

Floodlit Structures and Endangered Birds

The Kirtland's Warbler Recovery Team, at its February meeting in Lansing, Michigan, expressed concern for potential hazard to Kirtland's warblers posed by lighted tall structures that these birds may encounter during their migration flights. It has been extensively documented that certain smokestacks lighted by spot or floodlights have been a disaster to individuals of many species that have flown into them during adverse weather conditions. For example, bird kill data has been collected at two of Ontario Hydro's thermal generating stations (near Bath and Kingston, Ontario). Approximately 28,000 bird kills were documented in the period from 1970 to 1977. Recognition of the consequence of floodlit smokestacks resulted in a general modification of lighting techniques during peak migrations. When red warning lights and the pulsating white strobe lights (that appear to be most effective in reducing hazards to aircraft) were in use, the bird kill dropped sharply.

Dramatic reinforcement for the necessity to turn off floodlights at Ontario Hydro during the migration period occurred in 1981. Through a combination of bureaucratic blunders, floodlights were turned on during the fall migration, resulting in a new record of man-caused bird kills for Canada. In one night (Sept. 6), 5,818 birds from 24 warbler species, five species of vireos, least bitterns, and others -- 49 species in all -- died. In one weekend, more than 10,000 birds were killed by just two floodlit smokestacks 653 tall and 33 feet wide at the top!

Spectacular as this tragedy was, it is not an isolated occurrence, as floodlights are in use all over North America to illuminate tall buildings, monuments, transmission towers, and other bird obstacles. It is particularly tragic that the principal use of this lighting is for esthetics, rather than the oft-mentioned purpose of aircraft safety. The latter is served in better fashion by the strobe lights that give birds a chance to avoid the obstruction in their flight path.

The Kirtland's Warbler Recovery Team is especially concerned that the floodlight hazard may be a significant threat to the endangered Kirtland's warbler, the world population of which is now hovering in the area of little over two hundred pairs of breeding birds. They note that the wood warbler family (Parulidae) to which the Kirtland's warbler belongs is especially susceptible to this mortality. The State and Federal agencies and cooperators working jointly on improving the status of this species have made great strides in reversing the reduction in nesting habitat and in curtailing cowbird parasitism. Other factors depressing the Kirtland's warbler population are not as well understood, and must be investigated further.

The Kirtland's Warbler Recovery Team is asking that individuals concerned with our avian wildlife join with them in pin-pointing, and encouraging the modification of, floodlit structures. Offending structures that threaten the migration of the Kirtland's warbler between its nesting ground in central Michigan and its wintering site in the Bahamas need to be identified. The cooperation of their owner/operators must be solicited to assist in the protection of this and other species.

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