

Avian Mortality at Communications Towers

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Presentation Number 4

The behavioral responses of migrating birds to different lighting systems on tall towers.

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Al Manville's introduction of the fourth speaker, Sidney Gauthreaux.

Our next speaker is a native Louisianan. He did his undergraduate work at the University of New Orleans and his graduate work at Louisiana State and a postdoc at the University of Georgia. He has worked as Assistant and Associate, and is currently Professor of Biological Sciences at Clemson University. I look at him as the Grand Master, if you will, of radar ornithology. He began work in 1959 on weather surveillance radars looking at bird migrations and since that time has been studying radar movements of birds across the Gulf of Mexico, eastern United States, spring and fall. And, of course, with the advent of Doppler radar has improved his efforts tremendously. Last year he was the recipient of the Partners in Flight Researcher of the Year award. Dr. Sid Gauthreaux.

Sidney Gauthreaux

[the following text is the author's abstract for the conference]

The influences of both red and white light on the flight and orientation behavior of nocturnally migrating birds were investigated by 2 means in an attempt to assess the possibility that strobe lights may deter birds from colliding with tall man-made structures and aircraft. The first method examined the number and behavior of nocturnal migrants flying near a strobe-lit FM radio tower and over a control area during spring migration as well as near a red-lit television tower, a white strobe-lit television tower, and over a control area that had no light during fall migration.

The results show that numbers of birds at each site were not significantly different; however, the proportion showing curved, circling, or hovering behavior was significantly higher at the red-lit television tower than at the strobe-lit television tower and the control site. The proportion of birds showing one or more of these "non-straight" flight responses was also higher at the strobe-lit towers than at the control sites during both the spring and fall studies. The findings provide important information on the "best lighting configurations" for man-made obstructions that can be used to minimize the collisions of migrating birds with these structures at night.

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