unintentional effects: large scale (species being assessed is not the		Ambadira, Kirindy, South of	Ambadira, Kirindy,	Ambadira, Kirindy,
5.3.4	target)[harvest]		Morondava		South of Morondava
5.3.5	5.3.5 Biological resource use: Logging & wood harvesting: Motivation Unknown/Unrecorded				
5.5.5	5.4.1 Biological resource use: Fishing & harvesting aquatic resources: Intentional use: subsistence/small scale (species being assessed is the				
5.4.1	target)[harvest]				
	5.4.2 Biological resource use: Fishing & harvesting aquatic resources: Intentional use: large scale (species being assessed is				
5.4.2	the target)[harvest] 5.4.3 Biological resource use: Fishing & harvesting aquatic resources: Unintentional effects: subsistence/small scale (species being assessed is not the				
5.4.3	target)[harvest]				
5.4.4	5.4.4 Biological resource use: Fishing & harvesting aquatic resources: Unintentional effects:				

Spatial unit	Name	Past threats (no longer occurring)	Current threats	Threats expected to emerge or continue over next 10 years	Threats that would be relevant in the long-term aspiration scenario
	large scale (species being				
	assessed is not the target)[harvest]				
	5.4.5 Biological resource use:				
5.4.5	Fishing & harvesting aquatic resources: Persecution/control				
0.1.0	5.4.6 Biological resource use:				
	Fishing & harvesting aquatic				
	resources: Motivation				
5.4.6	Unknown/Unrecorded				
	6.1 Human intrusions &				
6.1	disturbance: Recreational activities				
	6.2 Human intrusions &				
	disturbance: War, civil unrest &				
6.2	military exercises				
			Ambadira,		
	6.3 Human intrusions &		Kirindy, South of	Ambadira, Kirindy,	Ambadira, Kirindy,
6.3	disturbance: Work & other activities		Morondava	South of Morondava	South of Morondava
	7.1.1 Natural system modifications:		Ambadira,	Anabadina Kinindu	Amphadina Kinindu
7.1.1	Fire & fire suppression: Increase in		Kirindy, South of Morondava	Ambadira, Kirindy,	Ambadira, Kirindy, South of Morondava
7.1.1	fire frequency/intensity 7.1.2 Natural system modifications:		IVIOIOIIUava		South of Moronuava
	Fire & fire suppression:				
	Suppression in fire				
7.1.2	frequency/intensity				
<b>-</b>	7.1.3 Natural system modifications:				
	Fire & fire suppression: Trend				
7.1.3	Unknown/Unrecorded				
	7.2.1 Natural system modifications:				
7.2.1	Dams & water management/use:				

Spatial unit	Name	Past threats (no longer occurring)	Current threats	Threats expected to emerge or continue over next 10 years	Threats that would be relevant in the long-term aspiration scenario
	Abstraction of surface water (domestic use)				
	7.2.2 Natural system modifications: Dams & water management/use: Abstraction of surface water				
7.2.2	(commercial use)				
	7.2.3 Natural system modifications: Dams & water management/use: Abstraction of surface water				
7.2.3	(agricultural use)				
	7.2.4 Natural system modifications: Dams & water management/use: Abstraction of surface water				
7.2.4	(unknown use)				
	7.2.5 Natural system modifications: Dams & water management/use: Abstraction of ground water				
7.2.5	(domestic use)				
	7.2.6 Natural system modifications: Dams & water management/use: Abstraction of ground water				
7.2.6	(commercial use)				
	7.2.7 Natural system modifications: Dams & water management/use: Abstraction of ground water				
7.2.7	(agricultural use)				
7.2.8	7.2.8 Natural system modifications: Dams & water management/use:				

Spatial unit	Name	Past threats (no longer occurring)	Current threats	Threats expected to emerge or continue over next 10 years	Threats that would be relevant in the long-term aspiration scenario
	Abstraction of ground water (unknown use)				
	7.2.9 Natural system modifications: Dams & water management/use:				
7.2.9	Small dams 7.2.10 Natural system modifications: Dams & water				
7.2.10	management/use: Large dams 7.2.11 Natural system modifications: Dams & water management/use: Dams (size				
7.2.11	unknown) 7.3 Natural system modifications:				
7.3	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		Ambadira, Kirindy (feral cats, feral and domesticated hunting dogs)	Ambadira, Kirindy (feral cats, feral and domesticated hunting dogs)	Ambadira, Kirindy (feral cats, feral and domesticated hunting dogs) Possible for control in the long- term, but uncertain
8.2.1	8.2.1 Invasive & other problematic species, genes & diseases: Problematic native				

Spatial unit	Name	Past threats (no longer occurring)	Current threats	Threats expected to emerge or continue over next 10 years	Threats that would be relevant in the long-term aspiration scenario
	species/diseases: Unspecified species				
	8.2.2 Invasive & other problematic species, genes & diseases: Problematic native				
8.2.2	species/diseases: Named species				
	8.3 Invasive & other problematic species, genes & diseases:				
8.3	Introduced genetic material				
	8.4.1 Invasive & other problematic species, genes & diseases: Problematic species/diseases of unknown origin: Unspecified				
8.4.1	species				
	8.4.2 Invasive & other problematic species, genes & diseases: Problematic species/diseases of				
8.4.2	unknown origin: Named species				
	8.5.1 Invasive & other problematic species, genes & diseases: Viral/prion-induced diseases:				
8.5.1	Unspecified "species" (disease)				
9 5 9	8.5.2 Invasive & other problematic species, genes & diseases: Viral/prion-induced diseases:				
8.5.2	Named "species" (disease) 8.6 Invasive & other problematic				
8.6	species, genes & diseases: Diseases of unknown cause				

Spatial unit	Name	Past threats (no longer occurring)	Current threats	Threats expected to emerge or continue over next 10 years	Threats that would be relevant in the long-term aspiration scenario
	9.1.1 Pollution: Domestic & urban				
9.1.1	waste water: Sewage				
9.1.2	9.1.2 Pollution: Domestic & urban waste water: Run-off				
	9.1.3 Pollution: Domestic & urban				
	waste water: Type				
9.1.3	Unknown/Unrecorded				
	9.2.1 Pollution: Industrial & military				
9.2.1	effluents: Oil spills				
	9.2.2 Pollution: Industrial & military				
9.2.2	effluents: Seepage from mining				
	9.2.3 Pollution: Industrial & military				
	effluents: Type				
9.2.3	Unknown/Unrecorded				
	9.3.1 Pollution: Agricultural &				
9.3.1	forestry effluents: Nutrient loads				
	9.3.2 Pollution: Agricultural &		Ambadira,		
	forestry effluents: Soil erosion,		Kirindy, South of	Ambadira, Kirindy,	Ambadira, Kirindy,
9.3.2	sedimentation		Morondava	South of Morondava	South of Morondava
	9.3.3 Pollution: Agricultural &				
0.0.0	forestry effluents: Herbicides &				
9.3.3	pesticides				
	9.3.4 Pollution: Agricultural &				
0.2.4	forestry effluents: Type				
9.3.4	Unknown/Unrecorded				
0.4	9.4 Pollution: Garbage & solid				
9.4	waste				
051	9.5.1 Pollution: Air-borne pollutants:				
9.5.1	Acid rain				

Spatial unit	Name	Past threats (no longer occurring)	Current threats	Threats expected to emerge or continue over next 10 years	Threats that would be relevant in the long-term aspiration scenario
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		Ambadira, Kirindy, South of Morondava	Ambadira, Kirindy, South of Morondava	Ambadira, Kirindy, South of Morondava
11.2	11.2 Climate change & severe weather: Droughts		Ambadira, Kirindy, South of Morondava	Ambadira, Kirindy, South of Morondava	Ambadira, Kirindy, South of Morondava
11.3	11.3 Climate change & severe weather: Temperature extremes		Ambadira, Kirindy, South of Morondava	Ambadira, Kirindy, South of Morondava	Ambadira, Kirindy, South of Morondava

Spatial unit	Name	Past threats (no longer occurring)	Current threats	to emerge or	Threats that would be relevant in the long-term aspiration scenario
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				

## References

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## Appendix 1. Assessor Self-Review

- 1. **Disclose any potential conflicts of interest which could bias the assessment**. No conflicts of interest to disclose.
- 2. Is there any discrepancy between this assessment and the Red List assessment for the species? If so, comment on the likely reason for this discrepancy. No.
- 3. Review the impact that you assigned to the various threats and conservation actions. Would the trajectory of the species be very different if other choices were made? If so, review your justification for these choices. If appropriate, widen the bounds on tabs 4 and 5-8 (change the lower and upper plausible values) to reflect the uncertainty introduced by the possibility of these other choices. How, if at all, did this review question cause this assessment to change? If no changes were needed, please write "no changes". No changes.