



Ecological Consequences
of
Artificial Night Lighting

Edited by
Catherine Rich • Travis Longcore

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Chapter 4

Effects of Artificial Night Lighting on Migrating Birds

Sidney A. Gauthreaux Jr. and Carroll G. Belser

Many hundreds of species of birds typically migrate at night, and it is well known that fires and artificial lights attract birds during migration, particularly when the sky is cloudy and the ceiling is low. Romanes (1883) was first to discuss the similarities of the attraction of insects to a flame at night, birds to lighthouses, and fish to lanterns. In some instances, humans have exploited the attraction of migrating and local birds to lighted buildings, floodlights, and spotlights. In one early example, hunters used a simple reflecting lamp to attract shorebirds at night. "[T]he birds came all around and about them—like chickens when called to feed," reported the *St. Augustine Press* (quoted in Hallock 1874:150). In Jatinga, a small village on a ridge in the North Cachar Hills district of Assam in northeastern India, from August to October on moonless, foggy nights with south winds and drizzle, villagers use searchlights and lanterns to attract, capture, and kill hundreds of local birds for food (Dubey 1990). Up to fifty species have been collected, with herons and egrets being some of the largest victims and pittas and kingfishers representing some of the smaller species. In Africa the attraction of nocturnal