

Life on the Rocks: A Portrait of the American Mountain Goat

By Bruce L. Smith. 2014. University Press of Colorado, 5589 Arapahoe Ave., Suite 206C, Boulder, CO, USA, 80303. 192 pages, 35.00 USD, Cloth. (Also available as an e-book)

Anyone who has ever done any rock climbing or scrambling is likely in complete awe of the feats that mountain goats manage in the steep terrain that is their home year around. The photos in this book attest to their ability to survive “life on the rocks,” and the text helps the reader understand how they do it, physically and physiologically.

While *Life on the Rocks* could be described as a “coffee table book” by virtue of its size (31 cm tall × 24 cm wide) and plethora of colour photographs (over 100, the majority taken by the author), to limit it to that category would do both the book and the author, a disservice. Smith is a scientist with the US Fish & Wildlife Service, and the photographs complement his well-written text on the mountain goat’s taxonomy, anatomy, behaviour, environment and co-inhabitants of extreme terrain, rather than the text just being an expanded caption for each photograph. As well as life history and natural history (Part I), Smith discusses current population estimates and reasons for declining numbers, and the conservation challenges that impact mountain goats (Part II). And, throughout the book Smith weaves in tales of his personal adventures as a field biologist studying mountain goats, particularly in the Selway-Bitterroot Wilderness of southwestern Montana.

The majority of the photographs are excellent, and range from intimate portraits to broad landscape images. The quality of some of the full-page images do suffer from apparently having been scanned from decades-old slides or colour prints (e.g., the landscape photo on page 109), although these are often used to illustrate a point or theme, for which they are adequate. (As an aside, it would be interesting to know if the photographs reproduce more sharply in the Kindle e-edition.) Many photographs are reproduced in two-page spreads, some of which are truly outstanding, such as the backlit goat (including breath vapours) on pages 134–135, also used on the book’s cover jacket, or the close-up of a pika with a mouthful of vegetation (pages 160–161). Smith includes many photographs of other species that share the mountain goat’s environment, which help to illustrate his text. I did notice an error on photo pages 148–149, where the caption refers to whitebark pine dying

from disease and insects, whereas the photo clearly depicts lodgepole pine and subalpine fir, whose red needles are likely the result of the phenomenon known as “red belt,” where a temperature inversion causes the tree’s needles to transpire, while the roots are still in frozen ground and unable to take up moisture, causing desiccation of the needles.

It would have been useful to have had the sketches of different ages and sexes of mountain goats near the beginning of the book, rather than near the end, so that the reader could refer to them when looking at some of the photographs. Smith highlights pertinent research in an easy manner throughout the book, but while there is a page of suggested references (including scientific papers), I would have liked source notes for some of the chapters, relating his statements to specific research papers.

Relatively early in the book Smith states that “at its core, the goat is both product and captive of its evolutionary history and specialization as a mountain climber.” This could also be an introductory statement for the chapters on local and global conservation challenges. While wildlife and land managers can reduce harvest levels and minimise human disturbance, only a landscape approach will ensure that mountain goats survive in a world with a changing climate. Smith touches on the uncertainty of how mountain goats may respond: their generalist diet may help them cope with vegetation changes, but they are intolerant of summer heat so where will they go when the temperature rises, and what might changes in parasite loads and transmission vectors mean for the goat? As such questions are just starting to be asked of mountain goats, Smith refers to research involving other inhabitants of these mountain ranges, such as pika.

If you’ve ever looked up at a mountain goat on a seemingly impossible ledge and wondered how come it doesn’t fall off that cliff or what does it eat in winter? And how does it stay warm? then you will enjoy this book and its many photos.

CYNDI M. SMITH

P.O. Box 70, Mountain View, AB, Canada, T0K 1N0