

Bevanger, K. and Brøseth, H. 2004. Impact of power lines on bird mortality in a subalpine area. *Animal Biodiversity and Conservation* 27: 67–77.

Abstract: Impact of power lines on bird mortality in a subalpine area— Four sections of power lines, amounting to 4,000 km, in a subalpine area of southern Norway were patrolled from April 1989 to June 1995 to record birds killed when colliding with the overhead wires. A total of 399 dead birds and bird remains were identified as collision victims. At least 24 species were identified among the victims, the majority only represented by a few individuals. Ptarmigan (*Lagopus* spp.), particularly Willow ptarmigan (*Lagopus lagopus*), made up 80% of the victims. Season, power-line section and ptarmigan abundance affected the collision rate of this species. The highest rate was found in winter, marginally higher than in spring. Few collided with the power lines in autumn, and none were identified as victims in summer. On average, the annual minimum ptarmigan collision rate was found to be 5.3 birds km<sup>-1</sup> power line. The only parameter with a predictable effect on the probability of ptarmigan collisions was the height of the trees, as collision spots tended to be in places with low trees. Mortality due to power lines was, on average, at least 2.4 times higher than the annual ptarmigan hunting bag in the area during this 6-year study.