Muduva Nyangana
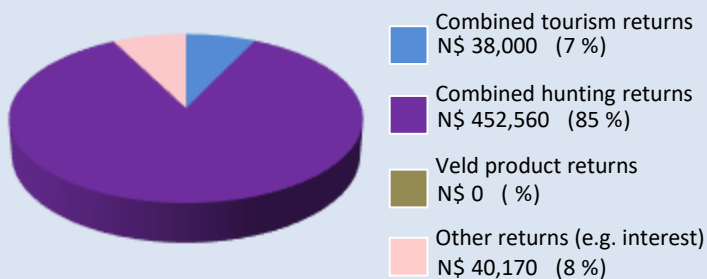# Status Summary & Natural Resource Report

maximising wildlife returns by minimising threats...

Conservancy status summary

Returns from natural resources in 2017
the chart shows the main sources of returns and values and their percentage of the total returns

Approximate Total Returns N$ 530,730

- Combined tourism returns N$ 38,000 (7 %)
- Combined hunting returns N$ 452,560 (85 %)
- Veld product returns N$ 0 (%)
- Other returns (e.g. interest) N$ 40,170 (8 %)

Two of the most significant returns for the conservancy:
- ✓ cash income to the conservancy to cover running costs and invest in developments
- ✓ Employment to conservancy residents

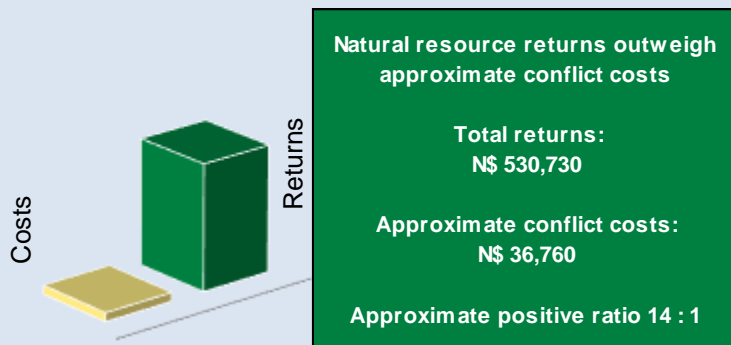|		
Conservancy income		**N$ 429,930**
Employment	Private Sector	3 staff	N$ 100,800
	Conservancy	12 staff	N$ 332,530

Cost of natural resource conflicts in 2017
estimates are based on average national values

Estimated human wildlife conflict cost	N$ 36,760
Estimated poached high value species loss	N$ 0
Total conflict cost estimate	**N$ 36,760**

Natural resource cost–return ratio in 2017
the chart shows the approximate ratio of returns to costs

Natural resource returns outweigh approximate conflict costs

Total returns: N$ 530,730

Approximate conflict costs: N$ 36,760

Approximate positive ratio 14 : 1

Costs / Returns

Management performance in 2017

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

Wildlife status summary in 2017
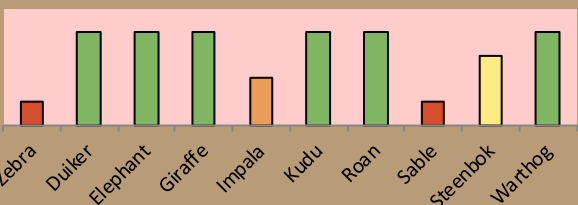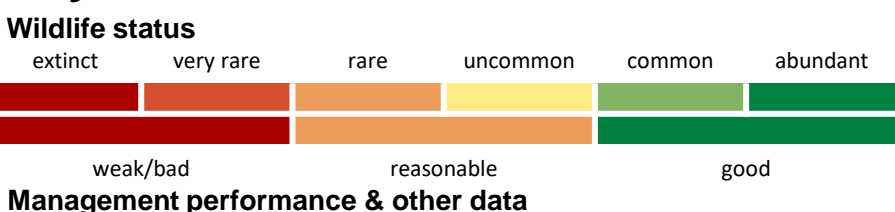
B. Zebra, Duiker, Elephant, Giraffe, Impala, Kudu, Roan, Sable, Steenbok, Warthog

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

- Hyaena
- Elephant
- Lion
- Hippo
- Crocodile
- Pigs/Porcupine
- Other predators
- Antelope/baboon

2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017

Most troublesome problem animals 2015-2017
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

The most troublesome species in 2017 are on the left

The least troublesome species in 2017 are on the right

Antelope, Wildcat, Leopard, Hyaena, Elephant, Wild dog, Pigs, Cheetah

Type of damage by problem animals 2015-2017
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

Livestock attack, Other damage, Crop damage, Human attack
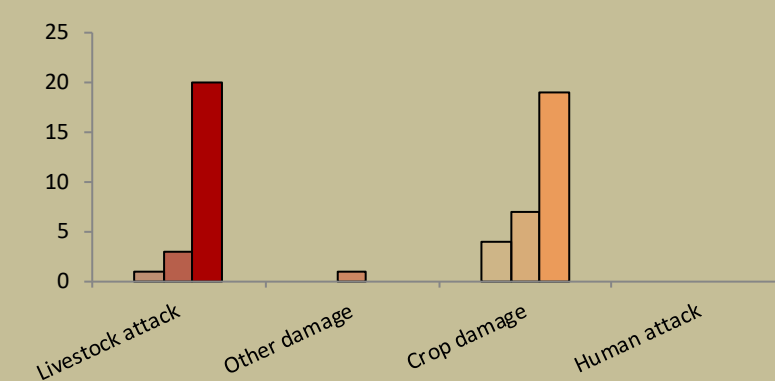
Poaching

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

- Subsistence
- Commercial
- High Value

2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017
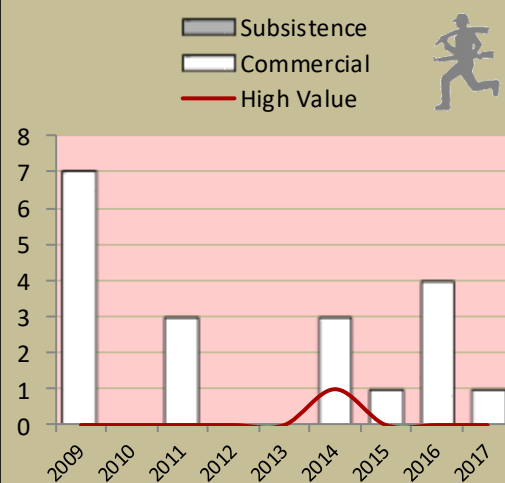
Traps and firearms recovered
number of incidents per category

- Firearms recovered
- Traps/snares recovered

2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017

Arrests and convictions
number of incidents per category

- Arrests
- Convictions

2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017

Wildlife removals – quota use and value

Species	Quota 2017			Animals actually used in 2017						Potential Trophy Value N$	Potential Other use Value N$
	Total	Trophy	Other Use	Trophy	Own Use & Premium	Shoot & Sell	Capture & Sale	Problem Animal	Total Use		
Caracal	1	1								2,400	
Duiker	2	1	1							1,800	168
Eland*	1	1								10,900	
Elephant*	3	1	2		1				1	142,300	180,000
Gemsbok	5	2	3		2				2	2,600	2,592
Giraffe	1		1						1		13,440
Hyaena	1	1								3,000	
Impala	2	1	1							2,600	816
Kudu*	5	1	4		2				3	6,200	31,000
Leopard	0.167	0.167								11,700	
Roan*	1	1								64,900	
Warthog	2	1	1							1,600	480

Potential value estimates (N$) for species are based on:
- **Potential trophy value** - the average trophy value for that species in the conservancy landscape
  - trophy values vary depending on trophy quality, international recognition of the hunting operator and the hunting area
- **Potential other use value** - the average meat value for common species
  - the average live sale value of each high value species (indicated with an *)[high value species are never used for meat]

Key to the status barometer

Wildlife status

extinct, very rare, rare, uncommon, common, abundant

weak/bad, reasonable, good

Management performance & other data

Success/threat flags

- ► success/benefit created
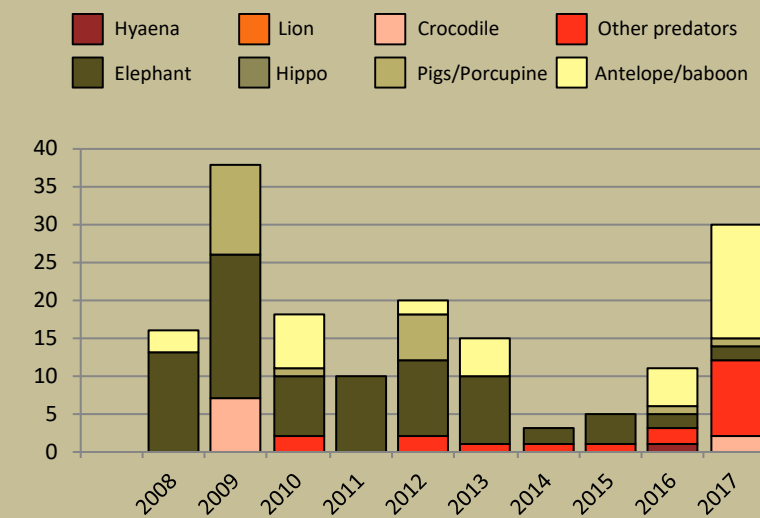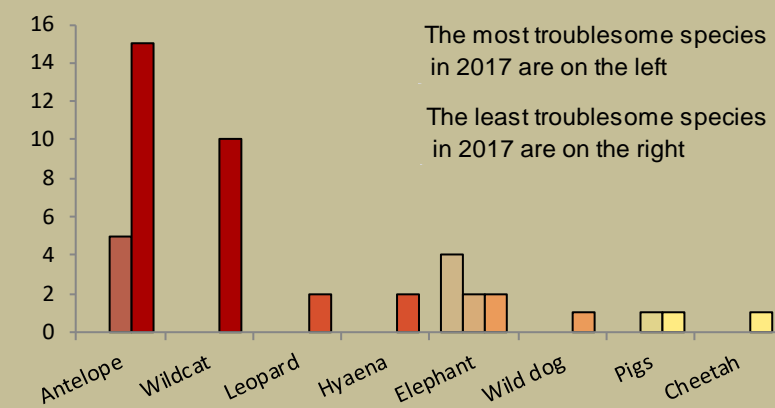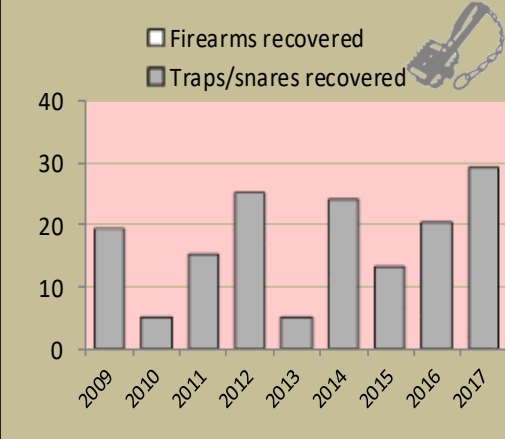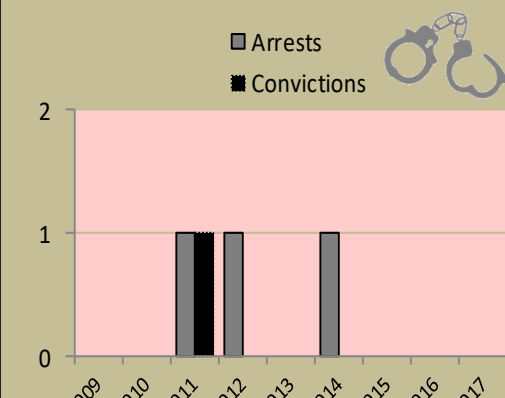- ◄ weakness/action needed

Conservancies reduce environmental costs while increasing environmental returns. Returns from wildlife can far outweigh human wildlife conflict costs.

monitoring numbers and trends for a healthy conservancy…

Current wildlife numbers and status

Species	Animals Seen	Estimate*	Wildlife Status		
			Count Trend	Landscape Status	Desired Number
B. Zebra					
Duiker	18				
Elephant	36				
Giraffe	12				
Impala					
Kudu	23	152			
Roan	13	114			
Sable					
Steenbok	3				
Warthog	1				

Wildlife Status

Count trend – gives the species status in the conservancy based on game count trend data.
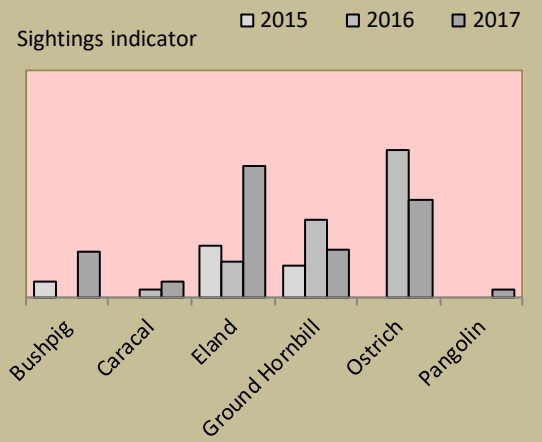
Landscape status – gives the species status in the focal landscape; for example, lions may cause local problems, but are of high value and may be rare at landscape level.

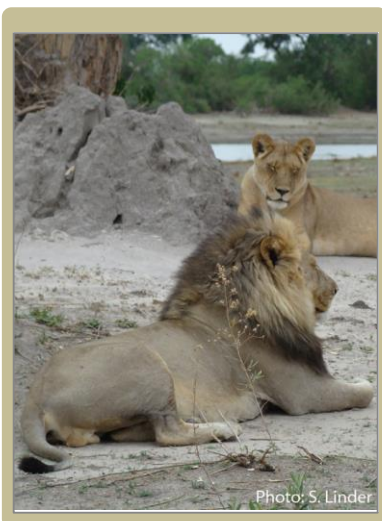**Desired number** – gives the species status in the conservancy based on what the conservancy would like to have.

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.

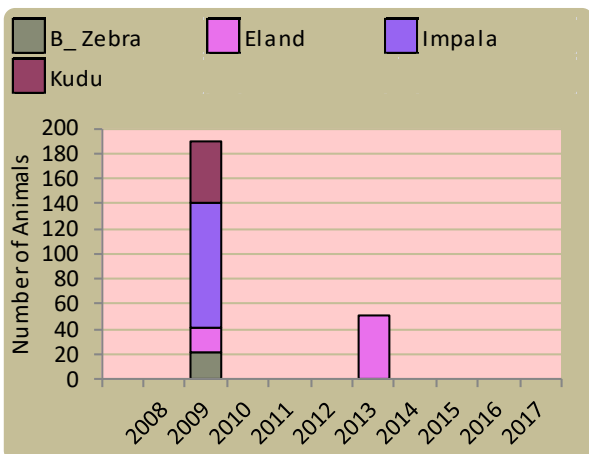** Estimates are for the focal conservancy and neighbouring conservancies combined*

Locally rare species

Sightings indicator
□ 2015   □ 2016   □ 2017

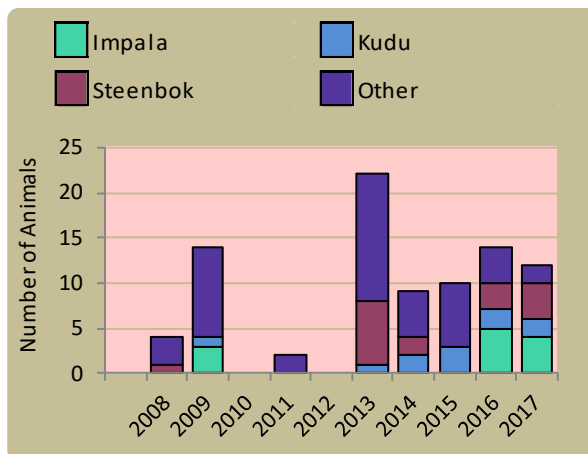Bushpig   Caracal   Eland   Ground Hornbill   Ostrich   Pangolin

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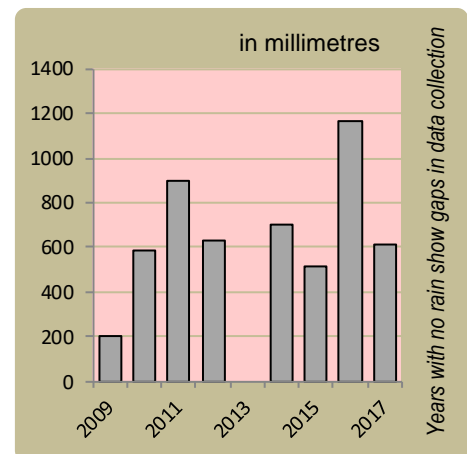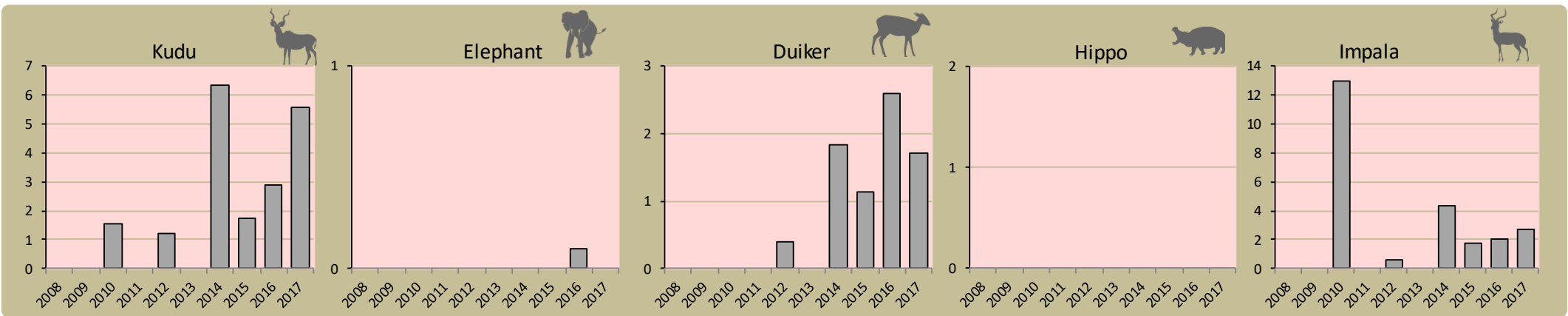
Wildlife introductions

B_ Zebra   Eland   Impala   Kudu
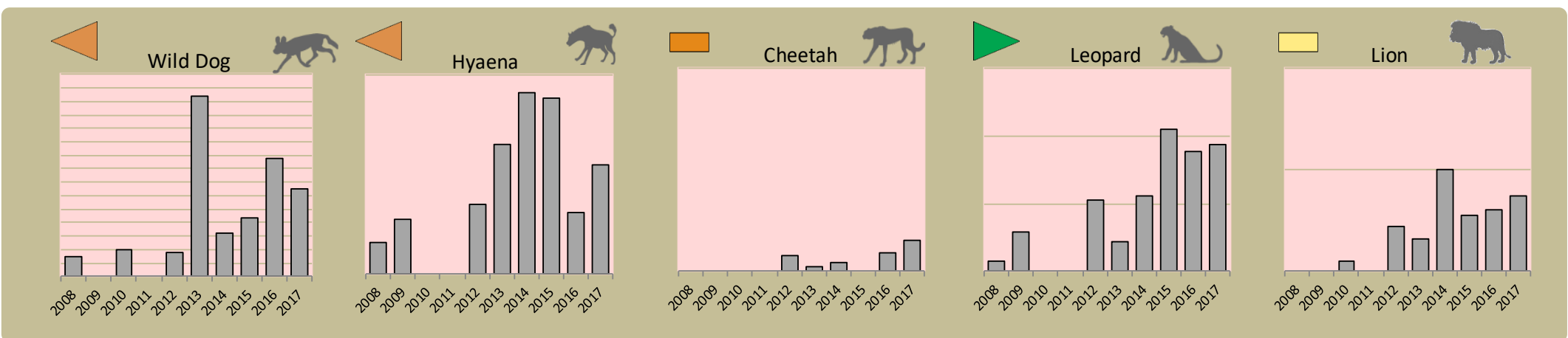
Number of Animals

Wildlife mortalities

Impala   Kudu   Steenbok   Other

Number of Animals

Annual rainfall

in millimetres

Years with no rain show gaps in data collection

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

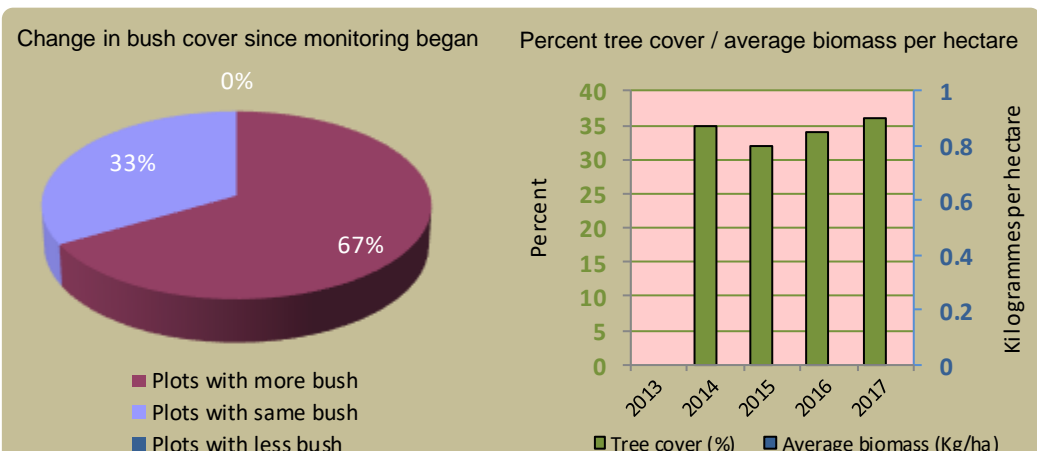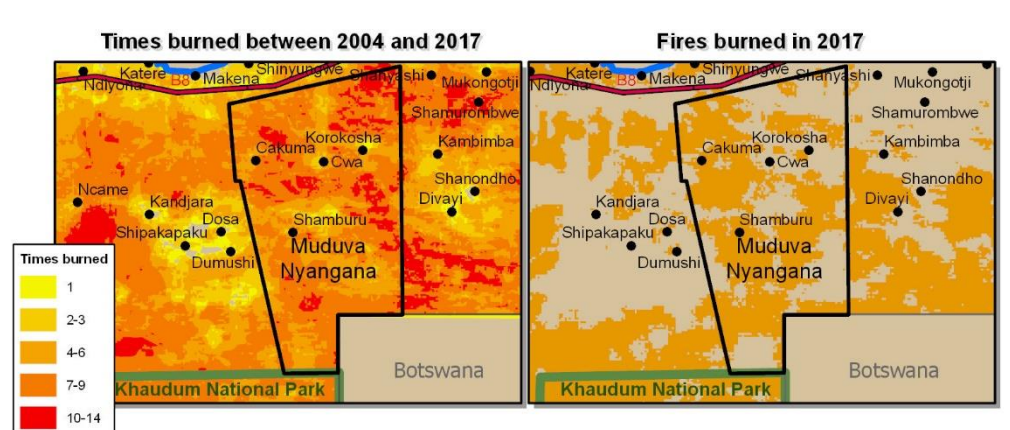Kudu | Elephant | Duiker | Hippo | Impala

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

Wild Dog | Hyaena | Cheetah | Leopard | Lion

Vegetation monitoring

Change in bush cover since monitoring began

0%
33%
67%

■ Plots with more bush
■ Plots with same bush
■ Plots with less bush

Percent tree cover / average biomass per hectare

Percent

Kilogrammes per hectare

■ Tree cover (%)   ■ Average biomass (Kg/ha)

Fire monitoring

Times burned between 2004 and 2017

Fires burned in 2017

Ndjiyona   Katere   Makena   Shinyungwe   Chanyashi   Mukongotji
Shamurombwe
Korokosha   Kambimba
Cakuma   Cwa   Shanondho   Divayi
Ncame   Kandjara   Dosa   Shamburu
Shipakapaku   Muduva Nyangana
Dumushi

Times burned
1
2-3
4-6
7-9
10-14

Khaudum National Park   Botswana

Photo: S. Linder

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.

Muduva Nyangana
Institutional Report

Enabling wise conservancy governance…

Conservancy Statistics

Date Registered:	September 2005
Population (2011 census):	1730
Size (square kilometres):	615

Conservancy Governance

Number of management committee members:	Men: 1; Women: 7
Date of last AGM:	Mon, November 20, 2017
Attendance at AGM:	Men: 111; Women: 117
Date of next AGM:	Thu, November 15, 2018

Other important issues

Financial report approved?	✓
Budget approved?	✓
Work plan approved?	✓
Chairperson's report approved?	✓

Key Compliance Requirements

Was an AGM held?	✓
Were elections held?	✓
Is there a Benefit Distribution Plan?	✓
Is there a Game Management and Utilisation Plan?	✓
Was an Annual Financial Report produced?	✓

Employment

Conservancy staff: Male		10
Female		2
Community game guards:		9
Community resource monitors:		0
Lodge staff: Male		0
Female		0

Benefits

Cash	In Kind
Funeral Assistance	Cash Benefit
Community Projects	Hwc Members
Haccis	Meat Distribution
Hwc Offset	Members Wages
	Training

Conservancy Self Evaluation How well does the conservancy consider it has performed in the past year?

Effectiveness of implementation	Poor	Fair	Good	Prev. Year	Explanation of effectiveness rating
Game Management and Utilisation		Fair		Orange	Lack of transport for fire management activities
Zonation Plan		Fair		Red	The MC gave advice on mitigation but there are some members who are not adhering to these conditions
Benefit Distribution		Fair		Green	The benefits are reaching members and the conservancy management is doing their best to implement
Human Wildlife Conflict Management		Fair		Orange	Lack of resources to successfully implement these activities
Sustainable Business and Financial Planning			Good	Orange	All accounts are accounted for
Tourism		Fair		Orange	Not all species on the quota are hunted
Staff Management		Fair			Staff members who disobey instructions
Assets Management/Register		Fair			Assets are not properly managed
HIV/AIDS		Fair			Not all activities were implemented, even though facilitator is at the office
Communication			Good	Orange	Members are informed about the benefits within conservation