

The value of the De Beers/ Oppenheimer Diamond Routes Properties for Bird Conservation



Objective of Study

What is the value of the De Beers/
Oppenheimer Diamond Route properties
towards bird conservation in South Africa?



How to best answer the question

- Determine the species occurring in these properties
 - Number of species per property
 - Number of species for all of the properties together
- Indicate the status of the species recorded on these properties:
 - Species of Conservation Concern (Critical Endangered, Endangered, Vulnerable, Near-threatened)
- Analyse the data to see if any of the properties pass the criteria and thresholds for:
 - Important Bird Areas
 - Ramsar sites

Data Sources

- A number of data sources exist that could have been used.
- Checklist of birds recorded at each of the properties
 - Limited in how the data can be analysed – for example reporting rates cannot be used.
 - Cover species recorded over many years.
 - Vagrants
 - Does not reflect the current state of affairs

Data Sources (continue)

Data collected during citizen science projects in South Africa

- South African Bird Atlas Project 1 (SABAP₁)
- South African Bird Atlas Project 2 (SABAP₂)
- Co-ordinated Waterbird Counts (CWAC)
- Birds In Reserves Project (BIRP)

Data Sources (continue)

Number of advantages and disadvantages in using citizen science projects

Advantages

- Most of the data are current
- The data are collected in a scientific way – following a certain protocol
- Data are vetted
- Data are available

Disadvantages

- Coverage might be an issue – especially in certain parts of the country
- Resolution might be an issue

Data Sources (continue)

Decision was taken to use the SABAP2 data

Pleasantly surprised with the results!

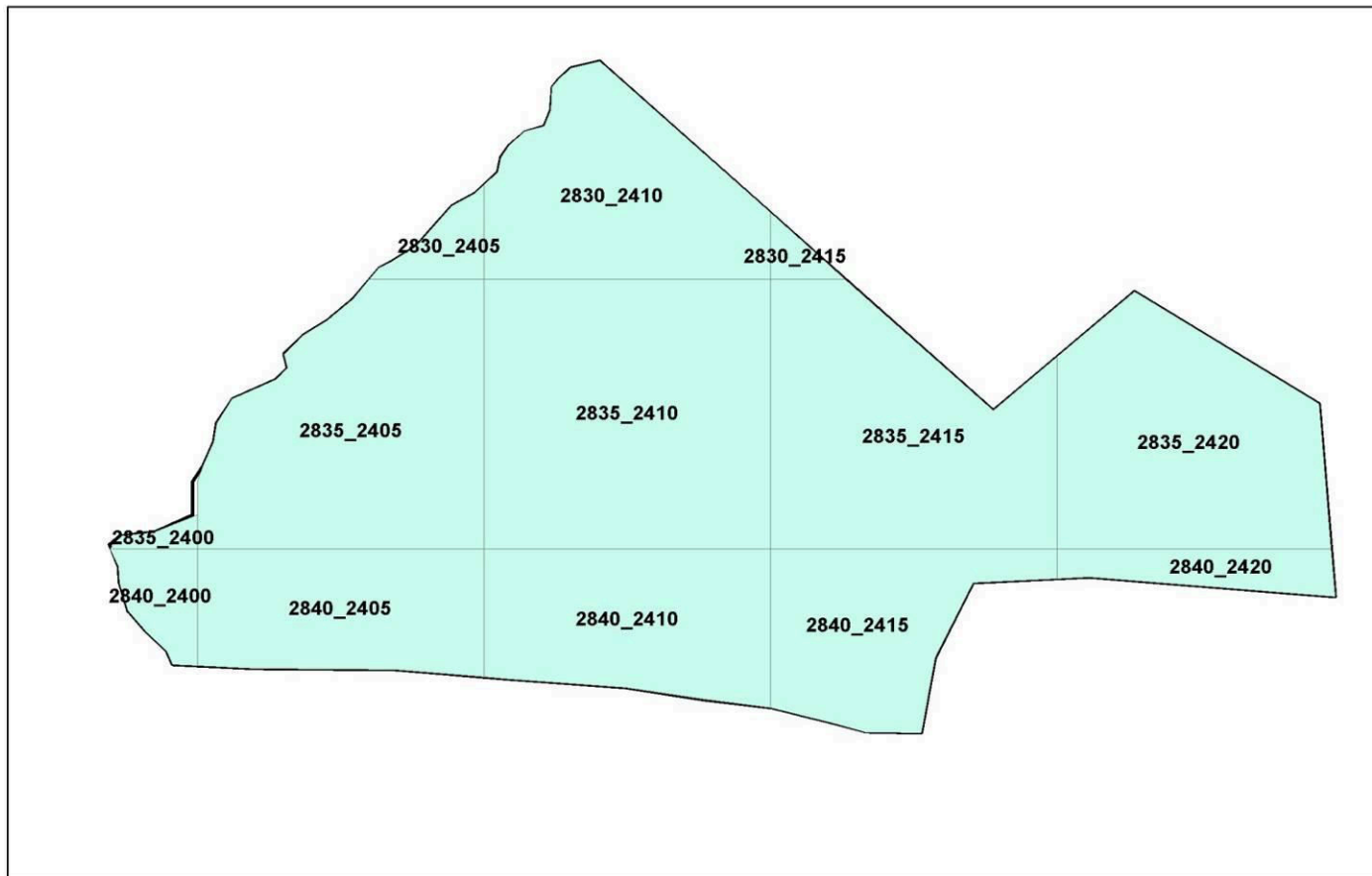
Methodology

In order to access the SABAP2 data GIS tools (ArcView 9.2) was used:

- Created shapefiles of the property boundaries (with the assistance of reserve managers).
- Determine the pentads within these properties (using the tools within ArcView 9.2).
- Obtain a list of all the species recorded as well as number of times reported from the SABAP2 database.

Rooipoort Nature Reserve Pentads

Pentads within Rooipoort Nature Reserve



Rooipoot Nature Reserve

Number of lists submitted:	249
Percentage of pentads covered:	(100%) 13/13
Total Number of Species recorded:	245
Number of Global Threatened Species:	8
Number of Regional Threatened Species:	13
Number of Biome & Range Restricted Species:	8
Possible IBA Status:	Yes

Namaqualand Diamond Coast

Number of lists submitted:	246
Percentage of pentads covered:	32% (31/95)
Total Number of Species recorded:	214
Number of Global Threatened Species:	14
Number of Regional Threatened Species:	22
Number of Biome & Range Restricted Species:	18
Possible IBA Status:	Definitely

Benfontein Game Farm

Number of lists submitted:	38
Percentage of pentads covered:	100% (5/5)
Total Number of species recorded:	200
Number of Global Threatened Species:	9
Number of Regional Threatened Species:	13
Number of Biome & Range Restricted Species:	5
Possible IBA Status:	Already an IBA

Venetia Limpopo Nature Reserve

Number of lists submitted:	33
Percentage of pentads covered:	50% (4/8)
Total Number of Species recorded:	287
Number of Global Threatened Species:	5
Number of Regional Threatened Species:	16
Number of Biome & Range Restricted Species:	8
Possible IBA Status:	Yes

Dronfield Nature Reserve

Number of lists submitted:	33
Percentage of pentads covered:	100% (7/7)
Total Number of Species recorded:	199
Number of Global Threatened Species:	7
Number of Regional Threatened Species:	9
Number of Biome & Range Restricted Species:	5
Possible IBA Status:	Already an IBA

Ezemvelo Nature Reserve

Number of lists submitted:	74
Percentage of pentads covered:	100% (5/5)
Total Number of Species recorded:	256
Number of Global Threatened Species:	4
Number of Regional Threatened Species:	11
Number of Biome & Range Restricted Species:	4
Possible IBA Status:	Yes

Tswalu Kalahari Reserve

Number of lists submitted:	8
Percentage of pentads covered:	23% (6/26)
Total Number of Species recorded:	105
Number of Global Threatened Species:	1
Number of Regional Threatened Species:	3
Number of Biome & Range Restricted Species:	4
Possible IBA Status:	Possibly

Brenthurst Gardens

Only checklist for the garden used

Total Number of Species recorded:	87
Number of Global Threatened Species:	None
Number of Regional Threatened Species:	None
Number of Biome & Range Restricted Species:	1
Possible IBA Status:	No

The Big Hole - Kimberley

Species list based on larger Kimberley Pentad with expert input

Total Number of Species recorded:	54
Number of Global Threatened Species:	2 (Fly Over)
Number of Regional Threatened Species:	2 (Fly Over)
Number of Biome & Range Restricted Species:	0
Possible IBA Status:	No

Summary for all the properties

List of species for all the pentads

Total Number of Species recorded:	489
Number of Global Threatened Species:	24
Number of Regional Threatened Species:	43
Number of Biome & Range Restricted Species:	29

The value of the properties to bird conservation

Contribution is really impressive!

Percentage of global threatened species: 31% (52% of terrestrial species)

Percentage of regional threatened species: 36% (39% of terrestrial species)

Already an IBA: 2

Possible IBA Status: 4

With more data: 1

Way forward

Obtain better SABAP2 coverage

- Train atlaser/s in each property to submit lists on a regular basis
- Analyse the data on a continuous basis to obtain more accurate data and to indicate trends

Apply to have all/some of the properties declared as
Important Bird Areas

Establish species management plans to ensure the future of
endangered species

Thank You