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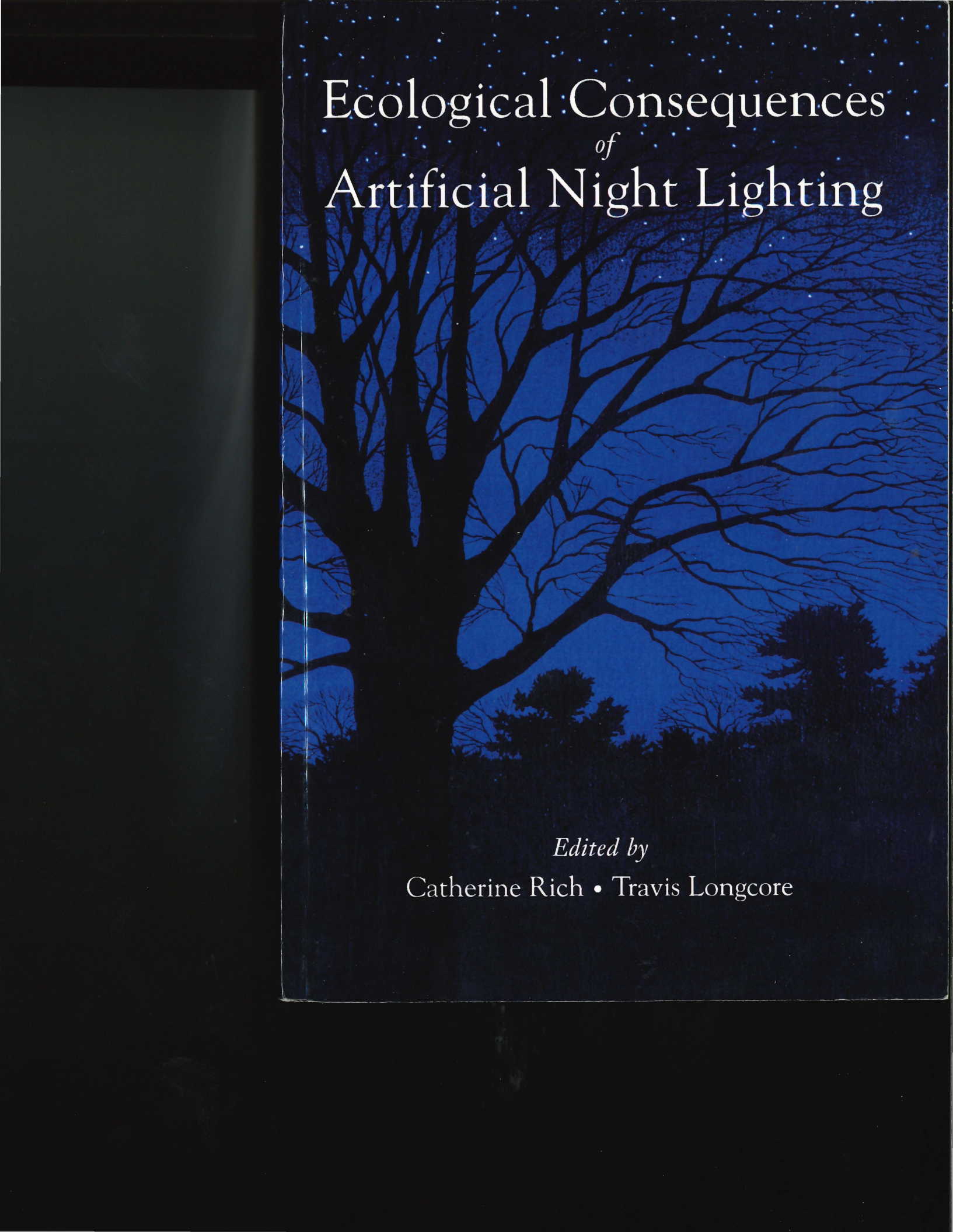
Chapter 3

Bats and Their Insect Prey at Streetlights

Jens Rydell

Bats have long been observed feeding on insects attracted to artificial light sources. Indeed, before the advent of high-tech bat observation equipment such as ultrasound detectors and infrared-sensitive video cameras in the 1980s, artificially lit places provided otherwise rare opportunities to observe bats hunting insects (Griffin 1958, Roeder 1967, Shields and Bildstein 1979), and this research tradition has continued ever since (Belwood and Fullard 1984, Schnitzler et al. 1987, Barak and Yom-Tov 1989, Hickey and Fenton 1990, Dunning et al. 1992, Acharya and Fenton 1999, Fullard 2001).

Experimental ultraviolet lights set up in otherwise dark areas rapidly attract bats, which feed on the insects that accumulate around the light (Fenton and Morris 1976, Bell 1980). The habit of feeding at artificial lights is now so common and widespread among bats that it must be considered part of the normal life habit of many species. Some bat species obtain a large part, perhaps even most, of their food at lights. Nevertheless, what bats and insects do in lit places is a special case. Lighted areas are not representative of the conditions to which bats and insects have become evolutionarily adapted. The phenomenon is new in an evolutionary



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