

Averill, A. 1996. Brown-headed cowbird parasitism of neotropical migratory songbirds in riparian areas along the lower Colorado River. M.S. thesis. University of Arizona. Tucson, Arizona. 148 pp.

Populations of several riparian-obligate, neotropical migratory songbirds have declined in recent years, partly due to brood parasitism by brown-headed cowbirds (*Molothrus ater*). In 1994 and 1995, I measured parasitism rates and nesting success of 4 riparian-obligate, neotropical migrants breeding in the lower Colorado River valley. Because vegetation characteristics of nest sites may influence cowbird parasitism and host nesting success, I also measured vegetation attributes associated with nest-site selection. Parasitism rates were 40-90%, and reproductive success was significantly lower in parasitized nests. Foliage cover may influence host nest-site selection and prevent cowbird nest discovery. The patchy distribution of native tree species may have aided cowbird nest discovery by providing elevated survey perches. Saltcedar (*Tamarix ramosissima*) was an important understory component providing foliage cover at nests. Understanding vegetation characteristics associated with host and cowbird nest-site selection should be useful in riparian restoration projects and cowbird control.