

Dudderar, G.R., S.R. Wintersteiny and W.H. Sangsteiz. 1997. Ecology and Control of Wildlife Damage to Electric Substations. Proc. East. Wildl. Damage Mgznt. Conf. 7;132-138.

Abstract: This study addresses several aspects of the ecology and control of wildlife damage to electric substations because the amount of existing research is not sufficient to make informed decisions about how best to minimize that damage. Records of 121 incidents of animal-caused faults showed that 78% of the faults were caused by squirrels and raccoons and an average of 2,511 customers lost service during the outage caused by such a fault. Animal damage control measures were evaluated by observing challenges to control measures by raccoons and squirrels at a substation. The control measures were breached twice because they had not been properly applied. In 1994, 301 transmission and distribution substations in Michigan were sampled and categorized based on various structural and habitat characteristics. Significant relationships ($p < 0.10$) were found between faulted substations and the number of nests in the substation, the distance of water from the substation, and the beam type used in the substation.