

Where Elk Roam: Conservation and Biopolitics of Our National Elk Herd

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Book Review

When Elk, Biology, and Politics Collide

Where Elk Roam: Conservation and Biopolitics of Our National Elk Herd, Bruce L. Smith. Lyons Press, Guilford, Connecticut (2012). 266 Pages. ISBN 978-0-7627-7074-8. Paperback \$18.95 (U.S.).

Bruce Smith has written a very readable and entertaining book about the elk herds that inhabit the Greater Yellowstone Ecosystem, most particularly those that winter on the National Elk Refuge adjacent to the town of Jackson, Wyoming. Smith, having retired in 2004, addresses the subject from his perspective as the wildlife manager on the refuge for over two decades. The refuge, administered by the U.S. Fish and Wildlife Service, was established in 1912 as a nucleus for the preservation and restoration of the region's elk, a species which, at the time, was extirpated over much of its range, and threatened elsewhere. Interspersed throughout the book are accounts of the author's own research as a wildlife biologist, including his tagging and radio collaring of elk in order to trace their migratory movements, reproduction, mortality, and demographics as well as measurements of forage biomass and nutrient content.

The National Elk Refuge now serves many purposes. However, it primarily provides winter habitat and protection for the thousands of elk in the region that migrate to it from summer ranges in Grand Teton and Yellowstone National Parks and wilderness areas in the Bridger-Teton National Forest. These are migration routes that historically extended far south of the present refuge into the Little Colorado Desert and Red Desert of Wyoming, but have been blocked by development and ranches. Because of the large number of elk on the refuge (averaging 8,000 over the years), they have been fed supplemental forage in all but nine winters since the refuge's founding. As the author points out, feeding the elk herd was probably not viewed as a long-term solution a century ago, but "by default, feeding elk became policy out of repeated practice" (p. 25). The author provides

good detail on the feeding program and its seasonal and daily adjustments in quantity, mechanics, and costs. As a result, "Winter feeding is the most noteworthy, scrutinized, and controversial of the refuge's functions" (p. 47).

The reader is also introduced to the other important functions of the refuge. These include enhancing winter elk survival, thus providing a valuable and important resource for sportsmen and outfitters; reducing conflicts and competition for forage on cattle ranches in the region; and the tourism benefit to the region by providing visitors up-close opportunities to view large numbers of elk, as well as bison, coyotes, and, now, wolves. All of these factors serve to entrench the current management program of elk on the refuge. This leads to the main thrust of the book which is to point out in clear terms the fallacy of the current management program, a situation that results in unnaturally high numbers of elk concentrated at extreme densities in winter. (It should be noted that the state of Wyoming also maintains many winter feed grounds for elk in the region.)

Of most concern to the author is that such high densities of elk more easily promote the spread of brucellosis among the animals. As the author points out, the primary significance of brucellosis in elk or bison is not its effects on those species, which is minimal in terms of reproductive loss, but rather that the disease can, under specific conditions, be transmitted to livestock. Of equal concern is that the same situation may permit the emergence of Chronic Wasting Disease (CWD) in the elk herds of the region, a disease that has already been identified in areas to the east. As the author suggests, "western Wyoming sits on pins and needles, waiting for this ecological drama to play out. Its westward march across Wyoming has brought CWD perilously close to world-class elk and mule deer populations numbering over two hundred thousand in the Greater Yellowstone Ecosystem" (p. 114). In the strongest language in the book, Smith maintains that "Feedgrounds will become de facto biological "Superfund"

sites contaminated with infectious prions proven highly resistant to environmental and chemical degradation” (p. 114).

Solutions, including phasing out the feeding programs and developing protected migratory corridors to the south, have been proposed, most recently as an alternative in a final Environmental Impact Statement issued in 2007 but rejected for more status-quo approaches. Ultimately, the author reluctantly recognizes that such changes, while essential, may not be implemented in the near future. The biggest hurdle is that elk have been managed the current way for almost 100 years, although nothing prevents management changes “except an irate hunting community and

the inevitable winterkill. Drove of dead and dying elk within sights of thousands of people would be socially, economically, and therefore politically unacceptable” (p. 209).

Where Elk Roam is a good book for everyone interested in elk management in a dynamic bio-social environment. The book is understandable to the lay public, but detailed enough to capture the attention of wildlife biologists.

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