Mashi

2012 Annual Natural Resource Report

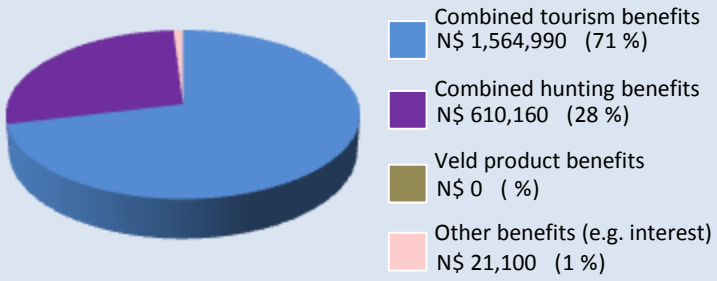
maximising wildlife benefits by minimising threats...

Conservancy status

Benefits from natural resources in 2011

the chart shows the main benefit sources and values and their percentage of the total benefits

Approximate Total Benefits N$ 2,196,250



Two of the most significant benefits for the conservancy:

✓cash income to the conservancy to cover running costs and invest in developments

✓employment benefits to conservancy residents

Conservancy income			**N$ 870,560**
Employment benefits	**Private Sector**	**64 staff**	**N$ 816,260**
	Conservancy	**19 staff**	**N$ 397,820**

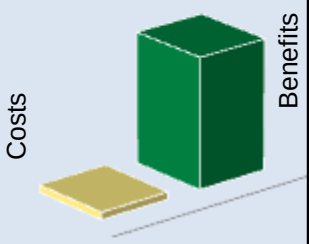
Cost of natural resource conflicts in 2011

estimates are based on average national values

Estimated human wildlife conflict cost	N$ 121,710
Estimated poached high value species loss	N$ 0
Total conflict cost estimate	**N$ 121,710**

Natural resource cost–benefit ratio in 2011

the chart shows the approximate ratio of benefits to costs



Natural resource benefits outweigh approximate conflict costs

Total benefits: N$ 2,196,250

Approximate conflict costs: N$ 121,710

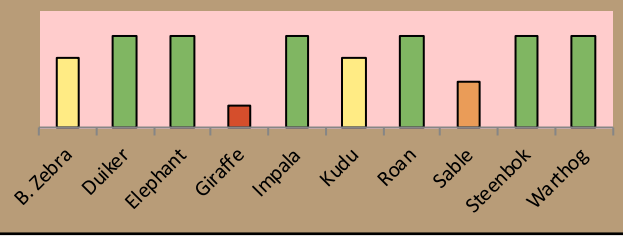
Approximate positive ratio 18 : 1

* The annual data collection process results in a lag of 1 year for income data *

Management performance in 2012

Category	Score	Performance
1 Adequate staffing	3	
2 Adequate expenditure	3	
3 Audit attendance	5	
4 NR management plan	2	
5 Zonation	0	
6 Leadership	3	
7 Display of material	2	
8 Event Book modules	4	
9 Event Book quality	3	
10 Compliance	3	
11 Game census	3	
12 Reporting & adaptive m/ment	4	
13 Law enforcement	4	
14 Human Wildlife Conflict	3	
15 Sources of NR income	3	
16 Benefits produced	3	
17 Resource Sustainability	3	

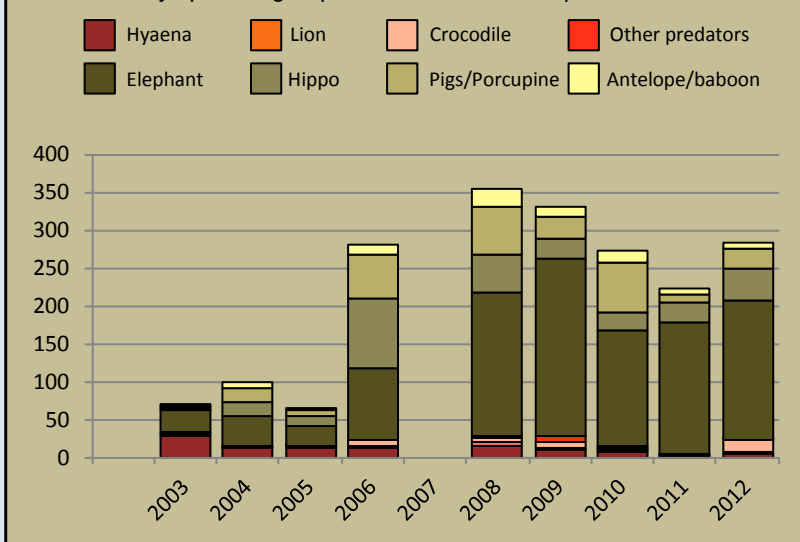
Wildlife status summary in 2012



Human wildlife conflict

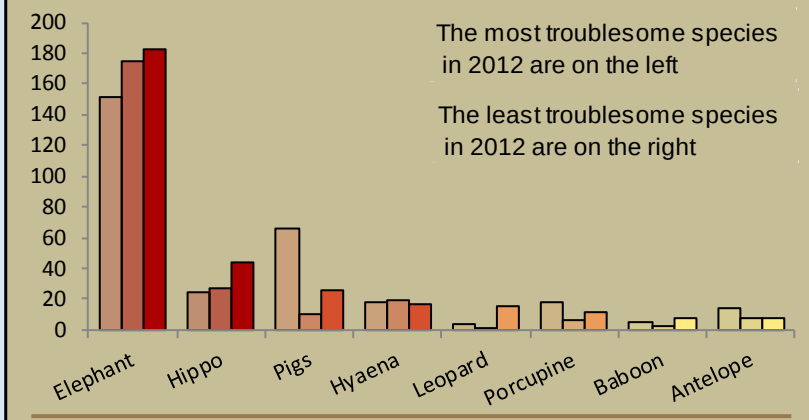
Human wildlife conflict trend

the chart shows the total number of incidents each year, subdivided by species, grouped as herbivores and predators



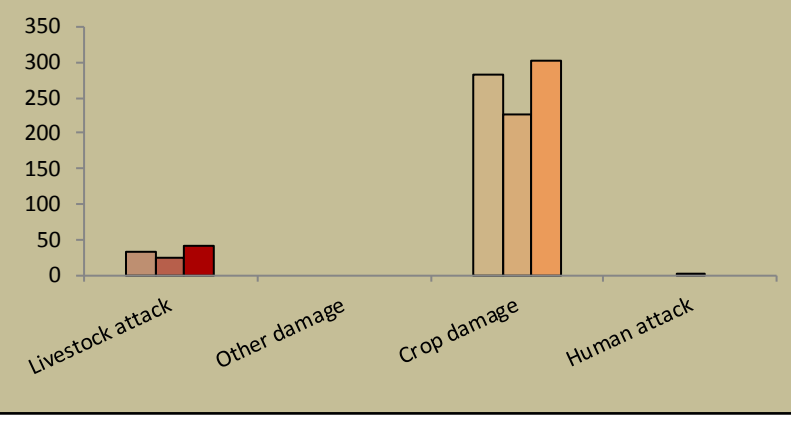
Most troublesome problem animals 2010-2012

the chart shows the number of incidents per species for the last 3 years; the darkest bar (on the right) indicates the current year for each species



Type of damage by problem animals 2010-2012

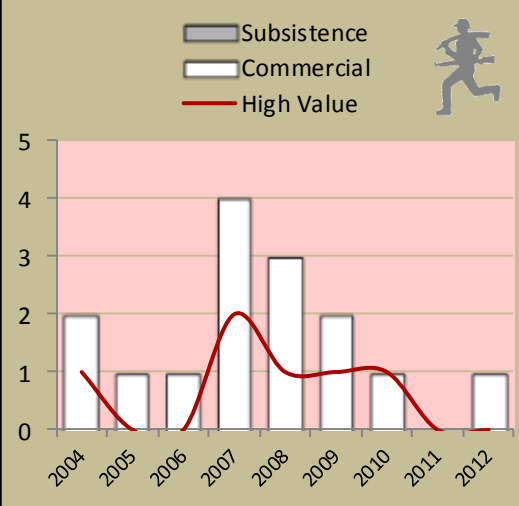
the chart shows the number of incidents per category for the last 3 years; the darkest bar (on the right) indicates the current year for each type



Poaching

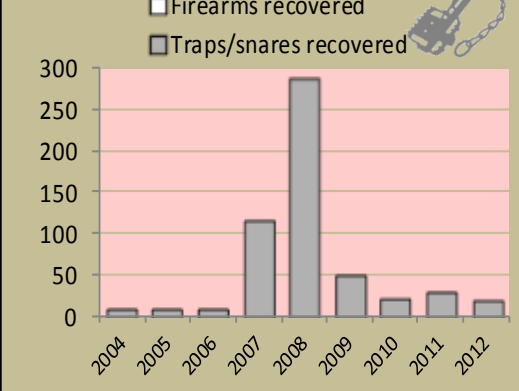
Number of incidents per year

Commercial poaching is a serious threat to conservancy benefits. The chart shows the number of incidents per category



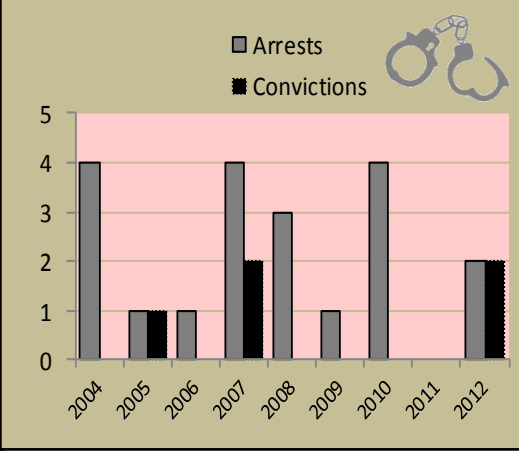
Traps and firearms recovered

number of incidents per category



Arrests and convictions

number of incidents per category



Wildlife removals – quota use and value

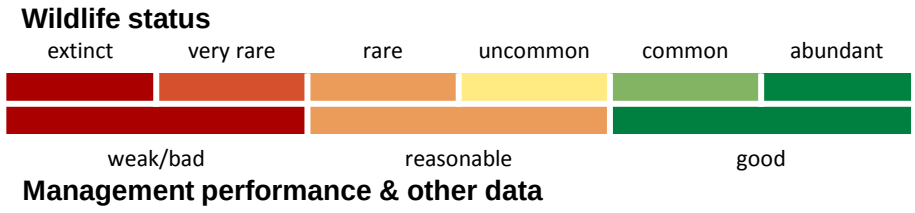
Species	Quota 2012						Animals actually used in 2012					
	Total	Potential Total Value N$	Trophy	Potential Trophy Value N$	Other Use	Potential Other use Value N$	Trophy	Own Use & Premium	Shoot & Sell	Capture & Sale	Problem Animal	Total Use
Baboon	15	2,690	10	2,690	5							
Buffalo	6	318,000	6	318,000			1					1
Bushpig	4	100			4	100						
Duiker	6	2,344	2	2,316	4	28						
Eland	1	6,184	1	6,184								
Elephant*	5	612,455	5	612,455			5					5
Hippo	5	99,690	5	99,690			5					5
Hyaena	1	2,981	1	2,981								
Impala	10	5,470	3	5,232	7	238	6	3	1			10
Kudu	8	25,674	6	25,416	2	258	2	3				5
Lechwe	1	11,475	1	11,475								
Leopard	1	20,586	1	20,586								
Reedbuck	2	11,400	2	11,400								
Roan*	2	95,112	2	95,112			2					2
Wildebeest	3	11,055	3	11,055			1					1
B. Zebra	9	31,647	8	31,472	1	175	8	1				9

Potential value estimates (N$) for quotas are based on:

- **Potential trophy value** - the average national trophy value of each trophy species multiplied by the quota number
- **Potential other use value** - the average national meat value of each common species multiplied by the quota number
  - the average live sale value of each high value species (indicated with an *) multiplied by the quota number
  - high value species are never used for meat

Key to the status barometer

Wildlife status



Management performance & other data

Success/threat flags

success/ benefit created

weakness/ action needed

Conservancies reduce environmental costs while increasing environmental benefits. Benefits from wildlife can far outweigh human wildlife conflict costs.

With Event Book Data

Not all data or species are shown on this report; use your Event Book for more information

Mashi **2012**

monitoring numbers and trends for a healthy conservancy...

Current wildlife numbers and status

Species	Animals Seen	Estimate	Wildlife Status		
			Count Trend	National Guideline	Desired Number
B. Zebra	25	25			
Duiker	5	23			
Elephant	8				
Giraffe					
Impala	40				
Kudu	11	11			
Roan	3	10			
Sable	1				
Steenbok	2				
Warthog	1	36			

Wildlife Status

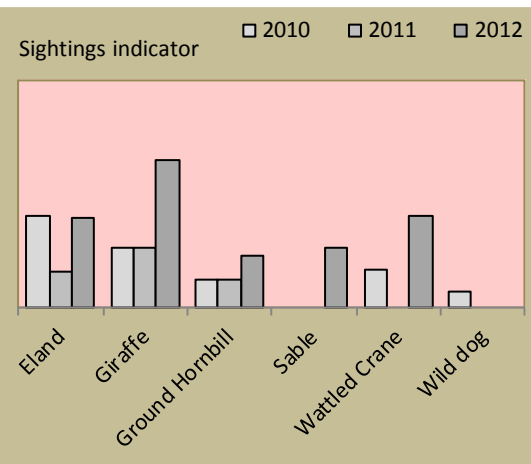
Count trend – gives the species status in the conservancy based on game count trend data.

National guideline – gives the species status in the conservancy using national guidelines for the conservancy; for example, lions may cause local problems, but are of high value and are rare at landscape level.

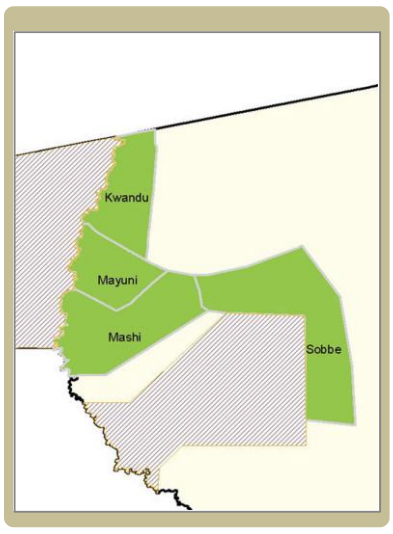
Desired number – gives the species status in the conservancy based on what the conservancy would like to have.

dark green (abundant) – there should be less;
light green (common) – the desired number is reached;
yellow (uncommon) – there should be more;
light orange (rare) – there should be more than double;
dark orange (very rare) – there should be more than triple;
red (extinct) – the species needs to be reintroduced.

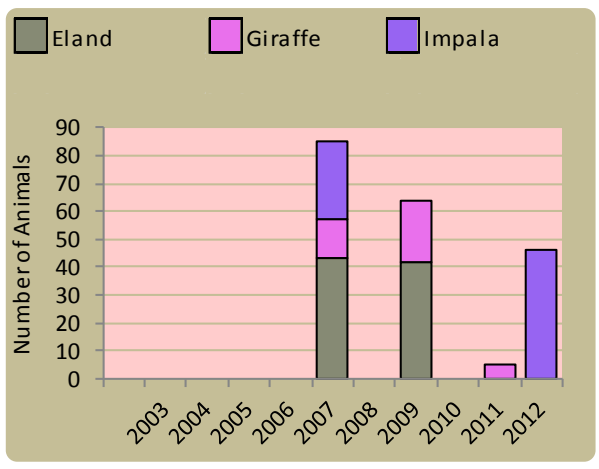
Locally rare species



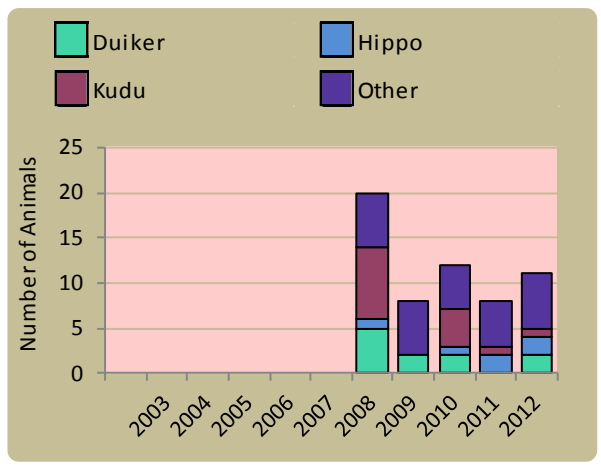
Locally rare and endangered species are not found very often in the conservancy and need special conservation attention.



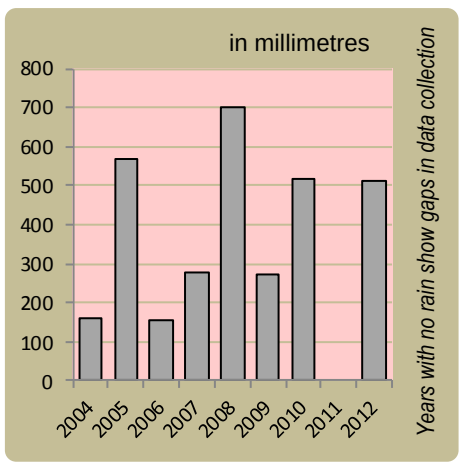
Wildlife introductions



Wildlife mortalities

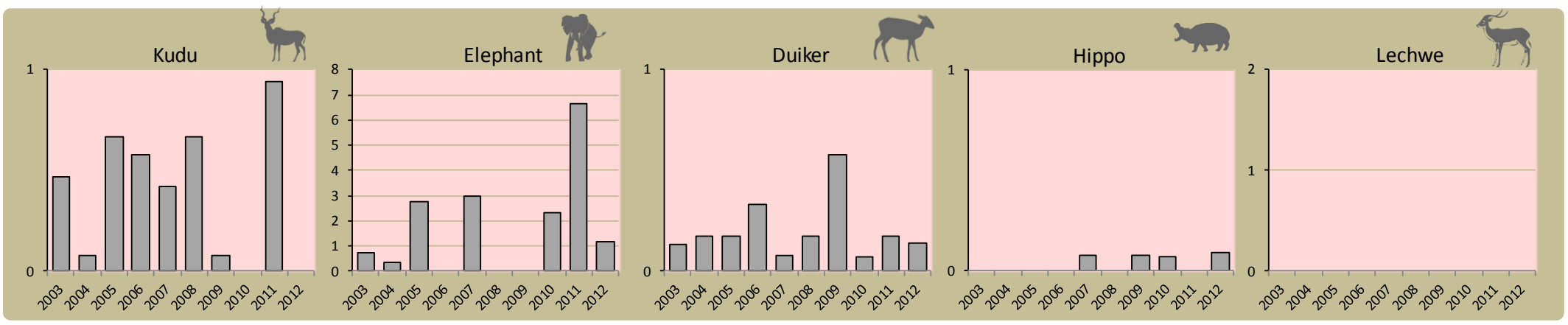


Annual rainfall



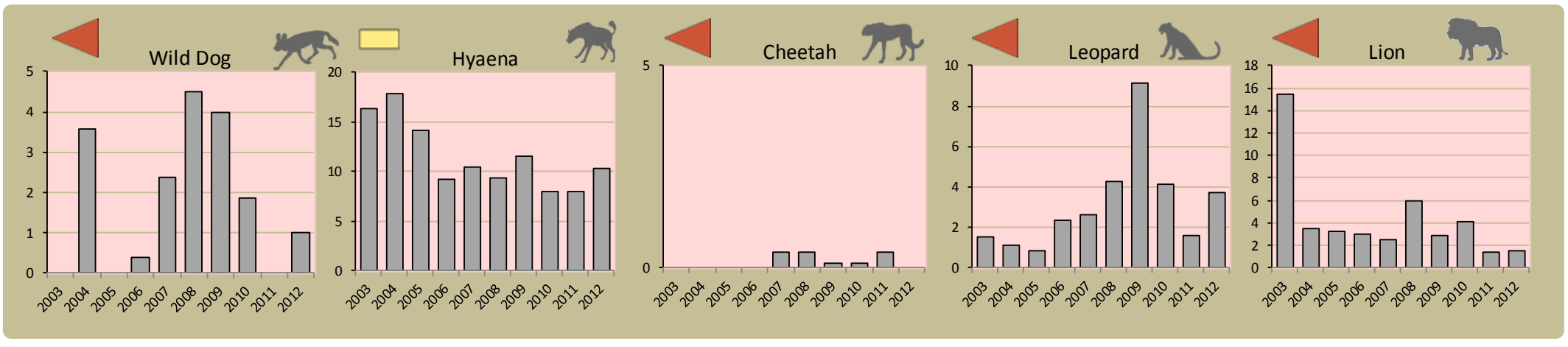
Fixed route patrols

charts show the number of sightings of each species per fixed route foot patrol each year



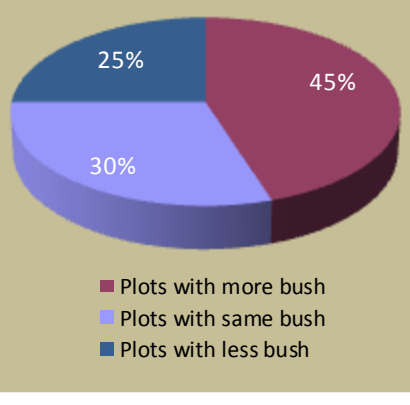
Predator monitoring

charts show the average number of animals seen per Event Book each year
status barometers reflect the general sightings trend over the last 5 years

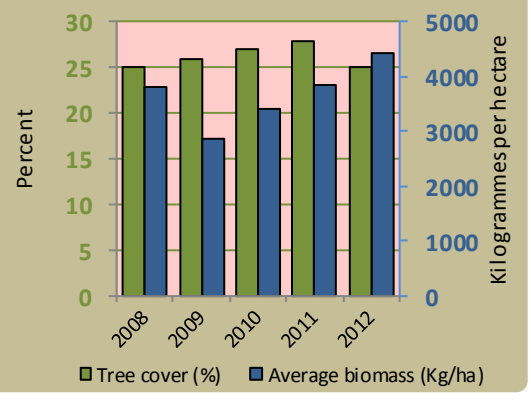


Vegetation monitoring

Change in bush cover since monitoring began



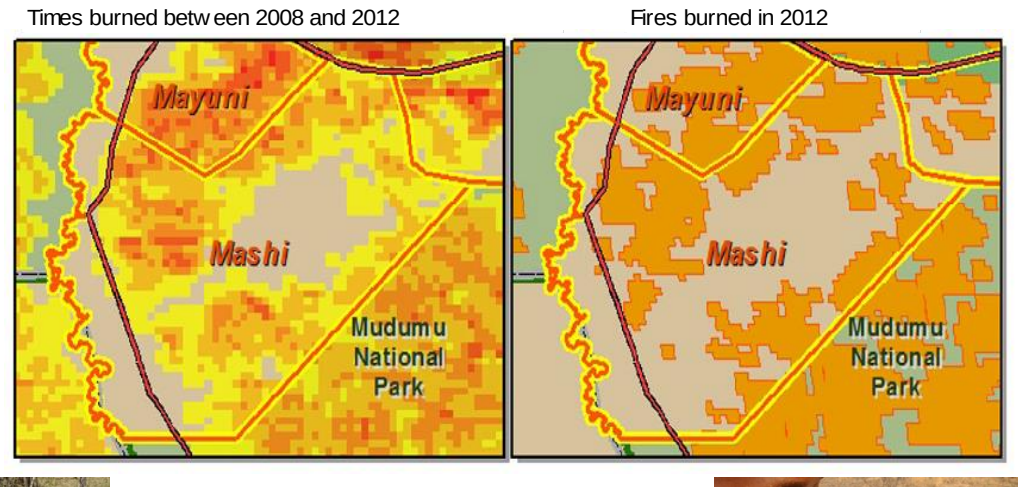
Percent tree cover / average biomass per hectare



Fire monitoring

Times burned between 2008 and 2012

Fires burned in 2012



Wildlife provides a wide range of benefits. Some wildlife can cause conflicts, but all wildlife is of value to tourism, trophy hunting and a healthy environment.

By using all the available information and adapting and improving activities, threats such as human wildlife conflict, poaching and other issues can be minimised.