



CREW Seminar Series: Spring 2013

Are the Answers Blowing in the Wind? Searching for the Causes of Bat Fatalities at Wind Turbines

Abstract

Wind energy is one of the fastest-growing industries in the world and represents an important step toward reducing dependence on non-renewable sources of energy. However, over the past decade it has come to light that wind turbines are causing fatalities of unprecedented numbers of migratory tree-roosting bats. The causes of bat collisions with turbines remain unknown, but important clues toward understanding the issue are beginning to emerge. This talk will review the history of bat collisions with tall structures, summarize potentially important patterns in bat fatalities at turbines among regions and continents, touch upon hypothesized causes of bat susceptibility to turbines, and then detail the results of a recent collaborative field study that used videography, acoustic detectors, radar, daily ground searches, and experimental turbine operation schedules to test whether bats are attracted to turbines, whether certain turbine operational conditions lead to greater fatalities, and to observe bat behaviors at night around operating turbines. Some of the new discoveries about how bats respond to wind turbines may eventually lead to ways of minimizing or avoiding fatal collisions.

By Paul Cryan, USGS-Science Center

When: Monday, May 6 at 11:00am

Location: Weber 202, Colorado State University

Link for simulcast on web: <http://tinyurl.com/CREW-SP13-Cryan>



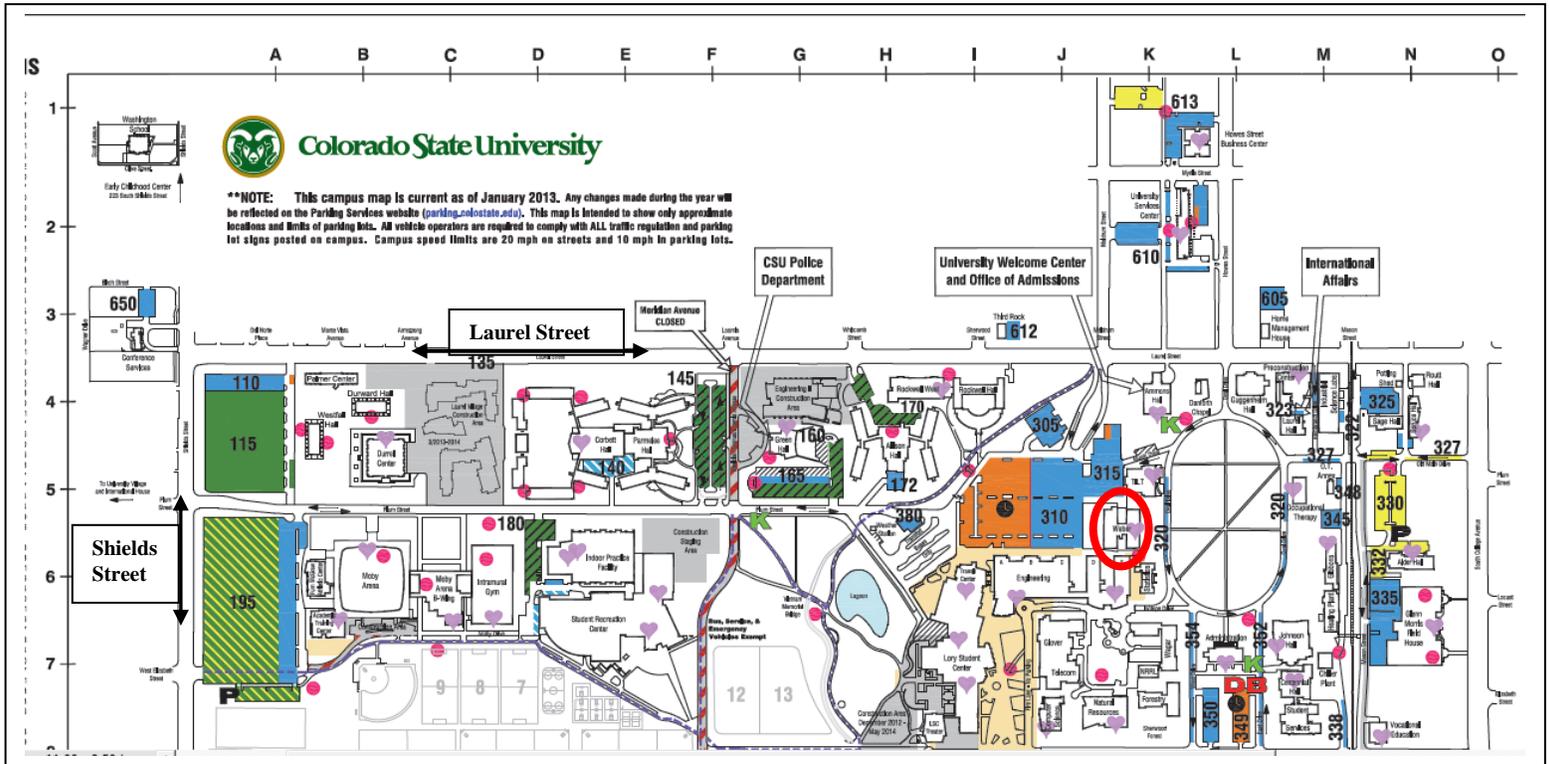
Paul Cryan is a research biologist with the USGS Fort Collins Science Center. He received masters and Ph.D. degrees in biology from the University of New Mexico and has spent more than 20 years studying the ecology of bats. Paul is interested in many of the mysterious aspects of bat ecology, including their migration behaviors and movements, the details of their winter survival strategies, and the ways that infectious diseases influence bat populations. As one of the few people actively studying the group of bats that began showing up dead in large numbers beneath wind turbines a decade ago, Paul has focused much of his research over the past 10 years on trying to solve the puzzle of why migratory tree-roosting bats are so susceptible to wind turbines and what might

be done to decrease or eliminate bat fatalities at turbines.



The Weber building is pictured just west of the oval, left of #320, section K-6, and is circled in red in the map below.

Parking lots: blue lots are for "A" parking permits.



For more information, contact Dr. Sid Suryanarayanan (Sid.Suryanarayanan@ColoState.Edu)