Johnson, J.A. 2008. Effects of the Blue Canyon Wind Farm on Avian Populations in Southwest Oklahoma. Preliminary Analysis. Cameron University, Lawton, Oklahoma. 16 pages.

Abstract: The environmental effects of renewable energy development present one of the most significant problems to local planners. Wind power promises to significantly increase the production of energy from renewable sources, but substantial growth in this area may also pose significant potential threats to bird populations. Recent research on this point is ambiguous, and provides little to guide planners. This study analyzes the effects of one case, the Blue Canyon Wind Farm in Southwest Oklahoma, on local avian populations using data from the Audubon Society Christmas Bird Counts and Fish and Wildlife Service Breeding Bird Surveys. This study finds that there are no statistically significant threats from such facilities to regional avian populations. The data suggests the further hypotheses that the effects of wind farms are primarily localized, and that in some circumstances wind farms may actually improve habitat by excluding humans and grazing animals from most of the environment. Key concerns for wind power planning should thus be the adequacy of facility, design careful attention to habitat, and the potential for partnership with rather than conflict between conservation organizations and power companies in the planning process.