Book Review

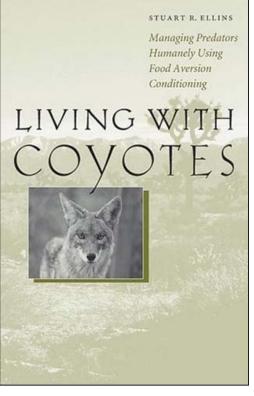
Living with coyotes: managing predators humanely using food aversion conditioning by Stuart R. Ellins. Austin, Texas: University of Texas Press, 2005. 165 pages.

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I WAS INITIALLY worried after receiving a phone call from a predator advocate who told me that I must see the new book that explained how conditioned food avoidance (CFA) could be used to solve the problem of coyote predation. "New?" I thought, recalling the acrimonious debates over CFA in the journal *Appetite* and elsewhere in the 1980s. On reading the book, however, I was pleasantly surprised to find that *Living with coyotes* by Stuart Ellins is not an extension of the ongoing diatribes that started so long ago. Instead, the book acknowledges that many of the previous heated debates could be reduced to personal differences in the philosophy of science.

Indeed, the most useful aspect of the book is its reflection on the morass of competing perceptions, beliefs, and value systems regarding coyote management. Ellins was tormented by accusations from People for the Ethical Treatment of Animals that he was abusing animals. He further suffered the wrath of irate pet owners, park administrators, city council members, and livestock producers. In his mind, competing evaluations of CFA were performed by people who either saw the glass as half full (in my mind, those who tend to infer possibilities beyond the scope of the data) or those who saw the glass as half empty (to me, those who give up on a technique at first failure rather than identify what alterations are needed for successful application). Reading between the lines, I find the book an interesting case study of human sociology. Unfortunately, as a layperson's book about coyotes, a scientific contribution and compendium of knowledge, or as a new roadmap for the successful application of CFA, Ellins' book fails.

The book does not define the problem of coyote predation management well. One can allow leeway and artistic license for a



nontechnical summary, but it is too much to say that "the outcome of this controversy now weighs heavily on the survival of the coyote" (pages 8-9) even though the statement is contradicted 4 pages later when it is noted that coyotes have expanded their range "in the face of trapping, poisoning, and aerial shooting programs." There seems to be a basic lack of knowledge about what is actually done in the field of coyote predation management. Does anyone "poison them with a well-placed cyanide capsule as they attempt to bite their way out of the trap" (page 14) or use a "coyotegetter" in which "a mechanism inside the tube explodes..." (page 14)? Perhaps Ellins is misidentifying trap tranquillizer tabs, which calm rather than kill, and blank-round fired coyote-getters, which have not been used for about 50 years. Many references are woefully out of date, most notably the assertion that the "American wolf, for all intents and purposes, is gone ... and there have been attempts to reintroduce the wolf into selected habitats, including national parks (Klinghammer 1979)" (page 66).

The science described in the book may be simplified for the general public, but much of the evidence presented for CFA struck me as manipulative and biased; for instance, in 1 picture caption Ellins encourages the reader to "note the disgusted look" on a coyote's face as evidence for conditioning, and he fails to acknowledge alternative hypotheses for observed behaviors and "looks;" captive coyotes also roll and urinate on many things that they are not conditioned against. This is the glass half-empty versus half-full concept again, but for a treatise on CFA where pictures sell a thousand words, shouldn't the complete story be told? In his book, Ellins argues that "just because an experimental effect was not demonstrated does not necessarily mean that the hypothesized relationship...does not exist" (page 129). This statement, albeit true, can also be indicative of putting faith in front of science; furthermore, if an effect is not large enough to detect and use in the real world, the existence of a relationship is irrelevant to managers.

There are gaps in logic that are frustrating. Ellins is against lethal predator control measures, repeatedly noting that they do not work because new coyotes invade, which requires additional removals and that "there seems to be no end" (page 122). Ironically, he later admits that that CFA must involve continued baiting over the course of years to gradually decrease kill rates (page 127) and that long-term distribution of toxic baits over large areas is needed to condition a significant proportion of covotes and even then "total suppression of kills may not be possible" (page 127). Perhaps it is a question of scale and semantics, but asserting repeatedly that "lethal control methods do not work," is black-andwhite and erroneous. A dead coyote will not kill a sheep, and repeated actions (e.g., removing coyotes) that alter a system (e.g., to reduce predation) is the definition of management, not failure. That lethal control may not be a preferred tool, or that it may not be the most efficient technique are valid arguments, but that it does not work and can easily be replaced by CFA is fallacious and misleading. Probably the biggest impediment to applying CFA in the current era is that any chemical used in a CFA program must first be registered with the U.S. Environmental Protection Agency; Ellins minimizes the difficulties of obtaining a registration by dismissing the lengthy and expensive obstacle: "there are organizations that have the capacity, if not the will, to do the job" (page 147).

Ultimately, the troubling aspect of the book to those of us trying to resolve conflicts between humans and wildlife is that it seems to preach a simple, miraculous solution while inferring that wildlife managers and livestock producers are the actual problem. That is, although the acrimony has been ameliorated, the potential to create more conflict (with wildlife managers caught in the middle) is still significant. The book is disappointing because some of the rhetoric is still too inflammatory, the biology and modern management techniques are overly simplified or misunderstood, and the references are extraordinarily out of date. The result is unfortunate because the topic deserves a current and pragmatic overview of the problems of successfully applying CFA for covote predation management in the real world. *