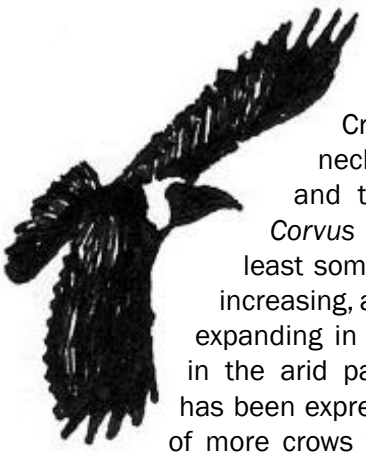
Crows and raptors



Four species of crows occur in southern Africa: Pied Crow *Corvus albus*, Cape (Black) Crow *Corvus capensis*, White-necked Raven *Corvus albicollis*, and the introduced House Crow *Corvus splendens*. Numbers of at least some of these crow species are increasing, and their ranges appear to be expanding in southern Africa, particularly in the arid parts of the region. Concern has been expressed about the implications of more crows for stock and crop farming, utility companies, and raptors. Crows are generally highly successful birds - they eat a varied diet, are remarkably tolerant of humans, are generally not negatively affected by land-use changes, and will probably be one of the groups of birds least affected by climate change.

A larger crow population is not necessarily desirable because:

- Crows occasionally feed on small domestic livestock, especially young lambs.
- Crows may cause damage to agricultural crops, such as maize and ground nuts.
- Some conservationists are concerned that increasing numbers of crows may have a negative effect on our raptor populations. They compete for the same food, may usurp or even rob their nests, and sometimes aggressively mob eagles, vultures and other birds of prey.
- Crows are very effective, opportunistic predators of tortoises and birds' nests. There is growing concern that increasing numbers of crows may cause widespread decreases in reptile and small bird populations.
- Crows often incorporate pieces of wire into their nests and, when these structures are built on electricity or telephone poles, they can result in short circuits - a huge headache for Eskom!
- Pied and Cape Crows have been implicated in the dispersal of prickly pears in the Nama Karoo.

Possible reasons for the range expansion and population increase are:

- More sources and greater quantities of food, including more animals killed on roads, an increased availability of the fruits and seeds of alien plants (such as prickly pear and creeping saltbush), as well as maize, other grain crops, and ground nuts, and an increase in the number and size of informal residential areas with inadequate waste removal services.
- Reduced competition with other scavengers, as the numbers of scavenging raptors and small carnivores has decreased.
- Profusion of additional nesting and roosting sites, including man-made structures such as windmills, telephone poles and electricity pylons, coupled with the spread of alien trees (such as *Eucalyptus* spp, *Pinus* spp) into previously un-treed habitats.

The positive role that crows play in the environment

- As scavengers, crows fulfil a valuable ecological role and the consumption of animal carcasses helps prevent the spread of diseases.
- Crows may also be effective in controlling rats and mice during rodent plagues.
- The nests of crows are used by a variety of raptors, including Greater Kestrels and Lanner Falcons.
- Some scavenging raptors, such as White-backed Vultures and Tawny Eagles may use crows to locate food.
- Crows are important for cuckoos, and it has been determined that up to 10% of Cape Crow and 13% of Pied Crow nests are parasitized by Great-spotted Cuckoos.

Management methods

Crows are notoriously difficult to kill, and most of the currently available methods of controlling their numbers are labour intensive, expensive and notoriously unsuccessful. The removal or destruction of nests will probably just displace nesting activity. Poisoning is illegal and should be very strongly discouraged, especially as it will almost certainly result in the inadvertent poisoning of non-target animals, including already rare and threatened scavenging raptors.

An optimal, holistic approach to crow control should include steps such as:

- Reducing the availability of artificial food sources (e.g. better waste containment and removal in informal settlements, better waste management at dumps and abattoirs, control of prickly pears in the Karoo, limiting the availability of offal and bones at vulture restaurants – rather use whole carcasses).
- Better management and protection of livestock to limit losses to crows.
- Crow nests on telephone poles and electricity pylons should be trimmed or perhaps moved to a platform away from the cross-arm. Removal simply encourages the crows to build new nests.
- Eggs and nestlings can be removed from nests and killed, but as the crows will probably lay more eggs, it may be better to kill the embryos in the eggs and return them to the nest.
- Increased awareness, within both rural and urban communities, of the beneficial ecological role played by

crows, of the various management options available, and of the potential consequences of unselective control methods for non-target animals.

Legislation

Cape Crows and Pied Crows are not protected in most provinces in South Africa. In the Northern Cape, for example, it is therefore permissible for a landowner to hunt them all year round without a restriction on the "bag limit". The landowner can also give someone permission to hunt the crows on his/her property. The weapons that can be used include .22 rifles and shotguns, but not air rifles. They may be hunted during the day and at night. They may not be hunted from a public road or in a municipal area. It is illegal to use poisons to kill crows.

Recommended research and monitoring

Much research and monitoring is needed, including:

- Monitoring of range changes and population trends, possibly by using road survey methods.
- Monitoring the effectiveness of the different management methods, including evaluation in terms of cost, effectiveness and collateral ecological damage.
- The movement patterns of crows should be determined, especially in order to identify possible source and sink areas, and possibly seasonality in response to changes in food availability.
- There is scope for a study on the possible effect of global climate change on crow distributions and numbers.
- Specific information is required on the impacts of crows on raptors, including nestling and egg predation, harassment of breeding raptors and usurpation of nest sites.

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