## Birds, Bats & Wind Energy

The Endangered Wildlife Trust (EWT) and BirdLife South Africa (BLSA), two of the largest conservation NGO's in South Africa, fully support the responsible development of a renewable energy industry in South Africa. We recognize the need for a cleaner, more diverse energy mix, and acknowledge the predicted imminent shortfall of energy supply versus demand. We also sympathize with the wind energy industry which has experienced significant regulatory uncertainties to date, making it a challenging arena in which to operate.



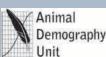


Contact Details: Endangered Wildlife Trust – Wildlife & Energy Programme Telephone: +27 11 372 3600 Fax: +27 11 608 4682 Email: wep@ewt.org.za Website: www.ewt.org.za

BirdLife South Africa Conservation Division Telephone: +27 11 789 1122 Fax: +27 11 789 5188

Email: conservation@birdlife.org.za Website: www.birdlife.org.za

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Wind turbines can cause three major problems for

wind turbines can be hazardous to birds, bats and their habitats.

- Disturbance (scaring birds away from their roosting, nesting or feeding sites).
- Displacement i.e. a loss or damage to bird habitat, specifically relevant to threatened species.
- Collision with blades and/or towers responsible for fatalities.

The most documented impacts with regards to bats include:

Direct collision

There is remarkable global evidence from scientific studies (in e.g. USA, Spain, England amongst others) that

- Barotrauma (mortality due to damage to bats' lungs caused by sudden change in air pressure close to the turning turbine blade; Baerwald et al. 2008)
- Loss of foraging habitat
- Barrier effect of commuting and migrating routes

The EWT and BLSA are approaching the interaction between birds and bats, and wind energy proactively through the development of the following guidelines:

• EWT-BLSA Best Practice Guidelines for Avian Monitoring and Impact Mitigation at proposed WEF sites in South Africa

https://www.ewt.org.za/Portals/0/ewt/workgroups/WEP/BAWESG\_Monitoring%20guidelines\_Version%201\_04042011.pdf)

 South African Good Practice Guidelines for Surveying Bats in Wind Farm developments 2011

https://www.ewt.org.za/Portals/0/ewt/workgroups/WEP/SA\_Wind\_Survey\_Guidelines\_FINAL\_April%202011.pdf

 An Avian Wind Energy Sensitivity Map (to be published in 2011). It is hoped that a similar map for bats will also be available in future

http://www.birdlife.org.za

All Wind Energy applications should be subject to the full avifaunal and bat impact assessment process as detailed in the active mentioned EWT-BLSA guidelines. Impact assessments must allow for the collection of adequate relevant field data to support decision making. To such extent pre-construction monitoring data should be collected over a minimum period of 2 months (in line with international best practice to consider seasonal variance).

The results of this monitoring must materially inform the final layout and mitigation plans for each Wind Energy Facility. Site alternatives must be considered given that correct siting is the primary means of mitigating wind farm impacts on birds and bats.

We encourage the wind energy industry to demonstrate that it is a progressive industry with respect to biodiversity, as well as carbon and economic benefits. While we understand that there are modest cost implications of advance baseline monitoring, we emphasize that in order to be sustainable wind energy should not be a significant additive factor which tips threatened bird and bat species towards extinction.

The EWT and BLSA are advised on matters relating to birds, bats and wind energy by the Birds and Wind Energy Specialist Group (BAWESG). This is an independent advisory group formed in order to coordinate efforts by bird conservationists and ornithologists in South Africa to reduce the impact of wind turbines on birds and bats.