

Erickson, W.P., G.D. Johnson, and D.P. Young Jr. 2005. A Summary and Comparison of Bird Mortality from Anthropogenic Causes with an Emphasis on Collisions. USDA Forest Service Gen. Tech. Rep. PSW-GTR-191

We estimate that from 500 million to possibly over 1 billion birds are killed annually in the United States due to anthropogenic sources including collisions with human-made structures such as vehicles, buildings and windows, power lines, communication towers, and wind turbines; electrocutions; oil spills and other contaminants; pesticides; cat predation; and commercial fishing by-catch. Many of the deaths from these sources would be considered unlawful take under federal laws such as the Endangered Species Act, Migratory Bird Treaty Act, and the Bald and Golden Eagle Protection Act. In this paper, we summarize this literature and provide the basis for the mortality projections for many of the apparent significant sources. Most of the mortality projections are based on small sample sizes, and on studies typically lacking adjustments for scavenging and searcher efficiency biases. Although the estimates for each source often range by an order of magnitude, the cumulative mortality from all these sources continues to be a concern.