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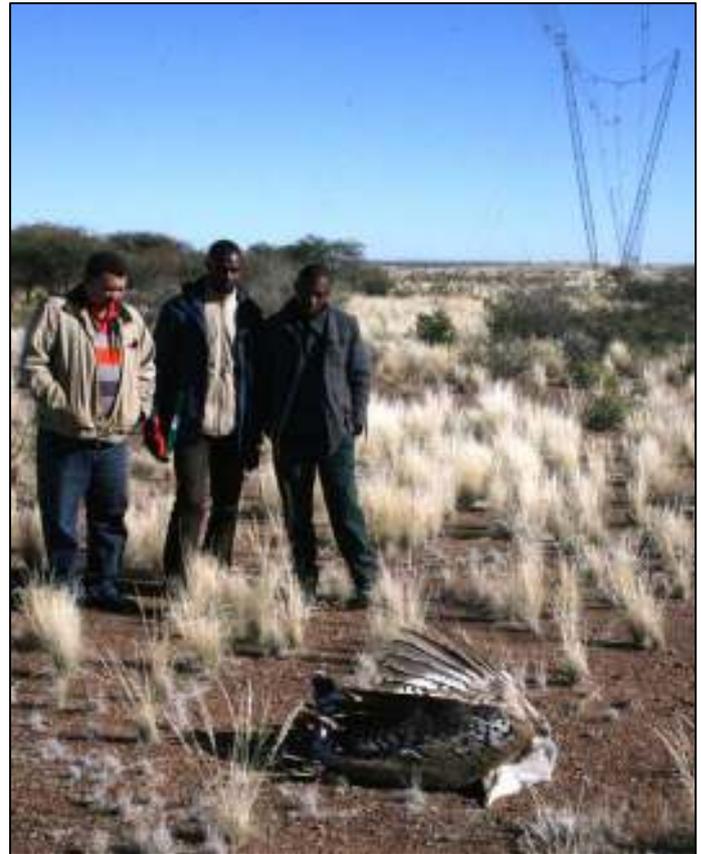
PROGRESS WITH PROJECTS

NamPower continues to demonstrate its commitment to addressing the impacts of power line structures on wildlife in Namibia, and *vice versa*.

Our Environmental Information Service (EIS) is now home to almost 7 000 data sets/records. We are proud to announce that an exciting new carnivore atlas and mammal atlas are now up and running, with an online data entry system. This means that anyone can now enter records of mammal sightings, spoor, camera trap and other photographs and/or telemetry records.

Power line surveys are being stepped up, and survey techniques refined. A special thank you to all those who are contributing to meet the objectives of the Partnership in this way. What is emerging is that, where feasible, surveys on foot will produce the most comprehensive results. As it is not practical to cover large areas in this way, however, representative sections of power line are being identified for repeat surveys, at least once each during the wet and dry season each year. These data will enable us eventually to determine the impacts of mortalities on the bird populations involved.

The bustard project has completed two surveys of 100 km each of four different types of power line in July and October 2012. The provisional results are cause for concern, with counts of 70 bird mortalities on the first survey, and 87 on the second. Although a wide spread of species is affected (bustards, korhaans, flamingos, storks, vultures and other raptors), bustards are taking the heaviest toll. There is no clear evidence that any one kind of line is more likely to cause collisions than another. Bustard collisions seem to happen wherever bustards and power lines share the same area. Well done to John Pallett and his team with obtaining these hard-earned data!



L to R: Pieter Cloete, Allen Kafene and Jasson Iyambo investigate a Kori Bustard collision on the 400 kV Kokerboom-Rock power line near Keetmanshoop (*photo John Pallett*).

NamPower's experiments with "dummy poles" (systappale) to discourage Sociable Weavers from nesting on power line structures continue to meet with success, provided that the correct steps are applied, with sufficient perseverance!

Our plans for tracking key bird species in order to determine their flight paths are progressing well. Four satellite tracking devices (GPS PTTs) have been delivered, and plans are afoot to capture three flamingos and one Blue Crane.

Reports of bird collisions on wind farms elsewhere in the world are mounting, and sound a timeous warning for us to prepare to address these threats effectively as this source of energy becomes tapped in Namibia.

Records of power line incidents continue to flow in, and we thank all those who take the time to submit this invaluable information for our database. We are in the process of collating all the records, and hope to bring you a summary analysis of the proportions of species and the power line structures that are involved in due course.

Search The EIS Upload Keywords Sponsors Forum Atlas Contact us What's new?



What's new?

Welcome to our new registered EIS users

Since the last EIS newsletter many people have registered on the website. Thanks, and welcome. Being registered allows us to keep you updated on what's new and allows you to participate in the new online atlasing projects.

Biodiversity monitoring

The **carnivore atlas** and the **mammal atlas** are now up and running. In collaboration with the members of the Large Carnivore Management Association of Namibia (LCMAN) and the Namibian Environment & Wildlife Society (NEWS) we have set up a system for entering records of Namibia's carnivores and mammals, large and small. This will allow us to get an updated picture of the distribution of these species.

Data entry is through an easy online form. Records can be sightings, spoor, photos from camera traps, telemetry records etc and can be entered with or without supporting photos. If you upload a photo and your camera records date, time and/or GPS coordinates, this info is automatically extracted from your photo which reduces the amount of information you have to type in. Historical and current records can be entered. The geographic location of your record can be entered in several ways: GPS coordinates; monad (1 minute x 1 minute grid, as used by SABAP 2); pentad (5x5 minute grid); or quarter-degree square (QDS). If you aren't sure of the identification of the species you can use the reference photos to assist you or flag the record to be assessed by an expert. You can edit your own records and you can view all records on a map as soon as you have entered them.

Check it out at <http://www.the-eis.com/atlas.php>



*** More atlases coming soon: alien invasive plants, rainfall ***

Passwords

Remember, you need to be registered to submit atlas data. If you have registered but have forgotten your password you can use the new "Forgot password" link which appear on the log in page. Just click on this and enter your email and a new password will be sent to you instantly.

Related results

If you use the EIS to find information, you have probably noticed the 'More info and related results' link that appears under each search result:



Clicking on this link will show you more information about the result, such as an abstract and notes. Scroll down and you will see 50 more results which are on the same topic and have many of the same keywords. This is a great way to find articles and new sources of information that you were not aware of.

Posters

An A2 size poster describing the EIS and how to use it was produced and hundreds of copies were distributed to libraries and other institutions in Namibia, including schools and tertiary education institutions. If you did not receive one, or would like additional copies, please contact us; there are a few left.

'Grey' literature

We are fortunate to have the services of Ritji Kahuure who is currently hard at work scanning documents and uploading them to the EIS to make them freely available. Many of these are unpublished documents and reports which are not available elsewhere but are highly relevant to Namibia, its development and environment. They will be a valuable addition to the information base of the EIS. You can see what has been added recently by clicking on the 'What's new?' button at the top of the page. If you have documents which should be made available, please contact us so we can arrange to have them scanned and returned to you.

We are also in the process of adding a lot of literature that has been collated by DRFN through their DLIB project. We appreciate the support and collaboration of DRFN.

And finally...

THANK YOU to Internet Technologies Namibia for their generous sponsorship of the hosting of the EIS for 3 years. Thanks also to Sonja Schubert who keeps the EIS up to date, sourcing, adding and keywording new information as it becomes available.

Number of records in the EIS: Almost 7,000

POWER LINE SURVEYS IN SOUTHERN NAMIBIA

John Pallett, email john.pallett@saiea.com



John Pallett and his field assistant, Allen Kafene examine one of 87 mortalities found on the October 2012 survey.

We switched off the "wifi", shut the door on the consulting office and pointed the car south. A sturdy Hilux was our office for two weeks, Karas soil and stones our mattresses, "pap" and bully beef our sustenance. We headed out to solve a question NamPower urgently needs to answer: how many birds collide against the high tension wires that transmit electricity around our country? The only way to answer the question is to do repeat counts of mortalities on the same stretches of power line over a long period, to build up a dataset that will represent the wider situation. The problem has been most reported in the south, so this is the focal area for our field work.

On a typical survey morning, tents are folded, kit is stowed and the vehicle and GPS are fired up shortly after sunrise. The Hilux rattles and grinds over the rocky terrain, following a small NamPower track which ideally runs directly under the power line. Often we have to "bundubash" when the track is unfortunately 20 or 30 m to the side of the line, beyond the zone where birds would likely fall after striking a line. Allen Kafene and I settle in to scanning mode, eyes swinging forward and to the side in search of a few loose feathers or old bones that will indicate the remains of a dead bird. Carcasses older than a few weeks are usually weathered and very scattered, and may comprise only a few large primary feathers and leg bones. It is very unusual to find a whole intact bird, as nightly scavengers get to work quickly and a large bird is reduced to feathers and bones in two to three days. The wind quickly spreads these remnants around. In the Sperrgebiet we suspect that whole birds are carried away by brown hyenas, leaving literally only a few down feathers caught in the stubby grass. On farmland, especially in the south where small predators are heavily persecuted, the breakdown of a carcass is usually slower and less thorough, making it easier to find a carcass from

the spread of feathers that remain. Whatever the case, we must be alert for any tell-tale signs as we progress.

Aha, there's a feather caught in a "driedoring". We stop and look more closely: yes, another few that we had missed, then a couple of bones. We try to locate where the bird had lain - usually indicated by many feathers together, some matted on the ground. The patterns on the large feathers and buff colouring of a few small ones tell us this was a Ludwig's Bustard. A leg bone is found - its size may tell us what sex we're dealing with. Like forensic detectives we collect and record all the evidence from the site in the hope that, collectively, the information will build up a picture of who, where, how many, and under what circumstances, these mortalities occur.

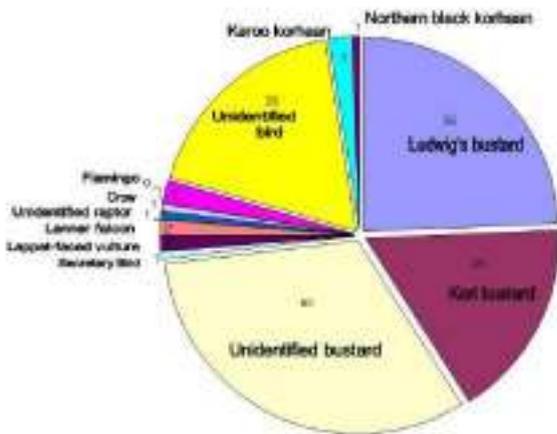
So far we have conducted surveys of about 100 kms of each of four different types of power line in July and October 2012, and will continue to run surveys every three months to get one full year of data.

Early results are very sobering. The body counts were 70 birds on the first survey, 87 on the second. A wide spread of species is affected: bustards, korhaans, flamingos, storks, vultures and other raptors. Bustards take the heaviest toll: Kori and Ludwig's make up more than 75% of the total collision fatalities so far. Adjusting for the fact



Live Ludwig's Bustards were observed foraging in this Sperrgebiet survey area; sure enough, under the line were a few fresh carcasses (photo John Pallett).

Total collision mortalities July + October 2012 surveys



Pie chart showing total numbers of bird mortalities from July and October 2012 surveys.

that we miss a number of carcasses (from being hidden in the vegetation, or carried away by scavengers, or due to observer fatigue), these results are similar to the findings of work in South Africa, where researchers estimate that, on average, one bustard dies per kilometre of power line per year in their prime range. That adds up to a worrying loss of bustards, an annual offtake that is almost certainly unsustainable.

Our surveys are conducted with financial support from the NamPower Strategic Partnership (funded by the European Investment Bank), and with much on-the-ground assistance from NamPower staff in Keetmanshoop. We thank them for their contributions, and hope that solutions to this very serious problem will become apparent as the project progresses.

The MSc project, "Collisions of large birds with power lines in Namibia - significance and solutions", led by John Pallett, will run to end-2014. The second half of the project will include trials with various mitigation devices, to seek a way to reduce bird collisions on power lines.



Not for the faint-hearted: a large Cape cobra makes itself at home under the bonnet of the bakkie (photo John Pallett).



"Busted". Although large and seemingly visible, the 400 kV lines pose an array of hazards to a flying Kori Bustard, which this bird either did not see or could not manoeuvre around in time (photo John Pallett)

"Bustards have quite large 'blind spots'. If these birds are flying without paying much attention to what lies ahead of them, focussing instead on looking for forage areas or other birds on the ground, they may not be able to see the power lines at all. This probably has implications for the type of marking devices that might be effective for these species" (Jess Shaw).

FOR MORE INFORMATION SEE:

Bird collisions with power lines: *Failing to see the way ahead?*
G.R. Martin & J.M. Shaw 2010. *Biological Conservation* 143(11): 2695-2702. Available online.

< http://news.bbc.co.uk/go/em/fr/-/earth/hi/earth_news/newsid_9140000/9140040.stm >

NAGEMAAKTE PALE/ SYSTAPPALE/ SKYNPALE/ FOPPALE ("DUMMY POLES")

AC van Zyl, epos AC.Van.Zyl@nampower.com.na



Die suksesvolle aanwending van systappale om neste van Versamelvoëls te skuif (foto AC van Zyl).

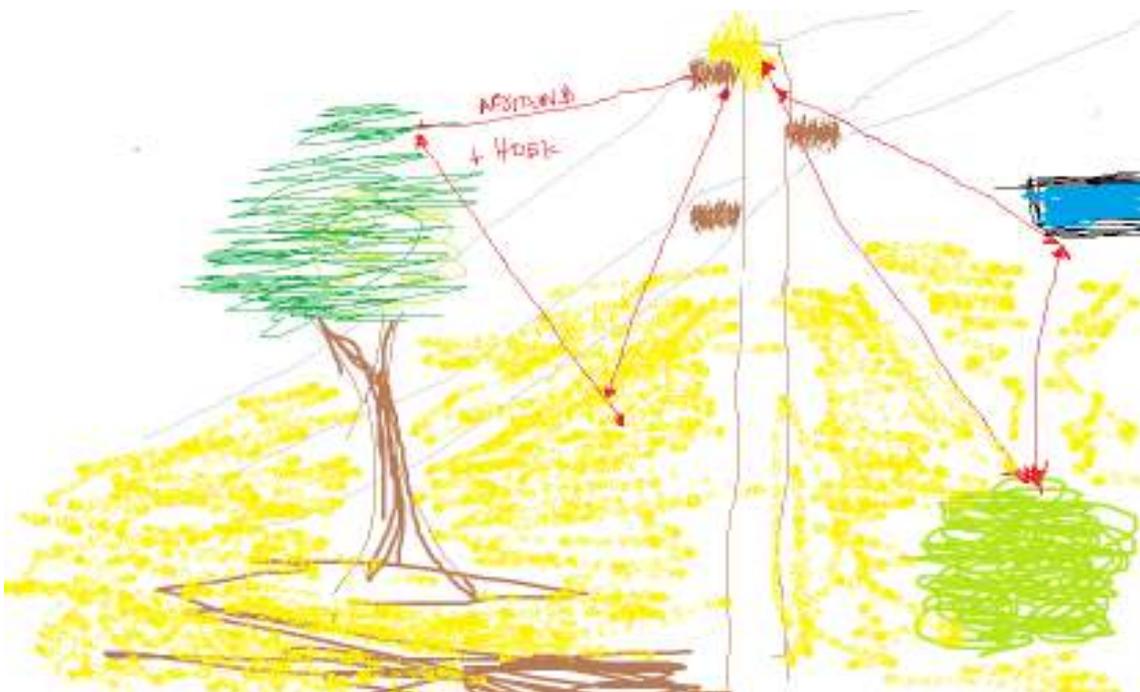
Een van ons kliënte se antwoord was: "Dit werk definitief. Die onderbrekings het baie verbeter! Groot is die verligting, wanneer die pale suksesvol is en werk – en hulle werk goed!"

Ons het die bewyse daarvan. Jy kry ook net niks as jy nie self iets doen nie. Ek praat van systappale (Engels "dummy poles") soos in rugby, om die voëls te verlei en weg van die lyn te neem.

Ons ondervinding is in meeste gevalle dat die voëls in gunstige areas vestig, d.w.s. naby water, weivelde waar genoeg kos is en natuurlik min gevaar (steurnisse), asook genoeg boumateriaal vir neste is.

Hierdie systappale moet met groot sorg gedoen word; aspekte om in ag te neem (kyk diagram hieronder) is:

1. Noord-aansig: dit bepaal die aanslag van weer/temperature, bv. reën, **wind**, son ten opsigte van die nes (natuurlike toestande)
2. SON: dit is 'n temperatuurreëling
3. Wind: nes sal so geplaas word dat toe kant van nes dit teen die elemente kan beskerm
4. Water: afstand en rigting
5. Voedingsarea: beskikbaarheid en voorkeur/broeityd
6. Boumateriaal: beskikbaarheid en afstand
7. Strukture moet stewig wees: voëls aanvaar dit makliker en die gewig van neste moet gedra word wat vinnig kan toeneem. Neste raak gou groot in volume en het groot windweerstand.



Aspekte om in ag te neem met die beplanning van die verskuiwing van 'n Versamelvoëlne (diagram AC van Zyl).

Wanneer 'n paal opgesit word, gaan kyk eers na die area, neem bogenoemde punte in ag en kyk waar sit die voëls gewoonlik – op 'n bos, boom, windpomp of enige ander struktuur naby die bestaande nes. Bepaal 'n posisie met alles in ag geneem so neutral moontlik. Sit ook bestaande nes of deel daarvan op jou systap paal, dan trek die voëls makliker.

Verwyder dan vir volgende periode alle neste (tot laaste grassie) van die ongewenste plekke so gereëld as moontlik.

Wanneer neste groot raak, plant vroegtydig nog pale by, anders sal hulle terug trek na die eerste posisie of op die lyn self.

Skep 'n plek waar hulle kan sit en plek waar hulle maklik kan begin bou, bv. plekke waar hulle maklik gras en stokkies kan insteek wat daar bly en so die bouproses kan bespoedig.

Met seisoensverandering raak die voëls gretig om te bou om te kan broei. Nou sal hulle maklik 'n systappaal aanvaar, net soos wanneer dit weer koud raak ook.

Ons gebruik ook kombinasies, bv. om plastiekbedekking ("sleeving") oor "jumpers" te plaas en dan die systappale langsaan. Dit verleng die periode wat jy die nes moet afhaal sou hulle op die lyn bou, maar gewoonlik trek hulle dan.

Mandjies kan ook aangewend word op lynpale self (kyk foto regs). Plaas dit net op veilige afstand vanaf geleiers.

Vir September 2012 het ons net een "advance" op die "recloser" gehad, vanwaar ons begin het met 11 "advances" per week – wat baie goed is.



Versamelvoëls bou graag hul neste op kraglynstrukture en veroorsaak sodoende kortsluitings (foto's AC van Zyl).

Gelukkig is daar raad – indien die regte stappe gedoen word, en 'n mens met pogings volhou! (foto's AC van Zyl).

GOOD PROGRESS WITH THE "FLIGHT PATHS FOR WETLAND FLAGSHIPS" PROJECT

Ann & Mike Scott, email ecoserve@iway.na

An ambitious programme has been launched by the NamPower/NNF Strategic Partnership in collaboration with the Namibia Crane and Wetlands Working Group, with co-funding from the Environmental Investment Fund (EIF) of Namibia and the Nedbank Go Green Fund and supported by the Ministry of Environment and Tourism (see issue No. 7 & 8 of this newsletter for background). The overall **goal** of the project is to track the flight paths of flagship wetland bird species in order to address major conservation issues outside protected areas.

The **objectives** are to:

1. Track the flight paths of flagship wetland bird species, namely Lesser Flamingos, Greater Flamingos and Blue Cranes;
2. Investigate the seasonal and local abundance of flamingos, and continue to monitor numbers and breeding success of Blue Cranes;
3. Investigate the mitigation of power lines on identified flamingo flight paths; and
4. Publicise the results to promote awareness of the plight of these flagship wetland bird species.

The EIF funding was transferred in August 2012. Since then, considerable progress has been made.

Purchase of tracking devices

Our four satellite tracking devices (GPS PTTs) arrived in Windhoek on 5 December 2012. The purchase of these specialised devices and the associated Argos tracking represents almost half the funds requested for this project, and the process has entailed ongoing collaboration with experts in order to determine the best options for the devices. The advisors consulted include North Star Satellite Tracking (Blake Henke), the Namibia Crane and Wetlands Working Group, the African Crane Conservation Programme of the ICF/EWT Partnership (Kerryn Morrison), the International Crane Foundation (Anne Lacy), the IUCN Flamingo Specialist Group and a flamingo researcher in Botswana (Dr Graham McCullogh).



Example of a 65g solar-charged GPS PTT that is fitted to the back of a flamingo by means of a teflon harness.



Plans are afoot to capture two Greater Flamingo (larger birds on right) and possibly one Lesser Flamingo (darker birds on left) to fit satellite tracking devices in order to track their flight paths (photo Ann Scott).

A range of three kinds of devices was finally selected for the flamingos: a solar-charged GPS PTT of 65-70g (suitable for Greater Flamingo), a solar-charged GPS PTT of 40g (suitable for Lesser or Greater Flamingo) and a battery-powered GPS PTT of 65-70g (as a back-up in case solar-charged devices prove to be less effective; suitable for Greater Flamingo).

On the advice of North Star, a leg-mounted solar-charged GPS PTT was selected for the Blue Crane. These devices have been used with success in the US and SA, and would have a longer life than a battery-powered device. A special leg band had to be ordered from Haggie Engraving, in order to fit the device. Dave Brandt, a wildlife biologist of the Northern Prairie Wildlife Research Center, United States Geological Survey has already fitted 800 such devices to cranes, and has provided invaluable expertise on the technicalities.

Satellite tracking by Argos

Various options were investigated for optimum satellite tracking duty cycles, in collaboration with Argos in France, Dr Graham McCullogh in Botswana and Dr John Mendelsohn (our local specialist). In the case of the flamingos, more intensive tracking is needed during migration periods (November-January and April-July), with a lower tracking cycle during the remainder of the time. This results in a fairly complicated tracking schedule of four "seasons", and includes tracking the altitude (essential in terms of determining the risk in terms of power line collisions). Although not dependent on the sun for power, the battery-powered device has relatively less capacity and therefore operates at a lower cycle. For the crane, where ongoing information is needed on movements, one GPS fix will be obtained every 7 hours. An agreement has now been entered into with Argos for the tracking of the four devices over the next three years.

Next steps

We are hoping to attempt a flamingo capture early in the new year, and a crane capture in April 2012. We will be

assisted by experts Wilferd Versfeld and Holger Kolberg from the MET and the Namibia Crane Working Group, and Mark Boorman who is busy investigating possible capture sites and experimenting with appropriate capture methods.

Our sincere thanks to all our donors and supporters for their invaluable financial and other contributions to these projects!



NamPower/NNF Strategic Partnership



BIRD COLLISIONS AT WIND FARMS IN WEST VIRGINIA, US

Darcy Ogada [africanraptors@yahoo.com]

<http://www.abcbirds.org/newsandreports/releases/111028.html>

I share this story about wind farm fatalities as it highlights some important causes behind them. As the continent is changing rapidly with regard to wind generated power it's probably good that we're all aware of these issues despite all the other conservation concerns crowding our plates.

Massive Bird Kill at West Virginia Wind Farm Highlights National Issue

Bird Group Says Wind Power Can still be Green, but only if Bird Smart Principles Are Implemented

MEDIA RELEASE, contact: Robert Johns, 202-234-7181 ext.210, email bjohns@abcbirds.org

(Washington, D.C., October 28 2011) With the deaths of nearly 500 birds at the Laurel Mountain wind facility earlier this month, three of the four wind farms operating in West Virginia have now experienced large bird fatality events, according to American Bird Conservancy (ABC)*, the nation's leading bird conservation organization.

"Wind energy has the potential to be a green energy source, but the industry still needs to embrace simple, bird-smart principles that would dramatically reduce incidents across the country, such as those that have occurred in West Virginia," said Kelly Fuller, ABC's Wind Campaign Coordinator.

There were three critical circumstances that tragically aligned in each of the three West Virginia events to kill these birds. **Each occurred during bird migration season, during low visibility weather conditions, and with the addition of a deadly triggering element – an artificial light source. Steady-burning lights have been shown to attract and disorient birds, particularly night-migrating songbirds that navigate by starlight, and especially during nights where visibility is low such as in fog or inclement weather.** Circling birds collide with structures or each other, or drop to the ground from exhaustion.

At the Laurel Mountain facility in the Allegheny Mountains, almost 500 birds were reportedly killed after lights were left on at an electrical substation associated with the wind project. The deaths are said to have occurred not from collisions with the wind turbines themselves, but from a combination of collisions with the substation and apparent exhaustion as birds caught in the light's glare circled in mass confusion.

On the evening of September 24 this year at the Mount Storm facility in the Allegheny Mountains, 59 birds and two bats were killed. Thirty of the dead birds were found near a single wind turbine that was reported to have had internal lighting left on overnight. This incident stands in stark contrast to industry assertions that just two birds per year are killed on average by each turbine. Data from Altamont Pass, California wind farms – the most studied in the nation – suggest that over 2,000 Golden Eagles alone have been killed there.

On May 23, 2003 at the Mountaineer wind farm in the Allegheny Mountains, at least 33 birds were killed. Some of the deaths were attributed to collisions with wind turbines and some to collisions with a substation.

"The good news is that it shouldn't be hard to make changes that will keep these sorts of unnecessary deaths from happening again, but it's disturbing that they happened at all. It has long been known that many birds navigate by the stars at night, that they normally fly lower during bad weather conditions, and that artificial light can



Wind turbines (photo Mike Parr).

draw them off course and lead to fatal collision events. That's why minimizing outdoor lighting at wind facilities is a well-known operating standard. And yet lights were left on at these sites resulting in these unfortunate deaths. This reinforces the need to have mandatory federal operational standards as opposed to the optional, voluntary guidelines that are currently under discussion," Fuller said.

A fourth wind farm in West Virginia, the Beech Ridge Wind Energy Project in Greenbrier County, has not experienced large mortality events, likely because it is currently prohibited by a court order from operating during nighttime between April 1 and November 15.

"Some West Virginia conservation groups have suggested that other wind farms in the state should shut down their wind turbines at certain times and seasons to protect birds. Given the recurring bird-kill problems, that idea needs to be seriously considered, at least during migration season on nights where low visibility is predicted. A wind farm in Texas is doing just that, so it is possible," said Fuller.

**The American Bird Conservancy (ABC) is a 501(c)(3) not-for-profit membership organization whose mission is to conserve native birds and their habitats throughout the Americas. ABC acts by safeguarding the rarest species, conserving and restoring habitats, and reducing threats, while building capacity in the bird conservation movement.*

WIND ENERGY, BIRDS AND BATS

<https://www.ewt.org.za/programmes/WEP/avifauna.html>

In March 2009, the National Energy Regulator of South Africa (NERSA) announced the Renewable Energy Feed-in Tariff (REFIT) Guidelines. These guidelines are aimed at creating an enabling environment for the growth of our renewable energy sector. The steps taken towards realising South Africa's vast renewable energy potential are undoubtedly positive in general environmental terms. However, stringent assessment of the impact of renewable energy projects is as important for wind energy as other developments. Renewable energy projects (including wind energy) have the potential to impact negatively on the receiving environment if not properly planned and sited.

The EWT's Wildlife & Energy Programme and BirdLife South Africa are well positioned to drive a response to the above concerns. A number of best practice guidelines and other documents on wind energy, birds and bats can be found at the website above.

MORE SOUTH AFRICAN BIRDS "IN THE RED"

BirdLife South Africa

Johannesburg, 11 June 2012: BirdLife International has announced the 2012 update of the IUCN Red List for birds. This is the first update since the 2008 *Threatened Birds of the World*, a comprehensive assessment of the status of

the world's birds. Of the 10 064 bird species recognised by BirdLife International, the status/categories of 208 have changed. Approximately 13% of the world's birds are now listed as threatened (Critically Endangered, Endangered or Vulnerable) as compared to 12% in 2008. Another 880 (almost 9%) have been classified as Near-Threatened in 2012.

It is concerning that of the 208 category changes in 2012, only two changes were improvements (downlisted); whereas 180 were deteriorations (uplisted). Twenty-five changes resulted from taxonomic revisions and 63 were a result of improved knowledge of the species' status, population numbers or threats faced by the species.

The status of three bird species in South Africa has deteriorated, and they were therefore uplisted.

White-backed Vulture *Gyps africanus*, the most widespread and common vulture in Africa, has been uplisted by two categories: from Near-Threatened to Endangered. The species is currently Near-Threatened in Namibia. It is currently undergoing a rapid decline in population numbers and faces similar threats to all the other African vultures. In East Africa, White-backed Vultures are primarily threatened by poisoning (particularly from the highly toxic pesticide carbofuran); whereas in southern Africa they are utilised for the muti trade (as they are perceived to have medicinal and psychological benefits); and the decline and possible extirpation in West Africa has been attributed to the trade in vulture parts for traditional 'juju' practices. Other threats include the loss or reduced availability of carrion, electrocution by power lines and poisoning.

The other two species that have been uplisted are **Grey Crowned Crane *Balearica regulorum*** and **Crowned Eagle**.

For more information on BirdLife South Africa's threatened species conservation, contact Hanneline Smit conservation@birdlife.org.za.

For more details about the new IUCN Red List, see:

http://www.birdlife.org/action/science/species/global/species_programme/whats_new.html



A large group of White-backed Vultures makes quick work of a zebra carcass in Etosha National Park (photo Ann Scott).

POWER LINE SURVEYS



15 June 2012: Rössing-Khan 220 kV

Survey team: Mike & Ann Scott, Chenault Sabatini, David Natanael
Start & end: From Khan S/S for 15.2 km
Type of incident: Collision on power line
Locality: First 5 km west of Khan S/S
Species: 4x bustards (Ludwig's)



Trekkopje-Wlotzka including Trekkopje Bypass

Survey team: Kaarina Nkandi, Helmut Ochurub, Richard Gurirab
Start & end: 68.5 km, walking 5 spans

5 June 2012:

Type of incident: Collision on power line
Species: 2x Ludwig's Bustard, 1x Namaqua Dove

5 July 2012: No incidents

25 September 2012: No incidents

6 November 2012: No incidents



18 June 2012: Rössing-Walmund 220 + 22 kV Walmund-Kuiseb-Walvis Bay (132 kV)

Survey team: Mike & Ann Scott
Start & end: Swakop River to Walvis Bay – 62 km
Type of incident: Collision on power line
Species: 1x flamingo (bones); 5x bustard (bones);
1x Ludwig's Bustard (fresh)



18 June 2012: Langer Heinrich

Survey team: Karl-Heinz Wagner
 Start & end: 10 km (mostly walking)
 Type of incident: Collision on power line
 Species: 5x bustards (bones only); 1x Ludwig's Bustard (fresh)



1 August 2012: Zambezi-Gerus 350HVDC

Survey team: Hendrik Espag
 Start & end: Whole line
 Type of incident: Collision on power line
 Locality: Kongola village (Tower 1427-1428)
 Species: Bateleur/Berghaan (juvenile)



14 September 2012: Khan-Trekkopje including Trekkopje Bypass

Survey team: Karl-Heinz Wagner, Mike & Ann Scott
 Start & end: 47 km (including 17 km walking)
 Type of incident: Collision on power line
 Species: 11x Ludwig's Bustard; 5x flamingo; 6x korhaan



25 October 2012: Walmund-Van Eck 220 kv

Survey team: Mike & Ann Scott
 Start & end: Intersection Bloedkoppie-Ganab road/ C28 eastwards)12.9 km)
 Type of incident: Collision on power line
 Species: 2x Greater Flamingo, 1x Ludwig's Bustard

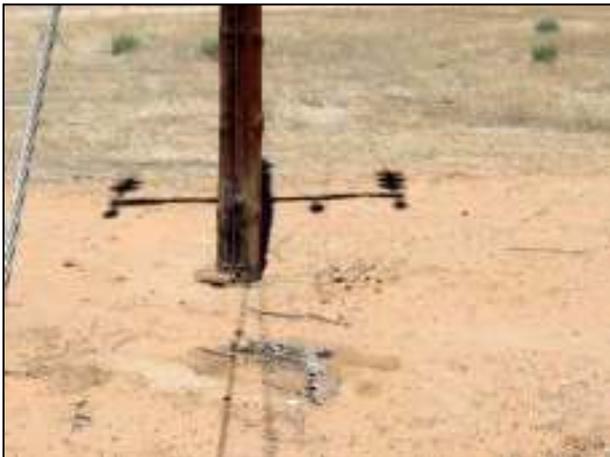
WILDLIFE INCIDENTS ON POWER LINE (AND OTHER) STRUCTURES



2008 - reported by Pieter Cloete
Locality/line: Kiris 33 kV Retics
Type of incident: Collision with power line
Species: Lappet-faced Vulture (juvenile)



31 December 2011 - reported by: AC van Zyl
Locality/line: Aranos-Kalkpan 33 kV Retic
Type of incident: Electrocution on transformer
Species: Southern Pale Chanting Goshawk
Comments: Trying to prey on Sociable Weaver nest?



1 January 2012 - reported by: AC van Zyl
Locality/line: Aranos/Leonardville 33 kV Retic.
Type of incident: Electrocution on pole
Species: Genet



February 2012 - reported by: Sue Roux
Locality/line: 30 km west of Okahandja on B2 road
Type of incident: Collision? on telephone pole
Species: Kite (*Milvus* sp.)



3 February 2012 - reported by: AC van Zyl
Locality/line: Aranos-Aminuis 33 kV Retic.
Type of incident: Collision on power line
Species: Kori Bustard



29 May 2012 - reported by: AC van Zyl
Locality/line: Aranos-Kalkpan 33 kV Retic.
Type of incident: Electrocution on transformer
Species: Giant Eagle-Owl



11 June 2012 - reported by: Pieter Cloete
 Locality/line: Kokerboom S/S – Obib 400 kV line
 Type of incident: Collision on power line
 Species: Ludwig's Bustard



10 August 2012 - reported by: Darius Hangero
 Locality/line: Buitepos 33 kV Retic. – Dorstrand 33 kV T-off
 Type of incident: Electrocution on A-frame pole
 Species: Southern Pale Chanting Goshawk (juvenile)



13 September 2012 - reported by: Sidney Geiseb
 Locality/line: Mariental S/S – Gibeon 33 kV line
 Type of incident: Collision with power line
 Species: 2x Greater Flamingo (one mortality + one flew off)



2 October 2012 - reported by: Peter Cunningham
 Locality/line: Kokerboom S/S 400 kV line
 Type of incident: Collision with power line
 Species: Lesser Flamingo



28 October 2012 - reported by: Mike Yates
 Locality/line: 202 km south of Mariental on the B1
 Type of incident: Electrocution on pole
 Species: Black-chested Snake-Eagle or African Hawk-Eagle