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### FOCUS ON THE NORTH-EAST

#### Awareness/training workshops: Katima Mulilo & Rundu (15-16/6/10)

It is good news that very few wildlife/power line conflicts are being experienced in either the Caprivi or the Kavango Region to date. The North-East was the recent focus of the series of workshops being organized by the NamPower/Namibia Nature Foundation (NNF) Strategic Partnership in order to promote awareness and the gathering of information on power line/wildlife incidents in Namibia (see previous newsletters for more details).

At Katima Mulilo we met with Pierre Joubert, Getson Nghoshi, Bernard Muchaka and John Mapenzie (NamPower) on 15/6/10. We also made contact with other stakeholders including Cedric Mundia and Ellen Simataa (MET); T. Iyambo, S. Chaka and J. Awene (Nored); and local birders/conservationists Katy Sharpe (Tutwa Tourism & Travel), Carol Murphy and Helen Priest. At Rundu we have been in contact with Freddie Thompson and Gerson Uaisako (NamPower) and J. Nambahu (Nored) on 16/6/10; as well as Phillip Steyn (MET), Dorothy Wamunyima (NNF Every River Project) and Mark and Charlie Paxton (Shamvura Camp).

The (standard) workshop programme includes an introduction to the NamPower/NNF partnership and the Environmental Information Service (EIS); electrocutions



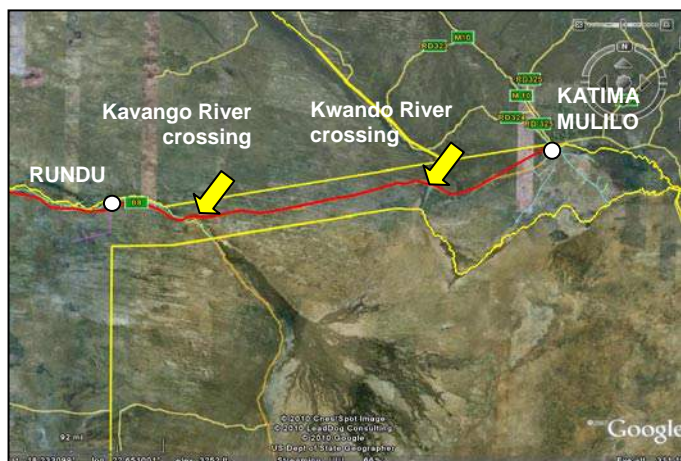
Participants at the Katima Mulilo (above) and Rundu (below) awareness/training workshops in June 2010  
(photos Ann Scott)

and collisions; problems caused by birds nesting on power lines; incident reporting; discussion and actions; together with power line observations.

#### General discussion (Katima Mulilo & Rundu combined)

##### Collisions/electrocution

- Generally, very few wildlife/power line conflicts have been recorded in either Caprivi or Rundu.
- Two Martial Eagles have been killed on power lines in Caprivi.
- Problems in the power supply were experienced when vultures made use of a nearby water point in Caprivi; in the end the farmer had been paid out to shift the water point.
- Squirrels, genets and elephants caused outages on smaller power structures in Caprivi (Nored).
- Seven or eight years ago there was a problem at Bagani when flocks of Spur-winged Geese flew up into 11 kV line at the agricultural scheme.



Google image of power lines in the North-east of Namibia (Kavango and Caprivi), showing the large Gerus-Zambezi 350HVDC line in red; country borders in bright yellow and roads in light yellow; and other power lines in other colours (based on a map generated by Alice Jarvis [EIS])

### Nesting

- Problems have been experienced with (Pied) Crows nesting on power line structures in Katima Mulilo; in Rundu crows perch on structures but do not nest, as there are many trees.

### Mitigation

- Solar-powered lights on the large river crossings are believed to have a limited life span (two years).

### General

- Large lines are patrolled at least once a year, but also if there is a problem.
- Termites are a problem in Kavango and can rapidly destroy a new pole; poison is used to prevent this from happening.
- Why do birds take so long to fly up from a road?

### Summary of actions

#### 1. Promote awareness

- Spread awareness amongst NamPower and Nored personnel, conservancies and other landowners/managers; birders/tourists; schools.
- Promote bird conservation.

#### 2. Reporting

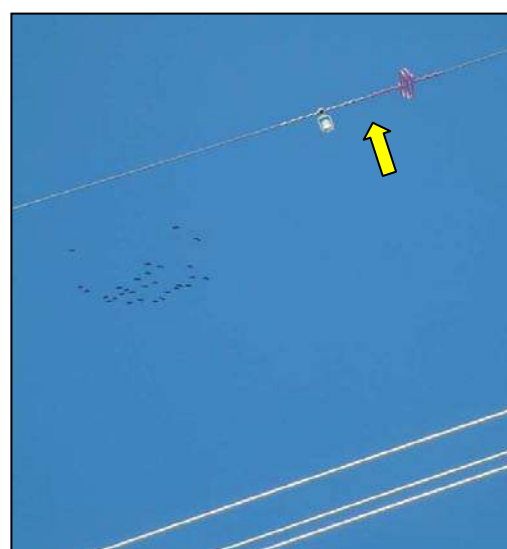
- Record and report incidents.
- Identify problem areas where mitigation measures can be applied and tested.

#### 3. Monitoring

- Monitor (Pied) Crow numbers and activities e.g. around municipal dump sites.
- Monitor effectiveness of mitigation measures e.g. solar lights.
- Investigate why birds do not perch/nest on cellphone towers.

### Power line observations: Caprivi & Kavango (14-17/6/10)

Motivation: No wildlife/power lines problems have been reported in these areas to date; however the impacts of the large new 350HVDC Caprivi Link Line require investigation, especially on large river crossings; the impacts of several new small HLPCD lines (for which an EIA is not a requirement) also require monitoring.



**Top:** The 350HVDC line crossing at the wetlands of the Kwando River at Kongola, Caprivi.

**Centre:** The 350HVDC line crossing at the Kavango River at Divundu, Kavango.

**Bottom:** Solar-powered light (left) and red double spiral bird flight diverter fitted at the Kavango River crossing at Divundu; a flock of storks circles overhead (photos Ann Scott)

### Findings

#### Large river crossings and mitigation measures Kwando River at Kongola

Solar-powered lights and double spiral bird flight diverters have been fitted as a proactive mitigation measure at the large Kwando River crossing of the 350HVDC line in Caprivi, where concentrations of bird life are greatest.

### **Kavango River at Divundu**

The same mitigation measures as above have been fitted as a proactive mitigation measure at the large Kavango River crossing of the 350HVDC line in Kavango.

No bird mortalities were found; however, observations were done from the road only, i.e. not beneath the full length of any of the lines. No bird nests were observed (in particular no weavers). Very few birds were seen perching on power line structures.

### **Habitat and visibility of lines**

Vegetation is woodland with bush and trees, some parts cleared for agriculture; dense in riverine areas; extensive wetland areas. In bushy habitats, smaller power lines (such as HLPCD lines west of Katima Mulilo) become less visible to birds flying at this height.

In some parts of Kavango, two or even three power lines of different structures run parallel, resulting in a potential obstacle course for birds under adverse weather conditions or at night. Power lines crossing bird flight paths, e.g. wetlands, also need to be monitored regularly for potential collisions.



In bushy habitats, power lines (such as this smaller HLPCD line west of Katima Mulilo) become less visible to birds flying at this height (photo Ann Scott)

### **Recommendations**

#### **1. Awareness**

- Promote awareness about the potential threats of both large and small power lines to wildlife, which also result in unnecessary outages.

#### **2. Surveys & incident reporting**

- Monitor the areas beneath power lines regularly, especially in wetland/riverine areas.
- Publicize the incident reporting system, and encourage the submission of reports.

#### **3. Mitigation**

- Apply/test mitigation measures in problem areas.
- Monitor the effectiveness of mitigation methods.

#### **4. Planning**

- Use the knowledge gained in the planning of future power lines.
- Encourage the use of the EIA checklist for new RED lines, even though it is not a legal requirement.



Participants at the Gobabis workshop on 19/5/10 (photo Ann Scott)

## **MORE AWARENESS/TRAINING WORKSHOPS**

### **Awareness/training workshop: Gobabis (19/5/10)**

In contrast to the North-East, nesting on power line structures by Sociable Weavers (throughout the year) and Red-billed Buffalo-weavers (during the rainy season) is an ongoing problem in the Gobabis area. These nests need to be removed on a regular basis. Participants at our workshop on 19/5/10 included Darius Hangero, Willie Pretorius, John Links, Julius Kavita, Simon Mokhatu (NamPower); and ET Tjizezensa, MM Miele, John Shikweyo (Censored).

#### **General discussion**

##### **Collisions/electrocution**

- Some problems have been noted with eagles being electrocuted.
- A baboon was electrocuted on a transformer.
- When the lines sag due to problems, cattle are regularly electrocuted.

##### **Nesting**

- Sociable Weaver nesting is an ongoing problem, especially on the 33 kV lines east of Hochfeld. Inspections have to be made at least once a week; this area is 160 km away from Gobabis.
- Do Sociable Weavers also nest on flight diverters?
- Buffalo Weavers also nest on the 33 kV lines east of Gobabis, including on the transformers, and cause outages.
- Owls roosting in substations and birds building nests within substations may cause problems.
- A Barn Owl has bred successfully in a drum at the NamPower office for two seasons. It has been photographed by Willie Pretorius, who mentioned that these owls help us by controlling numbers of rodents – which would potentially chew the cables.

##### **Mitigation**

- Dummy poles have been used with success for translocating Sociable Weaver nests at Aranos; these ideas can be tried out here as well.

##### **General**

- Kori Bustards have been observed in this area.
- Two vulture chicks were observed in one nest – this is an unusual record.

## Summary of actions

### 1. Sociable Weaver nesting problems

- Experiment with different ideas, e.g. noise deterrents; dummy poles in combination with silicon grease on original nest site.
- Approach AC van Zyl (NamPower, Aranos) to share ideas on procedures for translocating Sociable Weaver nests onto dummy poles.

### 2. Promote awareness

- Spread awareness among NamPower personnel and schools, and promote bird conservation.
- Obtain bird books for NamPower/Censored personnel.

### 3. Reporting

- Record and report incidents.
- Report interesting biological information, e.g. on vulture and eagle nesting.

## Power line observations: Gobabis area (19/5/10)

On 19/5/10 we investigated the 33 kV (HLPCD) lines east of Hochfeld, where NamPower (Gobabis) staff reported frequent problems with Sociable Weaver (*Versamelvoël*) nesting.

## Findings

Vegetation is open savannah with grass and trees, some parts cleared for grazing.

### Bird mortalities

None found; however, inspection was done from the road only, i.e. not beneath the full length of the line.

### Bird nests

Many Sociable Weaver nests on the 33 kV lines, mainly on the glass insulators, result in outages and damage to insulators, and sometimes fires. These nest constructions need to be removed frequently, and are replaced soon afterwards. These birds also nest on transformer structures.

### Use of lines by other bird species

Southern Pale Chanting Goshawks (*Bleeksingvalk*) are regularly seen perching on 33 kV line structures, without any recorded negative effects.



The availability of water near a homestead has apparently attracted many Sociable Weavers to this site, resulting in persistent nesting on insulators; the regular removal of these nests necessitates a round trip of 320+ km by NamPower personnel every week (*photo Ann Scott*)

## Recommendations

### 1. Sociable Weaver nesting problems

- Continue to seek solutions for the ongoing Sociable Weaver nesting problem; experiment with an integrated strategy, e.g. dummy pole (try using an old windmill tower) together with removal of nesting material and silicon grease at original site; investigate noise deterrents.
- Liaise with NamPower staff in the Aranos area, where dummy poles have been used successfully.

### 2. Awareness

- Promote awareness about potential threats to Pygmy Falcons (*Dwergvalk*) also nesting in Sociable Weaver nests, during nest removal operations.

## Awareness/training mini-workshops: Omaruru (17/2/10)

Sociable Weaver nesting is also one of the main problems in the Omaruru area. We met with Riaan Tjikuzu, Johannes Haimbodi, Richard Kameho and Isai Rukira (NamPower); and also with Koos Muaine, Roderick Uirab, Shakungu Tonias, J. Tjiriange, Alpheus Tjipange, Mack !Hoeab, Alpheus Karu, Frans Nauseb, Victor Gurirab and Daniel Shakungu (Erongo RED).

## General discussion (NamPower and Erongo Red combined)

### Collisions/electrocution

- Two eagles were electrocuted on an A-frame structure two weeks before (Erongo Red).



Participants at the Omaruru workshops on 17/2/10: NamPower (above) and Erongo Red (below; *photos Ann Scott*)



Damage caused by termites to creosoted Erongo RED power line poles at Omaruru (photo Ann Scott)

### Problems caused by bird nesting

- Nesting by Black Crows causes outages – this is an ongoing problem.
- Sociable Weaver nests on power lines also cause outages and need to be removed regularly.
- There are many trees in area – natural nesting and perching sites.
- Egyptian Geese nest on transformers.

### Other wildlife / power line interactions

- Baboons have caused outages on the 11 kV Otjompauwe line, blowing fuses.
- Genets climb up to birds' nests on transformers and cause outages. Transformers are expensive to replace.
- Dangerous snakes (e.g. black mamba) are found on Sociable Weaver nests; sometimes snakes are electrocuted on structures.
- Termites can cause damage to creosoted poles, which eventually collapse (see photograph above).

### Summary of actions

#### 1. Report incidents

- Complete and forward incident forms on wildlife/power line interactions.

#### 2. Bird nesting problems

- Investigate solutions for Black Crow nesting problems.
- Investigate the relocation of Sociable Weaver nests on dummy poles.

#### 3. Awareness

- Promote awareness about reporting and mitigating wildlife/power line interactions amongst NamPower and Erongo Red staff, and also involve farmers.

### We wish to thank:

- All our enthusiastic workshop participants for their interest and willingness to share information!
- NamPower for assistance with organization and logistics, especially Danie Louw, Gloudi de Beer, Pierre Joubert, Freddie Thompson, Darius Hangero; Cenored and Erongo Red supervisors
- Training materials/inputs: Chris van Rooyen, Liz Komen (NARREC), Alice Jarvis (EIS)
- Alice Jarvis of the project's Environmental Information Service (EIS) for generating the Google maps for these reports
- European Investment Bank for sponsoring the project

**Detailed reports on all the workshops (including discussion points) are available on our website.**

## POWER LINE SURVEYS

### Kokerboom – Auas 400 kV line, Tower 1-142 (71 km)

Report submitted by **Pieter Cloete**, email Pieter.Cloete@nampower.com.na, tel. 063-225291, Cell no. 0811225803

#### Survey details

Area: Keetmanshoop (Kokerboom – Tses)

Date: 23/12/09 – 27/1/09 (PTO)

Survey team: Hans Peens & Pieter Cloete (NamPower)



**Top:** Google image showing the Kokerboom – Auas 400 kV line in red, Tower 1-142 (lower two yellow markers) and Tower 143-323 (upper two yellow markers); sites of bird mortalities are indicated by red markers; country borders in bright yellow and roads in light yellow & dark blue; and other power lines in other colours (based on a map generated by Alice Jarvis [EIS])

**Centre:** The Kokerboom – Auas 400 kV line

**Bottom:** Remains of what appears to be a Black-chested Snake-eagle (above), and two bustards (below) (photos Pieter Cloete)

Survey area: Tower 1-142 / 26 25,068S 018 17,409E to 25 53,829S 018 04,186E (71 km); average distance between towers is 500 m; distance travelled per day depends on terrain/servitude as well as roads in and from the line. Keetmanshoop  
 Motivation: Request of NamPower-NNF Strategic Partnership, due to mortalities recorded elsewhere on this line structure

**Findings (see photos on p5)**

**Black-chested Snake-eagle:** collision/mortality  
 Tower 62 & 63 / 26 15.852S 18 15.483E  
 1 x 10/06/2009 and 1x 30/11/2009 on same transformer;  
 only skeleton of bird left

**Bustards x2:** collision/mortality  
 Tower 102-103 / 26 02.191S 18 08.751E  
 22/1/10; only feathers of second bird left

**Kokerboom – Auas 400 kV line, Tower 143 - 323 (90 km)**

Report submitted by **Pieter Cloete** (see above)

**Survey details**

Area: Tses – Mariental/Gibeon  
 Date: 23/12/09 – 27/1/09  
 Survey team: Hans Peens & Pameni Bernadino (reporting by Pieter Cloete; NamPower)  
 Survey area: Tower 143-323 / 25 53,521S 18 04,043E to 25 12,480 17 48,553E (90 km)  
 Motivation: Request of NamPower-NNF Strategic Partnership, due to mortalities recorded elsewhere on this line structure

**Findings**

**No mortalities** recorded. Personnel doing line inspections have also not recorded any incidents of wildlife with power lines. On the whole, little movement of birds/wildlife was observed during the four days of inspection. Only one live bustard was spotted, walking near the line.

**Kokerboom – Nabas 66 kV line (110 km)**

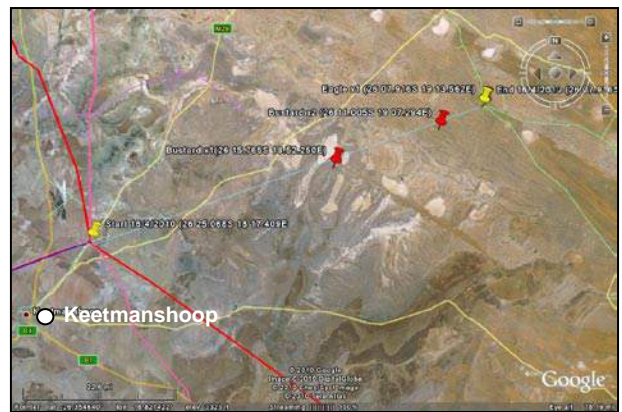
Report by **Pieter Cloete** (see above)

**Survey details**

Area: Keetmanshoop - Koes  
 Date & time: 16/04/2010 – 08h00 to 16h00  
 Survey team: Pieter Cloete & Elcan Mungundu (NamPower)  
 Survey area: 26 25,068S 18 17,409E to 26 07,916S 19 13,562E  
 Motivation: Remove bird nests/routine inspection

**Findings**

**Bustard:** collision/mortality  
 26 15,765S 18 52,250E  
 Carcass one month old, mid-line, eaten by scavengers  
**Bustards x2:** collision/mortality  
 26 11,005S 19 07,294E  
 Carcass one month old, mid-line, eaten by scavengers  
**Black-chested Snake Eagle (adult):** collision/mortality  
 26 07,916 S 19 13,562E  
 Carcass three weeks' old, mid-line, eaten by scavengers



**Top:** Google image showing the Kokerboom – Nabas 66 kV line in pale blue (surveyed area between two yellow markers); sites of bird mortalities are indicated by red markers; roads in light yellow & dark blue; and other power lines in other colours (based on a map generated by Alice Jarvis [EIS]);

**Centre:** Kokerboom – Nabas 66 kV line; and

**Bottom:** Remains of two bustards on the Kokerboom-Nabas 66 kV line (above) and remains of a Black-chested Snake-eagle (below; photos Pieter Cloete)

## Grootfontein: Gerus – Zambezi 350HVDC line (39.5 km)

Report by **Ann & Mike Scott**

### Survey details

Area: New Gerus-Zambezi 350HVDC transmission line north-east of Grootfontein (access via D2844 Berg Auchas turnoff from B8): Towers 412 – 491 (39.5 km; towers are 500m apart); -19.5215S 18.3535E to -19.2457S 18.5895E

Date & time: 17/6/10, 10h30 – 13h40

Participants: Johannes Shiimi (NamPower, email Johannes.Shiimi@nampower.com.na, cell 081 128 8499); Simon Ngeshya (NamPower); Mike & Ann Scott (NP/NNF Partnership)

### Motivation

A collision event involving 20± flamingos between Tower 472 (-19.3218S 18.5317E) and 491 (-19.2457S 18.5895E) was reported on 2/11/09 by Cronjé Loftie-Eaton (Jyoti Structures Africa, email ceaton@jyotiafrica.com, tel. 061 387100), via Danie Louw. Pierre van Niekerk (081 129 2357) also reported many dead doves beneath the same line. This area falls within the speculated flight path of flamingos between Etosha and Tsumkwe, as identified in the EIA for the line (see below).

Comments by **Chris van Rooyen** (email 7/11/09; cell +27824549570, email vanrooyen.chris@gmail.com):  
When I did the bird impact assessment study for the Gerus Mururani a couple of years back, I predicted the potential for collisions along that section of line (see below). At the time I did not recommend any mitigation because of the size of the potential risk area and the uncertainty whether it will in fact happen - marking the entire area translated into major costs. However, this has now turned into a reality which may have changed the picture somewhat. (For further comments on mitigation, see newsletter No. 3, pp 6-7).

### Findings

Dense bush with some grass (cleared beneath line). The area is known as the Parkiesveld.

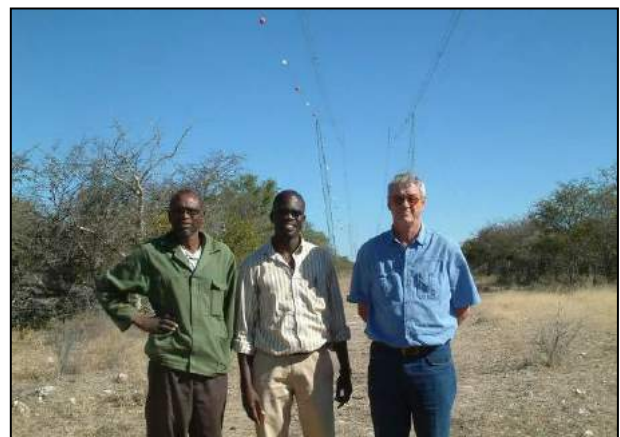
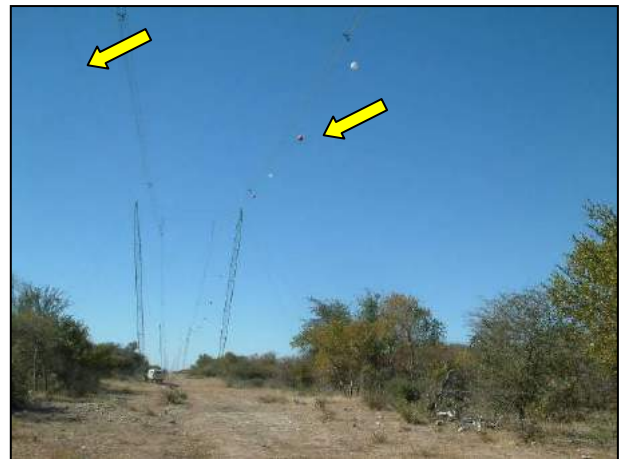
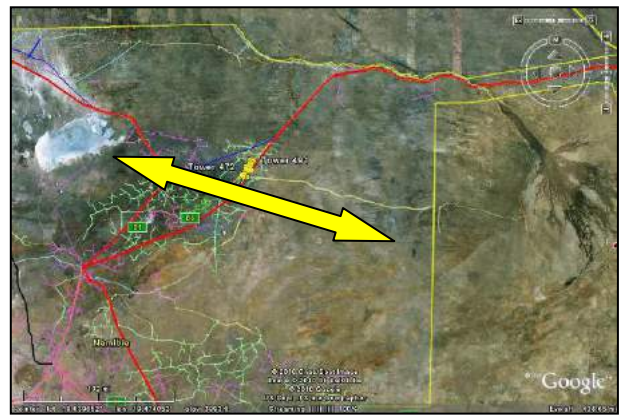
Bird mortalities: None

Bird nests: none

Wildlife (live): Purple Roller (perched on tower), White-backed Vulture (flying), Steenbok, Lilac-breasted Roller (perched on tower), 30± francolins (flew up under line at quarry), 2x kudu, warthog group, Brown Snake-eagle (perched on top of tower), Bateleur (flying), Black-chested Snake-eagle (flying), Southern Pale Chanting Goshawk (perched on tree), 2x Crowned Lapwing (at dry pan), 2x Crowned Lapwing.

Mitigation: Red double spiral bird flight diverters had been attached to both upper lines at 20m intervals, from Tower 457 to 491, before the collision event. However, these visual markers are not effective for warning birds that fly at night.

**General comments:** There appears to be a subtle habitat change from Tower 480, with underlying calcrete and pans area (dry) starting from Tower 482 onwards. If these depressions hold water during the rainy season,



**Top:** Google image of the area investigated, showing site of flamingo collision incident (yellow markers) and flight path (yellow arrow) between Etosha National Park (left) and Bushmanland (based on a Google map generated by Alice Jarvis [EIS]); PTO for more detailed map.

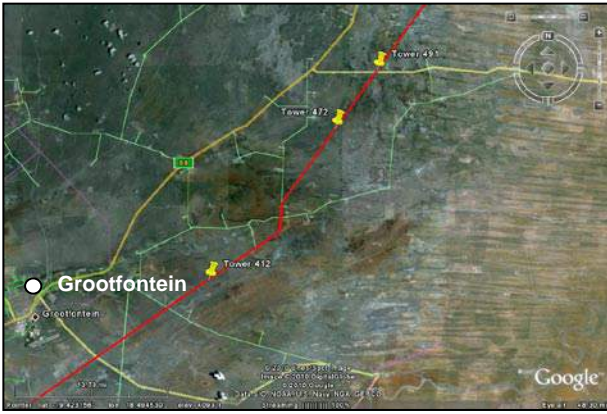
**Centre:** Structure of the 350HVDC line; near-invisible earth wire and optic cable are indicated by arrows (left: marked with red bird flight diverters; and right: marked with red flight diverters as well as red and white balls, standard for road crossings).

**Bottom:** Part of the survey team (L to R): Simon Ngeshya, Johannes Shiimi and Mike Scott (*photos Ann Scott*).

they could provide possible roosting sites that could be attractive to migratory flamingos. If so, it is particularly important to mark and patrol the lines in these areas regularly.

### Recommendations

The mortality of 20 flamingos is a cause for concern. As scavengers may have removed whole carcasses, this figure is considered to represent a minimum number of collisions. Both species are listed in the Red Data book;



Detailed Google image of the area investigated (Tower 412-491), showing site of flamingo collision incident (Tower 472-491); the 350kVDC power line is indicated in red; roads are yellow; and other colours represent different power lines (based on a Google map generated by Alice Jarvis [EIS]).

Greater Flamingos and Lesser Flamingos are both classed as *Vulnerable*, while the latter species is also regarded as *Globally Vulnerable*. As predicted, the new 350kVDC line spans what appears to be a migratory route for these birds between Etosha and Tsumkwe. As the line has been recently commissioned, further events may be possible. If one were to multiply these minimum figures by the length of the line (and other similar lines) and per month/year, the result could be a significant off-take from the flamingo populations. The above findings would justify a much expanded monitoring survey in order to obtain some idea of the greater impact through large sample sizes, as well as any geographic trends. The recommendations below should therefore be considered as extremely urgent.

### 1. Assessment of the extent and areas of impact

- If possible, survey the whole of the 55 km area beneath the 350kVDC line, that has been identified as a speculated flight path for flamingos between Etosha and Tsumkwe, in late November/early December each year (as the above collision event took place in October/ November) and possibly also during the dry season, using a standardized form; based on the findings, make an assessment of the sections where further mitigation is a priority. Given the constraints on NamPower resources during the rainy season, consider supplementary counts using trained volunteers.
- Follow up this pilot investigation with a further expanded survey of the line.

### 2. Mitigation

- Investigate further mitigation in problem areas, as soon as sufficient information is available. The Mace Bird Lite and blinking solar powered aviation lights attached to the earthwires could be tested on an experimental basis. Auditory/ultra-sonic warning devices should also be investigated.

### 3. Monitoring

- Include ongoing monitoring during regular NamPower activities, to determine:
  - Effectiveness of mitigation measures
  - Any further problem areas
- If possible, please obtain photographic records of carcasses.

### 4. Awareness

- Continue to promote awareness about the problem and reporting method to NamPower staff and other stakeholders, especially the farming community. In particular, contact the relevant landowners on the 55 km flight path (farms 1266, 918, 266, 267, 911, 897, 898, 899 Ptn 1, 899 and 900).

We thank Johannes Shiimi and Simon Ngesheya for their willing assistance in the field, Danie Louw and Hendrik Espag for facilitating the survey and Pierre van Niekerk for comments on mitigation.

## POLYTECHNIC STUDENT MONITORING & INVESTIGATION PROJECTS

### Interim report on the monitoring and investigation of 220 kV line, under NamPower/NNF Strategic Partnership

**Phineous S Siseho**, Duty station: Namibia Animal Rehabilitation Research Educational Centre (NARREC)

I am hereby informing you that I have started with my monitoring project on 220 kv power line running from Ongos through Monte Christo north and Monte Christo south. I started my monitoring on the 29<sup>th</sup> of March 2010. I am working on two different power lines, self-supporting structure and the guarded structure running along side each other from the south of Ongos to the north of Monte Christo.

The monitoring is going well and I have went through an orientation and I have been given a permit by one of NamPower staff Mr Christo Greyling to be on NamPower servitudes and letters to request permission from farm owners have been sent.

The only problem we're facing is bush encroachment beneath the power lines, which makes it difficult to walk through all the sides.

#### Results in two-month period (March – April 2010)

Coordinates: 22 21 08.9S / 016 58 56.1E

Findings: We found a **nest** on the eastern arm of the self-supporting structure at Monte Christo North. The nest is poorly constructed with sticks.

Coordinates: 22 25 09.6 S / 016 58 56.1E

Findings: A carcass of a **Lesser Grey Shrike** was found beneath the self-supporting structure at Monte Christo south.

Coordinates: 22 27 28.2S / 017 00 12.8E

Findings: We found a wing of a **European Bee-eater** with ribs attached to it beneath the guarded structure at Ongos.

Coordinates: 22 25 38.7S / 016 59 43.9

Findings: We found a live **Red-backed Shrike** beneath the self-supporting structure at Ongos. It had a wing problem so it could not fly.

### The monitoring and investigation of the 66 kV power line

**Wilson M Muyenga**, Duty station: Namibia Animal Rehabilitation Research Educational Centre (NARREC)



I hereby like to inform you that I have started with the monitoring of this power line on the 29<sup>th</sup> of March 2010. We underwent a power line orientation given by NamPower chief technician office Mr Christo Greyling. We were given keys to the gates of farms where there is a NamPower servitude passing through it and a permit to walk under such servitudes.

So far the monitoring is going well but we did not find anything yet but we might as days go. We are just experiencing some difficulties like dense tall grasses at some points under the servitude. This makes it difficult to walk, see or spot things that might be on the ground, we use sticks to open up the way as we walk through but this is not 100% that we see everywhere. I am monitoring the 66 kV line which starts just from Van Eck Power Station running north of the station towards Okahandja and I am ending just on the fence where the power line enters Brakwater recreation park.

## MORE WILDLIFE/POWER LINE INCIDENT REPORTS



### Genet (musseljatkat) I

**AC van Zyl** email AC.Van.Zyl@nampower.com.na  
21/2/10: Electrocuting/mortality pole/tower Smuts T-off on farm Ai-Ais at Pretorius Retic. – Leonardville. Genet climbed on cross-arm and made contact. White phase carrier broken (see photos above).

### Genet (musseljatkat) II

**AC van Zyl** (see above)  
21/2/10: Electrocuting/mortality pole/tower Kowissiekolk on Nossob Retic. TRFR D.O.F. – red phase. Two genets climbed on cross arm and made contact (no photo).

### Bird

**AC van Zyl** (see above)  
22/2/10: Electrocuting/mortality transformer Farm Galton. Instal. 36 Pretorius Retic. – Leonardville Bird made a short on landing on TRFR structure. White Phase fuse blown (no photo).

### Pollution by vultures

**Wicus Meyer** email Wicus.Meyer@nampower.com.na &  
**Karl-Heinz Wagner** email Karl-Heinz.Wagner@nampower.com.na

9/4/10: Please notice the pollution by streamers from vultures on the Auas - Omaere 132KV line not far from Auas S/S (see next column, photo on left). We could not trace any flashovers yet. It also seems that some of the stuff does get washed down during the rainy season but I'm still concerned that the build-up might progress. We will monitor the spot periodically. I would like to recommend that we order bird guards for these towers if



available (alternatively improvise ourselves). I would appreciate it if Pierre can maybe find out for us and if such guards are available and to order a few together with the new replacement towers. Rehabilitation and stabilising to the open foundation was done.

**Chris van Rooyen** email vanrooyen.chris@gmail.com

13/4/10: An option might be to attach a splatter guard at the pole top (see photo, above right). The product is made by Tyco. On the other hand, the anti-pollution qualities of the composite insulators might be so good that the flashovers might not happen?

### Kameelperdbul (giraffe bull)

**AC van Zyl** email AC.Van.Zyl@nampower.com.na  
23/4/10: Aranos Distrik – Monika-Oos (East) KVB. 7583

Omstreeks 16h00 Vrydag 23/04/2010 het Mnr. Schalk de Waal my telefonies gekontak en rapporteer dat sy kameelperdbul deur NamPower kraglyn gedood is. Hy het my gevra om ook uit te gaan na Monika-Oos sodat ek myself kan verwittig en ons die insident kon bespreek.



Giraffe mortality on the Monika-Oos power line, Aranos (photos AC van Zyl)

Ek het Mnr. A. Reyneke gekontak, aangesien hy uit was het ek dit aan Mnr. H. Peens rapporteer (wat dit weer aan hom oorgedra het). Daarna het ek Mnr. P.T. Immanuel gekontak, maar ek kon slegs 'n boodskap op sy selfoon los aangesien hy nie beskikbaar was nie.

Ons het Monika-Oos besoek, waar ek foto's geneem het en mates van die kameelperd asook van kraglyn en T-Off waar insident plaasgevind het. Mnr. Schalk de Waal was self teenwoordig.

Kameelperd vanaf hoof, in reguitlyn tot op sy horing was hy 4800mm en die kop was 900mm (totaal 5700mm). Nou moet die tong nog bykom wat tot 300mm kan wees.

Kraglyn vanaf grondvlak tot die laagste punt van 'jumper' was R- Fase 5665mm en B-Fase 5666 onderskeidelik. Die Trfr-punt se mate is 6100mm.

Volgens die merke moes die kameelperd reg onder die R-fase 'jumper' gestaan het. Hy moes kontak gemaak het met sy tong/kop en toe neergeslaan het volgens die merke. Geen ander diere of spore was sigbaar op dieselfde plek nie.

Volgens Mnr. de Waal was dit een van sy trofeeulle. Daar is nog kameelperde in die wildkamp. Volgens my kennis is daar nog drie trofeeulle. Mnr. de Waal het ook aangedui dat hy by die bou van die lyn versoek het dat dit nie deur die wildkamp moes loop nie, maar onderhandel is daaroor met versekering dat lyn se hoogte aangepas sou word.

Ek het Mnr. de Waal ingelig om sy eis op skrif te stel en aan my te stuur, sodat die saak aandag kan geniet. Ek wil vra dat ons so spoedig moontlik sal op tree en alle insette en ondersteuning sal waardeer word.

## BUSTARD NEWS

### Status of Ludwig's Bustard upgraded to **ENDANGERED**

**2010 IUCN Red List Category** (as evaluated by BirdLife International - the official Red List Authority for birds for IUCN): **Endangered**

**Recommended citation** BirdLife International (2010) Species factsheet: *Neotis ludwigii*. Downloaded from <http://www.birdlife.org> on 2/7/2010

**Justification** This species has been uplisted to Endangered as recent research has suggested that the population has undergone a very rapid population decline due to collisions with power lines, a trend which is set to continue into the future as successful mitigation measures are yet to be implemented. Research is urgently required to assess the current population size and identify ways to effectively mitigate collisions with power lines.

Population estimate: 56,000-81,000

Population trend: decreasing

Range estimate (breeding/resident): 342,000 km<sup>2</sup>

**Range & population** *Neotis ludwigii* has a large range centred on the dry biomes of the Karoo and Namib in southern Africa, being found in the extreme south-west of

Angola, western Namibia and in much of South Africa<sup>2,3</sup>. The global population has been previously estimated at 56,000 to 81,000 individuals<sup>1</sup>. However, this estimate is now approximately 20 years old, and in this time the species is suspected to have declined rapidly as a result of collisions with overhead power lines, for which there is currently no effective mitigation<sup>4,5</sup>.

**Ecology:** This species inhabits open lowland and upland plains with grass and light thornbush, sandy open shrub veld and semi-desert in the arid and semi-arid Namib and Karoo biomes. The breeding season spans from August to December, nesting on bare ground with a clutch of 2-3 eggs<sup>2,5</sup>. Chick-rearing is conducted solely by females<sup>5</sup>. Its diet includes invertebrates, some small vertebrates and vegetable matter, including the berries of *Lycium oxycladum*. There is strong evidence that the species undergoes movement with rains in pursuit of *Orthoptera* hatchlings, though vegetation remains important. Flocks of up to 70 individuals have been recorded<sup>2</sup>.

**Threats** Snares set for mammals on farms have been identified as a threat<sup>2</sup>, however the major threat for the species is collisions with overhead power lines<sup>2,4,5,6,7</sup>. Collision rates on high voltage transmission lines in the De Aar area of the Karoo may exceed one Ludwig's Bustard per kilometre per year<sup>4,8</sup>, and a recent survey found preliminary evidence for this level of mortality on transmission lines across the Karoo, indicating that the problem is widespread<sup>7</sup>. Given that the extent of power lines in the Karoo is vast and expanding<sup>5,10</sup>, with already over 25,000 km of lines in place, it is estimated that such collisions alone are already enough to cause a rapid decline in the population and may increase in the future<sup>7</sup>. This threat may be exacerbated as males are more prone to power line collisions than females<sup>7</sup>, which may lead to a reduced effective population size.

**Conservation measures underway** Mitigation measures for power line collisions consisting of visual deterrents have been implemented in South Africa by energy supplier Eskom, but have as of yet proved unsuccessful. There is however anecdotal evidence that there has been some success with new variations of mitigation measures at certain sites<sup>5</sup>. In Namibia, NamPower are also working to implement effective mitigation measures<sup>9</sup>.

**Conservation measures proposed** Obtain an updated population estimate<sup>5</sup> Measure bustard collision rates across the whole range of Karoo habitats<sup>5</sup>. Improve knowledge of annual movements<sup>5</sup>. Improve knowledge of how the species visually perceives power lines<sup>5</sup>.

**References** 1. Allan (1994). 2. del Hoyo *et al.* (1996). 3. Anderson (2000). 4. Anderson (2002). 5. Jenkins and Smallie (2009). 6. Jenkins (2009). 7. Jenkins *et al. in litt.* (2009). 8. Jenkins *et al.* (2009). 9. A. Scott and M. Scott *in litt.* (2010). 10. J. Smallie *in litt.* (2010).

### **Bustard Beat 1 - newsletter**

**Mark D. Anderson** Executive Director: BirdLife South Africa  
E-mail: [director@birdlife.org.za](mailto:director@birdlife.org.za) [www.birdlife.org.za](http://www.birdlife.org.za)

For those who're interested, you can access Bustard Beat (BirdLife South Africa's Bustard Working Group's e-newsletter) on:

[http://www.birdlife.org.za/page/5561/bustard\\_working\\_group](http://www.birdlife.org.za/page/5561/bustard_working_group)

Two issues will be produced per year, kindly edited by David Allan (South Africa's bustard/korhaan guru).