

# **GUIDELINES FOR TELKOM**

## **RAPTOR AND CROW NESTS ON TELEPHONE POLES**

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### **INTRODUCTION**

In the Northern Cape Province many raptors and crows use telephone poles (and other telecommunication and electrical structures). These structures provide these birds with a secure and high nest site, secure perch, as well as an elevated position from which to hunt for prey.

The use of these structures for breeding purposes is a fairly recent phenomenon, and has enabled certain species to expand their breeding ranges into areas where no natural nesting sites occur. A feature of this phenomenon is that the use of man-made structures usually occurs in areas where natural nest sites are either absent or of a poor quality.

When birds of prey and crows construct their nests on utility structures (telephone poles and electricity pylons) they often make use of long sticks, branches and other material (such as wire). This material (both wire and plant material) can result in flash-overs (outages) when it touches two conductors and may therefore ignite (damaging the pole or pylon), especially when the nest material is wet (from rain, mist or fog). Nest material can also ignite when lightning strikes the nest and pole, and this a frequent problem in the Northern Cape, particularly along the telephone line between Groblershoop and Prieska. Burnt nests can result in damage to equipment, an ineffective telecommunication service, a subsequent loss of revenue, and of course the death of the birds in the nest.

### **AIMS OF THIS DOCUMENT**

This document provides information on:

- (1) Possible solutions to the problem of birds nesting on telephone poles.
- (2) Legislation, with particular reference to the removal of bird nests from telephone poles.

- (3) Which species of raptor and crow build nests on artificial structures, and particularly telephone poles.
- (4) The time of year that raptors and crows breed, and the suggested months that their nests may be trimmed or removed.

### **SOLUTIONS**

There are several possible solutions to the problem: (a) trim the nest of excessive material, (b) remove pieces of wire, (c) insulate the conductors, (d) build an artificial nest platform above the insulators/conductors, and/or (e) remove the nest entirely.

Experience has shown that the removal of the nest is not a lasting solution to the problem, as the birds will return and rebuild the nest and continue with their breeding activities. A solution may be to remove wires and other unwanted material and to leave the birds to carry on with their breeding activities. The birds will usually keep the nest in good condition by adding to the top of the structure, and few problems will occur as long as the birds continue to occupy the territory, for they will drive other birds of the same species out of the area. One problem with this method is that it is labour-intensive, costly and not always a lasting solution to the problem.

A solution that needs to be explored is the insulation of the telephone wires. Although this would be costly, it would be a lasting solution to the problem.

Another more acceptable and longer-term alternative may be to build a platform on top of the telephone pole on which the birds can build their nest. This is the only situation in which both parties, the birds and the utility company, will benefit. For Telkom this will ultimately result in a considerable saving in effort and maintenance costs, although the initial costs will be high. Platforms could also be constructed in a manner that prevents strong winds from damaging the nests and blowing material onto the telephone conductors.

If nest removal is determined to be the only solution to the problem, this should only take place outside the birds' breeding seasons because:

- (1) It is an offence to disturb breeding birds (see below), and
- (2) It could result in the death of the embryo(s) in the egg(s) or death of the nestling(s).

## **LEGISLATION**

All indigenous birds of prey are protected by the Cape Province Nature & Environmental Conservation Ordinance (No. 19 of 1974) under Schedule 2 (protected wild animals). Birds of prey may not be hunted (includes kill, capture, attempt to kill or capture, pursue, and wilfully disturb), kept in captivity, poisoned, donated, bought, sold, exported from the NCP, and/or imported into the NCP, unless the person is in possession of a permit authorising him/her to do so.

Therefore, in order to remove a raptor nest (i.e. one that is currently in use – eggs, nestlings) from a utility structure, the utility company (such as Telkom or Eskom) is legally bound to obtain a permit to do so. In addition, written permission from the landowner on whose property the birds are nesting has to be obtained.

The ordinance imposes no restrictions about the removal of nests that are not being used (i.e. inactive).

As Corvids (crows) are not protected by the Cape Province Nature & Environmental Conservation Ordinance (No. 19 of 1974), no permit is required for the removal of active nests. However, it is still necessary to obtain written permission from the landowner to do so. Nevertheless, it must be borne in mind that it is unethical to remove crow nests during the breeding season, as this will result in the death of the embryo(s) or nestling(s). A problem may also arise when the workers are unable to distinguish between a raptor and a crow nest, or the eggs or young in the nest.

## **RAPTORS AND CROWS THAT NEST ON ARTIFICIAL STRUCTURES**

In the Northern Cape 13 species of raptors and two species of crows build nests on electricity pylons, telephone poles, and other telecommunication structures and these birds may present a problem to Telkom. However, some species, such as Black Eagles only breed on microwave and steel telecommunication towers and this is not believed to influence the telecommunication efficiency of these structures. To date eight species of raptors and two species of crows breed on telephone poles which gives rise to conflict situations resulting in considerable expense for Telkom in terms of maintenance of telephone lines and nest removal. A brief overview of these 15 species is provided.

**Whitebacked Vulture (Witruugaasvoël) *Gyps africanus***

Use of artificial structures: Whitebacked Vultures build their nests on 132 kV powerlines just east of Kimberley, but do not utilise telecommunication structures.

Use of telecommunication structures: No record of this species using these structures; possibly because of their large size and the demand for a large nest structure.

Frequency of use of telephone poles for breeding: Never observed.

**Black Eagle (Witkruisarend) *Aquila verreauxii***

Use of artificial structures: Black Eagles build their nests on powerlines and microwave towers, but not telephone poles.

Use of telecommunication structures: Nests are built on microwave towers and other large telecommunication structures, with little (no) interference in services.

Frequency of use of telephone poles for breeding: Never observed.

**Tawny Eagle (Roofarend) *Aquila rapax***

Use of artificial structures: There are records of Tawny Eagles building their nests on powerlines, but this species is not known to use telecommunication structures.

Use of telecommunication structures: No record of this species using these structures.

Frequency of use of telephone poles for breeding: Never observed.

**Martial Eagle (Breëkoparend) *Polemaetus bellicosus***

Use of artificial structures: The Martial Eagle builds its nests on powerlines and does so frequently in the Karoo, but this eagle is generally not known to use telecommunication structures.

Use of telecommunication structures: There is only one record of this species using a telephone pole for breeding purposes, near Sutherland. Here Telkom apparently erected another telephone pole adjacent to the one with the nest and re-routed the line.

Frequency of use of telephone poles for breeding: Very infrequent (only one record – see above).

**Blackbreasted Snake Eagle (Swartborsslangarend) *Circaetus pectoralis***

Use of artificial structures: The Blackbreasted Snake Eagle builds its nest on powerlines, but there is no record of these birds using telecommunication structures.

Use of telecommunication structures: No record of this species using these structures.

Frequency of use of telephone poles for breeding: Never observed.

### **African Fish Eagle (Visarend) *Haliaeetus vocifer***

Use of artificial structures: There are a few incidents of African Fish Eagles nesting on powerlines; one nest at Douglas and another possible nest at Ganspan (Jan Kempdorp).

Use of telecommunication structures: No record of this species using these structures.

Frequency of use of telephone poles for breeding: Never observed.

### **Blackshouldered Kite (Blouvalk) *Elanus caeruleus***

Use of artificial structures: It has been recorded making use of pylons and telephone poles for breeding purposes. This species also frequently perches on utility poles, from which it hunts its prey.

Use of telecommunication structures: Builds its nests on telephone poles.

Frequency of use of telephone poles for breeding: Infrequent.

Distribution in the Northern Cape: Common in the eastern areas of the Northern Cape, in the Kalahari Gemsbok National Park, and along the Orange River

Typical nesting habitat: Usually builds a small platform of sticks in a fork near the top of a tree.

Breeding season: This species may breed at any time of the year (*season: January - December*).

### **Jackal Buzzard (Rooiborsjakkalsvoël) *Buteo rufofuscus***

Use of artificial structures: Jackal Buzzards build their nests on a variety of artificial structures, including electricity pylons and telephone poles.

Use of telecommunication structures: The Jackal Buzzard makes frequent use of telephone poles for its breeding purposes, particularly in Namaqualand.

Frequency of use of telephone poles for breeding: Frequent, especially in Namaqualand.

Distribution in the Northern Cape: The Jackal Buzzard is found throughout the Northern Cape, being especially common in Namaqualand and the Karoo.

Typical nesting habitat: The Jackal Buzzard prefers mountainous and hilly terrain, with the majority of nests being built on cliffs. This species also builds its nests on trees away from hilly terrain.

Breeding season: It breeds from late-winter to early-summer throughout its range. Large nestlings have been observed in the nest on telephone poles in the Springbok-Vioolsdrift area during November and December (*season: May – October*).

### **Pale Chanting Goshawk (Bleeksingvalk) *Melierax canorus***

Use of artificial structures: The Pale Chanting Goshawk breeds on telephone poles throughout the Northern Cape. This species may usurp the nests built by crows.

Use of telecommunication structures: Uses telephone poles for nesting purposes throughout its range in the Northern Cape.

Frequency of use of telephone poles for breeding: Frequent.

Distribution in the Northern Cape: This species is the most common raptor in the Northern Cape, being widely distributed in this Province.

Typical nesting habitat: Builds a stick platform in the vertical fork of a tree.

Breeding season: Its breeding starts in July/August, peaks in October/November, and tails off in May. Egg laying spans March to December, with a July to September peak (*season: June - January*).

### **Lanner Falcon (Edelvalk) *Falco biarmicus***

Use of artificial structures: Usually breeds in nests on trees, but also uses electricity pylons and telephone poles. Its use of crow nests on utility structures has enabled it to increase its range into flat, treeless areas.

Use of telecommunication structures: It makes use of nests on telephone poles.

Frequency of use of telephone poles for breeding: Infrequent.

Distribution in the Northern Cape: Occurs all over the Northern Cape, but at relatively low densities.

Typical nesting habitat: Generally a cliff-nester, but also breeds in the disused nests of other birds, especially the Black *Corvus capensis* and Pied *Corvus albus* Crow.

Breeding season: Breeding is from July-December (*season: July - December*).

### **Rock Kestrel (Kransvalk) *Falco tinnunculus***

Use of artificial structures: Hunts from roadside telephone poles and electricity pylons. Has been recorded to breed on pylons and telephone poles.

Use of telecommunication structures: Breeds on telephone poles.

Frequency of use of telephone poles for breeding: Frequent.

Distribution in the Northern Cape: Occurs throughout the Northern Cape.

Typical nesting habitat: Usually breeds on cliffs. The nest is a scrape on a cliff-edge or a pothole, or uses the old nests of larger birds.

Breeding season: Breeding takes place from September to January, with a peak from September to December (*season: September – January*).

### **Greater Kestrel (Grootroivalk) *Falco rupicoloides***

Use of artificial structures: Uses a variety of artificial structures for breeding purposes, such as telephone poles, pylons and windmills.

Use of telecommunication structures: Breeds in old crow or raptor nests on telephone poles.

Frequency of use of telephone poles for breeding: Frequent.

Distribution in the Northern Cape: Widely distributed in open, arid habitats; therefore common in the Northern Cape. Widespread in the Karoo and Kalahari.

Typical nesting habitat: It is dependent on the nests built by other birds, especially the nests of Pied and Black Crows.

Breeding season: Breeding is from August to December, with a peak from September to October. Large nestlings have been observed in the nest on telephone poles in the Springbok-Vioolsdrift area during November and December (*season: August – December*).

### **Pygmy Falcon (Dwergvalk) *Polihierax semitorquatus***

Use of artificial structures: Pygmy Falcons usurp the chambers of the colonially-breeding Sociable Weaver *Philetairus socius*. As Sociable Weavers often build their nests on artificial structures, these little falcons are also associated with telephone poles, electricity pylons, windmills and other artificial structures.

Use of telecommunication structures: Sociable Weavers build their nests on telephone poles, and these are used by the Pygmy Falcon.

Frequency of use of telephone poles for breeding: Frequent.

Distribution in the Northern Cape: Confined to the northern areas of the Northern Cape, with its distribution being determined by the range of the Sociable Weaver. The range of the Pygmy Falcon has probably expanded further south and west in the Province, as a result of the spread of the Sociable Weaver into these tree-less habitats.

Typical nesting habitat: It is closely associated with the Sociable Weaver. The pinkish-white defaecations at the entrance to one or more of the nest entrances

is the tell-tale sign that this nest is (or was) being used by a pair of Pygmy Falcons.

Breeding season: It breeds from August to March, with a peak in egg-laying from September to December (*season: August - January*).

### **Black Crow (Swartkraai) *Corvus capensis***

Use of artificial structures: Nests are frequently built on telephone poles and electricity pylons, and the erection of these structures has probably facilitated the spread of breeding crows, and consequently falcons and kestrels into otherwise unsuitable treeless areas.

Use of telecommunication structures: Builds its nests on telephone poles.

Frequency of use of telephone poles for breeding: Frequent.

Distribution in the Northern Cape: It is common in Namaqualand and the Kalahari Gemsbok National Park, but uncommon in the Karoo.

Typical nesting habitat: Its natural nesting substrate is the top of a tall tree, among thin branches.

Breeding season: It breeds from July to January (*season: July - January*).

### **Pied Crow (Witborskraai) *Corvus albus***

Use of artificial structures: Originally mainly a tree-nester, but now also nests on structures such as buildings, telephone poles, electricity pylons, and windmills. This has resulted in a range expansion into otherwise tree-less habitats.

Use of telecommunication structures: Builds its nests on telephone poles.

Frequency of use of telephone poles for breeding: Frequent.

Distribution in the Northern Cape: It is common in the eastern areas of the Northern Cape and Namaqualand, but absent from the Kalahari.

Typical nesting habitat: Usually in the fork of an isolated tall tree.

Breeding season: Breeding is from August to January (*season: August - January*).



## **RECOMMENDATIONS**

1. It is recommended that nests are not removed from telephone poles (unless absolutely necessary), and that alternative solutions are sought to mitigate against the problems caused by nesting raptors and crows. These include the trimming of nests, the insulation of conductors, and the erection of simple nest platforms above the cross-arm of the telephone pole.
2. If nests (both active and inactive) are removed (and this should be seen as a last resort), this must be done outside the birds' breeding seasons (as indicated in Table 1). Any disturbance of (breeding) raptors necessitates the acquisition of the necessary permit(s) from the Northern Cape Nature Conservation Service. The best time for the removal of nests is during the four-month period from February to April.
3. It may be necessary for Telkom to seek the advice/assistance of the Northern Cape Nature Conservation Service or Raptor Conservation Group in the identification of the raptor (or crow) species that is utilizing the structure.
4. A working group should be formed to examine this "problem" in more detail, to determine how the recommendations can be implemented, and to initiate research (suitability of platforms for raptor nests, areas where platforms should be erected, etc.) and monitoring projects (use of platforms for breeding by raptors) in the Northern Cape.
5. During the construction and maintenance of telephone lines, all wire must be collected and disposed of at an approved site. This will limit the amount of this material available for use by crows, and thus reduce the frequency of flash-overs.
6. Telkom must continue with their practice of erecting wire baskets below the cross-arm of telephone poles. These baskets are not only used by Sociable Weavers (for whom they are intended) but also many raptor species, such as Pygmy Falcons (in the nest itself) and Greater Kestrels, Lanner Falcons, and owls (on top of the Sociable Weavers' nests).

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### **SOURCE OF INFORMATION**

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