This issue of *Lanioturdus* is devoted to the raptor workshop which was held at Waterberg Plateau Park from 18-19 February 2005. The workshop was organized by the Namibian Nature Foundation and was open to all who were interested in raptors.

CONTENTS

VOLUME 38 (3-4) 2005

BROWN, C. Welcome and introduction	1
BRIDGEFORD, P. & BRIDGEFORD, M. Status of	
vultures in Namibia	1
OSBORNE, T. & M. WINK. Taxonomy of African raptors	
with emphasis on Namibian species	7
BRIDGEFORD, P., BRIDGEFORD, M. & DÜRR M. Monitoring	
and ringing of Lappet-faced Vultures on the Namib:1991-2004	9
BRIDGEFORD, P & HEINRICH D. Ringing of African	
White-backed Vultures on commercial farms	13
MENDELSOHN. J, BROWN C., MENDELSOHN M. &	
DIEKMANN M. Observations on the movements of adult	
Cape Vultures in central Namibia	
OWEN-SMITH, G. Raptor issues within conservancies	21
HENGARI, G. M., CUNNINGHAM P. L., & ADANK W. The	
use of vultures by traditional healers in Namibia	. 22
KOMEN, L. Where we are and where we can go with poison	
and raptors: a perspective from NARREC	. 29
ROBERTSON, T. & JARVIS A. Raptors and the Avifaunal	
Database	
BRAINE, S. Raptor road counts - the need for continuation	45
JOUBERT, D. Raptor road counts with students at	
Polytechnic of Namibia	46
DIEKMANN, M. The capture and attachment of satellite- and	
radio-telemetry equipment on vultures in the Waterberg area	50
RAPTORS NAMIBIA. Action Plan	52

Welcome and introduction

Dr Chris Brown Namibia Nature Foundation, PO Box245, Windhoek

Namibia's vultures, other diurnal raptors and owls are increasingly under threat from factors such as disturbance, particularly at breeding sites; the misuse of poisons and pesticides; electrocution and collisions with overhead lines; habitat degradation; persecution; illegal harvesting; and drowning in reservoirs.

Much work has been done on raptors in Namibia in the past. People have come and gone, however, resulting in a lull in activity which is now picking up again. By collaborating in a close-knit group rather than in isolation we will be able to achieve more, encouraging one another and pooling our resources in effective, coordinated synergies. There is also a need for new actions, which will be incorporated into existing programmes/initiatives where possible, with a focus on increasing public involvement.

This is why the time is right for our workshop on birds of prey at Waterberg Plateau Park on 18-19 February 2005. We are privileged to welcome a healthy mix of "old-time" raptor enthusiasts here who bring years of experience to the table, and a new cohort of young conservationists who will carry the flag into the future. One of our main outcomes will be to develop an action plan for these threatened birds (see the plan below).

Status of vultures in Nambia

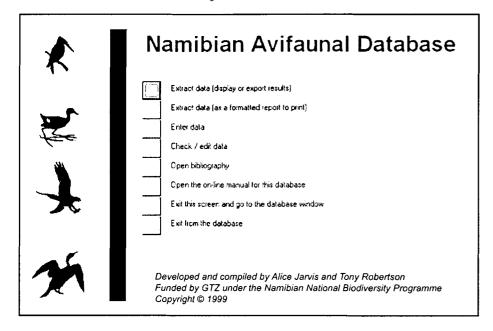
Peter & Marilyn Bridgeford Vulture Study Group Coordinator Namibia pmbridge@iway.na

Introduction

Vulture research in Namibia started in the 1960's in the Namib Desert Park, now part of the Namib-Naukluft Park (NNP). Sauer (1973), Jensen (unpublished reports), Clinning (1978) and Brown (1985, 1986) all worked on vultures in the same area over the years. The present project of ringing Lappet-faced Vultures

Raptors and the Namibian avifaunal database

Tony Robertson and Alice Jarvis PO Box 1429, Windhoek tr_aj@mweb.com.na



- A user-friendly, menu-driven database system, designed in Access and linked to ArcView for easy visualisation of data
- Created in 1997/98 under the Biodiversity Programme of the Directorate of Environmental Affairs, MET

Comprises:

Atlas (SABAP) data (1950s – 1993)

Museum specimen data (1804 – 1997)

Nest record cards (1866 – 2000)

Raptor road counts (1973 – 1984 by zone only; 1984 – 2000 by route)

Wetland data (1976 – 2001)

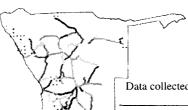
Bibliography

How much information is there?

	SABAP	Museum	Nest Record	Raptor Road Count	Wetlands
All records	510,088	24,303	7,858	63,370	19,040
Raptor records	53,507	1,314	1,195	63,370	399
%	10.5	5.4	15.2	100	2.1

NB: Raptor road counts include 2 species of storks

Coverage:



Data collected during the first two decades of Raptor Road Counts

	km	N obs	N birds	N species *
July 77 - Jun 82	128,798	7,280	16,383	45
July 82 - Jun 87	681,833	34,514	61,462	55
July 87 - Jun 92	366,366	21,514	33,382	53
July 92 - Jun 97	31,170	1,310	2,283	34
Total	1,208,167	64,618	113,510	56

Summary of observations by zone

Zone	Km	No species †	Density (n / 100km) of		Average no birds observation	
			Raptors	Observations	-	
Northern Namib	41813	38	7.83	6.40	1.22	
Central and Southern Namib	116125	28	2.96	2.09	1.42	
Southern Namib	44253	27	10.77	9.37	1.15	
South and ProNamib	399060	45	7.13	4.48	1.59	
Highland Savanna	473639	52	10.77	5.95	1.81	
Forest Savanna and	72278	52	21.72	7.59	2.86	
Woodland						
Kalahari Savanna	11338	31	7.87	5.17	1.52	
Mopane Savanna	49661	38	12.05	6.47	1.86	
	1208167	56	9.01	5.28	1.34	

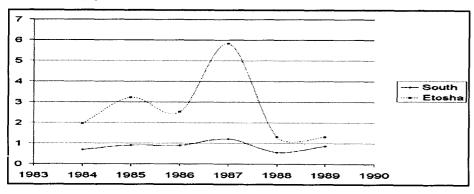
texcludes those classified as unidentified

Raptor observations within Etosha National Park and the adjacent area to the south in the same zone (Mopane savanna)

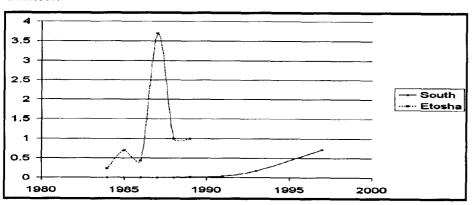
Area	No years of data used	No species	Raptor density (birds/100km)		
Etosha NP	8	28	13.4		
South of ENP	8	30	2.0		

Density of selected species inside Etosha National Park and in the area to the south in the same zone (Mopane savanna)

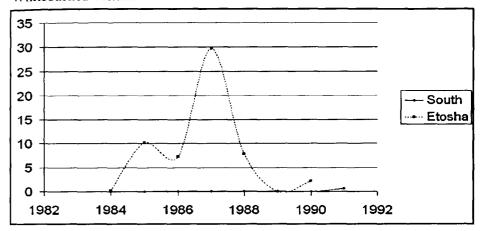
Pale chanting goshawk:



Bateleur:



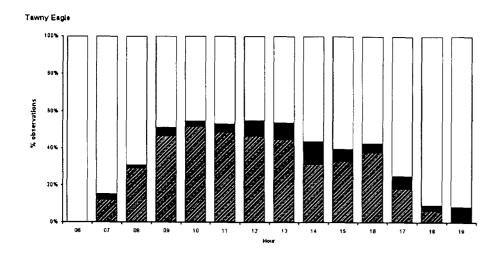
Whitebacked vulture:



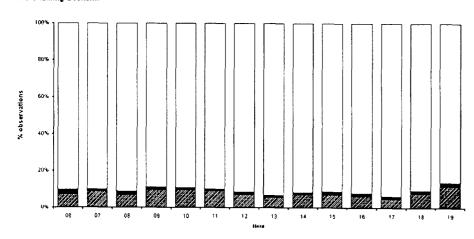
Substrate use by a selection of species in the Highland savanna zone

Substrate	BSK	LFV	PCG	TE	WBV	WRFK
Dirt/gravel road	0.03	4.76	0.14	1.26	2.99	
Fence post	0.38		0.70	0.18		0.81
Fence wire			0.03			
Pylon	0.14	ĺ	1.19	1.62	1.49	
Pylon cable	0.22		0.05			
Road verge	0.44	ĺ	0.68	2.16		
Tar road	0.03	4.76	0.15	1.44		
Telephone pole	57.14	ĺ	85.96	60.61	5.97	31.71
Telephone wire	24.53		0.72	0.18		61.79
Windmill		ĺ	0.02			
Ant hill			0.02	0.18		
Dead tree	6.74	28.57	2.65	8.81	22.39	3.25
Dry sand/soil			0.10		1	
Grass	0.22	14.29	0.32	0.54	5.97	
Green tree	9.93	33.33	7.00	21.40	50.75	2.44
Nest in/on tree		-	0.02	0.90	8.96	
Rocks/boulders	0.03	4.76	0.05	0.18		
Short vegetation	0.19	4.76	0.20	0.36		
Water's edge		4.76		0.18	1.49	

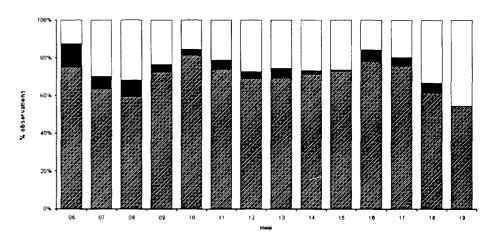
Activity budgets for (i) Tawny eahle (ii) Pale chanting goshawk (iii) Milvus kite



Pale Chanting Goshawk



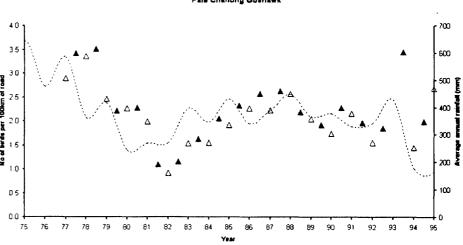


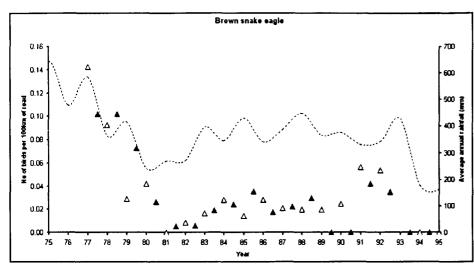


White = perched Black = on the ground Striped = flying

Trends in relation to an environmental factor: rainfall

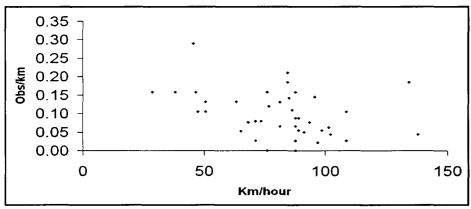
Pale Chanting Goshawk



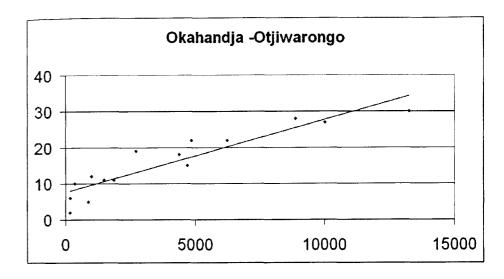


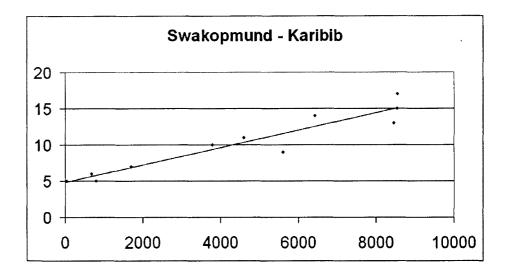
Black triangles represent counts between November and April (wet season) whilst grey triangles represent counts between May and October (dry season), in Highland savanna. The dashed line represents annual average rainfall based on data from 141 weather stations within this zone.

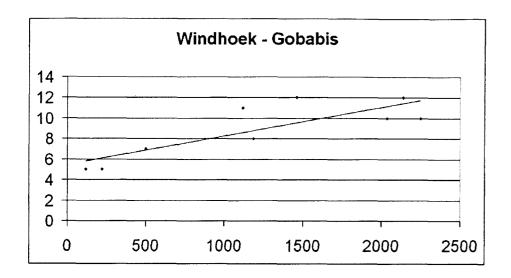
But analyses must take into account of biases in the data such as the number of observers, observer ability and driving speed . . .

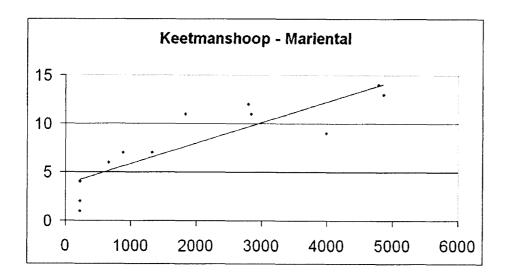


Relationship between the number of species recorded and the number of km travelled per year for 4 routes









Database status...

- The database was completed in 1998 but it is still not accessible to the wider public and very little updating has occurred
- The potential outputs are great however very little analysis has been done
- For the two largest data sets (Atlas data and Raptor road counts) data are no longer collected

Birds, and especially raptors, can be sensitive indicators of environmental health, often responding to negative impacts such as pollution and land degradation before other effects are apparent

To be a long-term monitoring data set and to fulfil its potential, we need to:

- Re-launch data collection programmes (atlas cards, raptor road counts) and put data management, data verification, data entry processes in place could be done through a server-based copy where collectors enter the data themselves
- Analyse data and publish results basic summary analysis as well as questionled outputs
- Make the data and outputs accessible (on the internet) for use by those working in the environmental sphere (consultants, EIAs, students etc.)

How could this be achieved?

Who could take it on?

Next steps...?

The need for resurrecting raptor road counts

Steve Braine

Hobatere Lodge PO Box 110, Kamanjab hobatere@mweb.com.na

The past years of raptor road (RR) counts done in the 80's and early 90's accumulated huge amounts of data. To be able to use this data effectively it would be wise to reinstate the RR and continue this project for several years so that enough data can be accumulated for comparative purposes. This data could