

Raptors and developments – for environmental practitioners



Background

South Africa is a developing country with an economic growth target of 6%. This implies a great deal more infrastructure, buildings and resource extraction in future. Although certain areas of the country have previously been relatively untargeted for development, this is changing as we discover new minerals, new business opportunities, and continually push the boundaries. Previously rural, untransformed areas are increasingly faced by new development.

Raptors or birds of prey are one of the most important groups of birds in any ecological community, representing the top of the food chain. The presence of birds of prey in an area indicates that the area is essentially ecologically healthy. For more details on the value of raptors see the BoPWG leaflet “The value of raptors”. All raptors are protected in South Africa by the “Regulations for Threatened or Protected Species” (TOPS) under the “National Environmental Management: Biodiversity Act” or under provincial legislation, CITES, etc.

As environmental practitioners it is essential to understand the implications of these developments for our raptor populations.

What do developments mean for raptors?

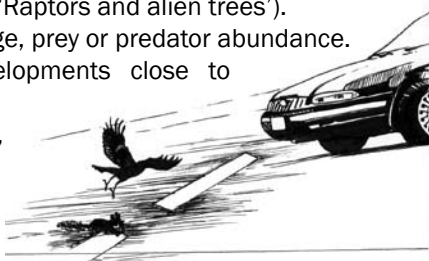
New developments can impact on raptors both directly and indirectly. Often the direct impacts are easier to identify, but the indirect impacts may have a far greater effect in the long term.

Direct impacts include increased raptor mortality through:

- Collision with fences, power lines and other above ground structures
- Electrocutions on power lines
- Road kill
- Increased predation
- Removal of nests and nestlings

Indirect impacts include:

- Increased disturbance of feeding, roosting, and particularly breeding raptors. Disturbance impacts can be broader than the site as some raptors have large home ranges.
- Destruction of feeding, roosting and breeding habitat. Habitat destruction is generally restricted to the development site itself. Remember that, since some raptors utilize alien tree species, destruction of these trees can be destruction of habitat – not many developers realize this, and think that they are benefiting the environment by removing these trees (see the BoPWG leaflet ‘Raptors and alien trees’).
- Changes in species range, prey or predator abundance.
- Disturbance, e.g. developments close to breeding sites.
- Decline in the prey base, such as for example during the poisoning of rodents.



On the positive side, buildings often provide nesting sites for falcons and kestrels and gardens provide food and nest sites.

Impacts on raptors have to be considered in both urban and rural areas. Importantly, both direct and indirect impacts occur during both the construction *and* operational phases of the development.

Most new developments require some associated infrastructure, such as roads, power lines, pipelines and others, and it is important to consider these factors in your assessment. It is also important to consider the cumulative impact of developments.

What can environmental practitioners do?

The most proactive way to prevent developments from impacting on raptors is to ensure that raptor information is incorporated into spatial development frameworks, municipal infrastructure development plans, strategic environmental assessments, provincial conservation plans and other strategic planning exercises. This should ensure that raptors are considered from as early in the planning process as possible. In other words, if raptor information is taken into account early enough, ‘no go’ zones can be identified, thereby preventing applications being made for developments in those areas.

The foundation for the environmental practitioners’ assessment of the potential impact of any given development on raptors is to have reliable, robust information on raptor distribution, abundance and habitats – both currently utilized and potential habitat, and habitat corridors. The best way in which to achieve this is to appoint an avifaunal specialist. Failing this, useful information on raptors in the study area for your project can be found at the places listed below.

Potential sources of reliable information on raptors include:

- The Southern African Bird Atlas Project 1 (see www.birds.sanbi.org or www.birdlife.org.za)
- The Southern African Bird Atlas Project 2 (see <http://sabap2.adu.org.za>)
- The Important Bird Areas project (www.birdlife.org)
- NaturalWorld (see www.natworld.org.za)
- Regional and local data sources such as local bird clubs, interest groups
- The Birds of Prey Working Group of the Endangered Wildlife Trust

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