

Avoiding the electrocution of falcons



This information sheet has been developed to inform people of the hazard posed by power lines to the threatened New Zealand falcon, Karearea.

What is the Problem?

Electrocution has been proven to have a significant impact on the survival of New Zealand falcon in the Marlborough region¹ and it is highly likely that electrocution is a factor that limits populations of this threatened species nationwide. The risk is especially high in open areas where power poles provide the most convenient perching opportunity in the landscape.

If efforts to conserve this spectacular, yet threatened species are to be successful it is imperative that this hazard is addressed nationwide.

How Falcons Are Electrocuted?

Low voltage distribution lines (opposed to high voltage transmission lines) electrocute and kill New Zealand falcons when a bird bridges the gap between two live wires, or between a live wire and a grounded structure, and creates a short circuit. As such there are two primary situations in which electrocution occurs (See information box 1).



Photo: Colin Wynn

BOX 1

There are two primary situations in which electrocution occurs

1. When a bird perches on an un-insulated transformer box and bridges the live wires coming out of the top of the box
2. When a bird perches on a crossarm that is grounded and made of conductive materials (including wet wood) and bridges the gap between the crossarm and any live wires

¹Fox N.C. & Wynn C. 2010. The impact of electrocution on the New Zealand falcon (*Falco novaeseelandiae*). *Notornis*, 57: 71-74.

Phasing Out Electrocution

We recommend the phasing out of the electrocution hazard through the two stage process outlined in information box 2.



Wingspan recommends the electrocution hazard be phased out by

1. Concentrating effort into retrofitting transformer boxes in high risk areas during routine line maintenance operations
2. Only erecting safe power pole and transformer box designs from this point on

This approach provides a pragmatic method to addressing the issue of electrocution, acknowledging that the issue cannot be addressed immediately but ensuring that the highest priority risk is addressed in the short term and the hazard removed entirely in the long-term.

What Wingspan is doing?

Wingspan is actively working towards reducing the hazard posed by power poles and transformer boxes to New Zealand falcon by seeking collaborative partnerships with the electricity distribution industry.

Through partnerships Wingspan is advocating for the:

1. Development of power pole and transformer designs that avoid the electrocution of falcons
2. Identification and mapping of high risk areas
3. Implementation of best-practice standards that avoid the risk of electrocution without compromising electricity distribution needs



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