

Byrne, S. 1983. Bird Movements and Collision Mortality at a Large Horizontal Axis Wind Turbine. Cal-Neva Wildlife Transactions. Pg. 76.

Abstract: We have been studying bird movements and collision mortality as part of Pacific Gas and Electric Company's performance monitoring program for a 350 foot boeing Mod-2 wind turbine. This machine is located on the western edge of the Suisun Marsh 4 miles south of Cordelia, Solano County, California.

Raptor and waterfowl movements were surveyed prior to construction. In the fall of 1982 we monitored nocturnal migration over the site for 6 weeks using a portable ceilometers-image intensifier system. Dead bird searches were conducted 5 days a week during this period and once weekly thereafter. Weather data were collected to determine the relationship between bird movement and nocturnal passerine migration over the wind turbine site. Raptor use of the area is moderate to high. Migration traffic rates are comparable to those in other parts of the western United States and lower than typical eastern migration rates. Collisions have occurred during all lighting and weather conditions, but collision mortality to date has been insignificant.