

Arkansas Wind Energy Bird and Bat Monitoring Guidelines: Recommendations to avoid and minimize potential wildlife impacts from wind energy projects in Arkansas

Initial site characterization

- Not all sites in Arkansas require bat or extensive bird surveys pre construction. Contact the U.S. Fish and Wildlife Service to determine if your project site is in a wildlife sensitive area.
- Use tubular supports instead of lattice to reduce perching locations-(generally small turbines and meteorological towers)
- Avoid use of guy wires-(generally small turbines and meteorological towers)
- Identify and evaluate potential development sites to determine wildlife risk
- Avoid fragmentation of large contiguous blocks of habitat, select low quality degraded sites
- Check with state and federal agencies to determine if threatened, endangered or species of concern are present within selected sites
- Evaluate existing local Doppler radar for bird and bat movement signatures

Pre-construction Bat and Bird Monitoring

- Recommend 2-3 years pre-construction monitoring
- Conduct a karst feature survey on leased lands including roads and transmission lines. Features include caves, springs, sinkholes, and losing streams. All streams in this landscape are considered losing streams. Interviewing landowners should assist with identifying additional karst features.
- Implement season long (spring/summer/fall) mist net surveys for bats on the project site and immediately adjacent to. Decontamination procedures must be followed when handling bats. Not necessary in the winter when bats are hibernating.
- Avian surveys should be conducted during appropriate times of the year to determine usage (spring and fall for migration, seasonally for resident species)
- Conduct season long acoustical monitoring at elevation at multiple sites across the project site. Not necessary in the winter when bats are hibernating.
- Conduct spring and fall on site radar studies to document bird and bat migratory movement throughout the project site. On site radar can survey the entire project site.
- Diurnal avian survey to estimate bird usage
 - Point counts to determine raptor and songbird use

- Raptor nest search – locate any nests within 1 mile of selected site to determine if impacts to nesting raptors exist

Post Construction Monitoring

- Bird and bat carcass search for 3-5 years

Summary

The above recommendations are abbreviated and detailed survey protocols will be developed in coordination with wind energy developers.

Surveying of wildlife species must be accomplished by person(s) experienced in bird and bat identification in Arkansas. Individuals that must handle species are required to have both federal and state permits. Once data is collected, all reports should be submitted to the U.S. Fish and Wildlife Service and the Arkansas Game and Fish Commission within two months of the completion of a field season. Final reports are due once all surveys have been completed.