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

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Welcome and introduction

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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

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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 Sauer (1973), Jensen (unpublished reports), Clinning (1978) and Brown (1985, 1986) all worked on vultures in the same area over the years.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

Cape Vultures don't seem to be specifically targeted by traditional healers close to the Waterberg Plateau Park although the traditional healers were not fussy about which vulture was used. Cunningham (1990) also mentions that traditional healers are not fussy about which species of vulture is used. According to Beilis (1999) the Cape Vulture is the preferred species in Lesotho. The fact that they are rare in Namibia coupled with the problem of distinguishing them from the White-backed Vulture could impact on the last few remaining birds. Although other factors are generally accepted as responsible for the decline of the Cape Vulture in Namibia, it is important not to exclude the role that traditional healers may have had, and may continue to have, on this as well as other vulture species.

During the early 1990's a vulture was "stolen" from a raptor rehabilitation centre north of Windhoek and probably used in the traditional healing industry although this was never confirmed (E. Komen pers. comm.).

The possibility that traditional healers (and/or other people supplying the products) use poison to acquire vulture parts in Namibia should be urgently investigated. Poisons are used to kill vultures for traditional healing in KwaZulu-Natal, South Africa (Govender 2002). Alternative substitutes for vulture parts should be investigated and timely further research into the effect that traditional healers may have on vulture numbers in Namibia, especially the Cape Vulture, is strongly recommended.

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References

Beilis, N. 1999. Descriptive environmental survey on the use of vultures in traditional medicines in Lesotho. MSc thesis, University of the Free State, Bloemfontein.

Berry, M.H. 1995. Population dynamics of the Cape Vulture Gyps coprotheres at theWaterberg Plateau Park. Unpublished Report, Department of Nature Conservation, Polytechnic of Namibia, Windhoek.

Boyer, H.J. & Bridgeford, P.A. 1988. Birds of the Naukluft Mountains: an annotated checklist. Madoqua 15: 295-314.

Bridgeford, P. 2001. More vulture deaths in Namibia. Vulture News 44: 22-26.

Brown, C.J. 1985. The status and conservation of the Cape Vulture in Namibia. Vulture News 14: 4-14.

_____. 1988. Scavenging raptors on farmlands: what is their future? African Wildlife 42: 103-105.

_____. 1997. Conservation status summary: birds. In Biological diversity in Namibia:a Country Study (P.E. Barnard, ed.). Windhoek: Ministry of Environment and Tourism/National Biodiversity Task Force, pp. 155-162.

_____. & Jones, S.J.A. 1989. A supplementary feeding scheme in the conservation of the Cape Vulture at the Waterberg, South West Africa/Namibia. Madoqua 16: 111-119.

Cunningham, A.B. 1990. Vultures and the trade in traditional medicines. Vulture News 24: 3-10.

Govender, S. 2002. Vultures killed for Lotto muti. Sunday Times, 26 May 2002.

Maclean, G.L. 1985. Roberts Birds of Southern Africa. John Voelcker Bird Book Fund,Cape Town.

Mundy, P., Butchart, D., Ledger, J. & Piper, S. 1992. The Vultures of Africa. Acorn & Russel Friedman Books, Halfway House, South Africa.

Pickford, P., Pickford, B. & Tarboton, W. 1994. Southern African Birds of Prey. Struik, Cape Town.

Simmons, R.E. 2002. A helicopter survey of Cape Vultures Gyps coprotheres, Black Eagles Aquila verreauxii and other cliff-nesting birds of the Waterberg Plateau,Namibia, 2001. Vulture News 46: 3-7.

_____. & Bridgeford, P. 1997. The status and conservation of vultures inNamibia. In: Boshoff, A.F., Anderson, M.D. & Borello, W.D. (eds). Vultures in the 21st Century. Proceedings of a workshop on vulture research and conservation in Southern Africa. Vulture Study Group, Johannesburg.

Steyn, P. 1982. Birds of Prey of Southern Africa. David Philip, Cape Town.

Raptor awareness and poison-use, a perspective from NARREC

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Cooperation and advocacy from civil society can reduce the environmental risks associated with hazardous chemicals. Safety for people and biodiversity must consider importation, transport, sales, handling and end-use of chemicals. Legislation and policies concerning pests and lethal control must be popularised through ongoing networking and relevant information dissemination campaigns.

Raptors as non-target victims of poison use

In Namibia no reliable data is available to determine: the number of poisoned birds of prey, whether poisoning is deliberate or accidental, or whether the rescued birds or carcasses found are primary or secondary victims of poison. The

lack of data is a problem in itself and further problematizes discussing the issue with farmers. Various initiatives in campaigning for birds of prey and safe use of poison have probably reduced incidents where predator controllers use an entire carcass laced with poison or deliberately set poison baits for raptors. However, raptors continue to be poisoned and carcasses are testing positive for pesticides, mainly organophosphates and carbamates. These products are used off-label (illegally) for lethal predator removal.

Strychnine, the legal predator-cide

Strychnine exists as the legal "predator-cide" in Namibia, but may now be the least used poison for predator control. Strychnine prescriptions issued by Ministry of Agriculture, Water and Rural Development (MAWRD), Directorate Veterinary Services, from 1997- 2001 were up to 2000 grams prescribed per year. By 2003, the campaign for birds of prey and safe use of poison had influenced various stakeholders to review their part in poison prescribed, issued and sold for lethal animal control. The Veterinary Council of Namibia voted against veterinarians prescribing predator-cides, although MAWRD veterinarians remain under an employment obligation to prescribe strychnine in "necessary" cases. The Pharmacist Association of Namibia alerted pharmacists, who supply the product on prescription, to the issues at stake, and the company importing strychnine stopped all imports. In the same year the Namibia Agricultural Union, developed an ethics statement supporting the interests and safety of biodiversity on farmlands in line with the national Vision 2030. The result has been a dramatic reduction in prescriptions given for strychnine, with only 95 grams prescribed from January 2004 to March 2005.

Pesticides used as "off-label" predator-cides are a major threat for raptors

Pesticides are known to threaten non-target species through primary and secondary poisoning, even when the products are used for prescribed controls. Agricultural products retailers give advice and sell pesticide to end-users with the understanding that the label will be read and safety instructions followed. However, some also "assist" their customers by spreading the word on using pesticides "off-label" for lethal predator control.

In January 2005, a telephonic survey of retail outlets selling agricultural products in Namibia was conducted. Sales personnel were asked to recommend a method

to control jackals predating on livestock on a farm in their area. 25% of surveyed retailers suggested a pesticide (nematicide) as their 1st recommendation for predator control, and gave a trade name. 15% suggested contact with one of the previous retailers. 20% gave their 2nd choice as a pesticide (nematicide) and gave a trade name. Only 8% refused to acknowledge pesticides as an option and only 1 retailer suggested contacting a state veterinarian for a legal predator-cide. 1 retailer has "special jackal poison"; this product has been traced to a South African manufacturer who uses 1080 or monofluroacetate, a hazardous poison banned in Namibia.10% suggested that as pesticides cost N$+900 – N$+1000 for a 25 kilogram pack, groups of farmers could share the purchase.

Single Lethal Doses

Through recommendation from the Poison Working Group – Endangered Wildlife Trust, the Single Lethal Dose (SLD) has been put forward as the best and safest way to deal with poison for predators. The strychnine SLD for jackal is recommended at 43mg, a knife-tip or match-head amount. For pesticides (organophosphates and carbamates) there is no recommended dose. These products are lethal in smaller quantities than strychnine and are highly toxic to birds even as a secondary poison whether orally consumed or through skin absorption.

In 2000-2001, a private veterinary clinic repackaged a pesticide (carbamate) in 200 gram packs and sold sufficient pesticide to kill 24 000 medium-sized mammalian predators. Through these sales many farmers have a pesticide that they believe is a legal product to be used as an SLD, and 200 grams makes a lot of SLDs.

An unusual exposure of an entire "SLD" pesticide-poisoning event happened on in February 2005. The evidence included 7 dead Milvus species lying dead on a jackal carcass and the remaining poison, about 20 grams of pesticide, poorly-wrapped and unlabeled. The Protected Resources Unit did the site investigation, samples were sent to the National Forensics Institute and the case was handed to the Ministry of Environment and Tourism (MET). There was evidence for a civil case with the landowner versus the livestock owner (poison was used without permission of the land-owner) and a criminal case with MET versus the livestock

owner (use of a hazardous chemical "off-label" and killing of protected species - birds of prey), but there were serious problems with the handling procedures for the case. Obvious problems included:

- No "Poison Investigation Forms" available and therefore a lack of set procedure for gathering evidence.
- PRU is uninformed about illegal use of a hazardous chemical and the status of raptors as protected species.
- The Namibian Police are not informed about the criminality of a registered poison used illegally and the killing of protected species.
- No clear communication channels are available between Law Enforcement of MET, Ministry of Health and Social Services (MOHSS), the Namibian Police, Ministry of Defence, National Forensics Institute and PRU.
- Registers of the purchasers of hazardous chemicals are not being kept by retailers nor monitored by MAWRD.
- The recommendation given to farmers of the SLD approach to poison for predators needs to be revisited by all stakeholders.

Rodenticides and owls

The posters and booklets developed for awareness on owls in Namibia has had no impact on sellers of rodenticides and probably had very little influence on end-users of these chemicals. In two areas of Windhoek where milling is done, transport trucks drop a lot of maize on the road (personal observation) and yet no dead owls have been reported on these roads. In South Africa, where grain trucks spill maize, the number of injured owls on the roads is very high because of rodents feeding on the spilled maize. Milling groups and many other companies usually contract a Pest Control Operator (PCO) to deal with potential and actual pests. Pest Control Operators (PCOs) in Namibia are another aspect of the "poison and pesticide" issue that may be affecting wildlife.

Pest Control Officers in Namibia

Investigation in 2003 and discussions again in 2005 revealed a number of problems with the Pest Control Officers in Namibia. MAWRD Directorate Technical Services is aware that many operators have no qualification for the job. Registration as a PCO is required but is not strictly controlled. PCOs may have little actual information on the chemical ingredients of their products and little if anything has been done to bring biodiversity concerns to their attention.

Without appropriate PCO training; pesticides are over-used, there is poor planning of stock purchases, poor knowledge of pest lifecycles and habits, and poor understanding of relevant legislation and policies.

Integrated Management

Integrated non-chemical pest management has been promoted by the MAWRD, Directorate Technical Services for small crop farmers in Northern Namibia. However, three major pesticide operations occur in northern Namibia; pest grain-eating birds and invasive crop-insects are controlled chemically by the MAWRD and the MOHSS handles malarial vector species control. No current information is available on the effects on birds of prey from these control operations.

The Cheetah Conservation Fund (CCF) conducts Integrated Livestock Management courses for communal farmers and has produced a book on farm management techniques with emphasis on livestock health and using guard dogs for livestock safety. Integrated predator management is handled as part of their integrated livestock management course. Articles on integrated management, written by "Poison Working Group" and predator groups, are often published in "Farmers Weekly" and "Landbou Weekblad".

Predation of livestock has a negative effect on farm productivity. A broad and integrated management vision of the farm environment can control many factors that allow predation of stock. But, individual farmers cannot work in isolation; community efforts and combined visions for veld/livestock/predator management issues are needed. Predator groups and conservationists must handle conservation practices and information dissemination such as relocation of predators or advice offered on predator management with great care. Government ministries could be more proactive to encourage integrated management and deal with hazardous chemical issues. Anti-poison campaigns must be realistic and take account of the fact that all land use affects raptor populations and that the global pesticide industry (35 billion euros for 2001) is an enormous field with positive and negative impact on numerous sectors.

Legislation and policy almost there

The proposed Environmental Management Act, Parks and Wildlife Act together with the new Pollution Control Act should fill existing gaps in the current

legislation concerning irresponsible transport, handling and use/misuse of hazardous chemicals and irresponsible killing of protected species. With the popularisation of these acts stakeholder groups can revisit or develop policies to best and consistently handle the issue of hazardous chemicals and negative effects on environment. Policy must be popularised through ongoing awareness campaigns, educational materials development and networking in order to encourage civil cooperation. Monitoring and policing also needs to be strengthened.

Croplife Namibia and obsolete pesticides

In 2002 a southern African (South Africa, Lesotho, Botswana, Swaziland and Namibia) project for the "Environmentally Sound and Sustainable Management of Obsolete Pesticides" was undertaken. Namibia, led by a group called AVPAN, was however not included in any retrieval of obsolete products and although obsoletes exist in government, private and individual stores with all the dangers of misuse and accidental leakage, the data gathered from the 2002 project and any future management procedures have not been made available. Sadly, momentum created with farmers to hand-over their obsolete stocks has dwindled. The safe hazardous chemical depository in Okahandja, developed to international standards, remains under-utilised, possibly through lack of personnel to attend to these stores and to transport obsolete stocks.

Croplife Namibia, under Croplife International, is in the process of registering as an Article 21 company and replaces AVPAN. They intend to assist in training and monitoring to create a safe pesticide industry in Namibia. Their proposed activity does not specifically include obsolete pesticides but proposes to cover the following: Nurseries and small garden pesticides retail industry. The veterinary and animal feed industry. The pesticide wholesale trade industry and co-operatives. The seed and crop protection industry. The environmental health and malaria control industry. Safe use training and accreditation. The animal health industry.

In terms of raptors the important question is will "Croplife Namibia" be helpful in the campaign to stop primary or secondary raptor poisoning in Namibia, especially concerning use of illegal use of registered products.

Awareness and Education on the issue

NARRECs' campaign for birds of prey is both centre-based and outreach. The centre-based programs are mostly used by formal and non-formal youth/student groups and include "close" views of 18 raptor species. The outreach program has developed attractive informative resource materials and a network to disseminate information to NGOs, government ministries, professional associations and unions, individuals farmers as well as youth through the weekly "Youth Paper" of The Namibian daily newspaper. The resources for raptor awareness and the poison issue (2001-2005) include:

- Booklet "Safe and Responsible Use of Pesticides" with specific pages on cattle-dipping – oxpeckers and rodenticides –owls.
- T shirts – "Poisons are Deadly"
- Poster – "Poison kills Lives"
- Poster and booklet – "Large Birds of Prey- Namibia"
- Awareness pamphlet to all small aircraft owners in Namibia on possible effects of low-flying on breeding sites of Lappet-faced Vultures
- Poster and booklet – "Owls of Namibia"
- Booklet "Predators on Livestock Farms in Namibia" with positives and negatives listed for all predator control methods as well as IPM for livestock farming.
- A booklet on "Bird Ringing in Namibia"
- A storybook "Where Birds are Prey" with activities for upper primary to lower secondary learners, highlighting threats as links between social and natural environments.