BOOK REVIEW

Conservation of Venomous Snakes is a Delicate Balance of Science, Sociology, and Politics

Timber Rattlesnakes in Vermont and New York: Biology, History, and the Fate of an Endangered Species. 2007. Jon Furman. University Press of New England, Lebanon, New Hampshire (www.upne.com/1-58465-656-5. html). 207 pp., 12 color illustrations, 8 halftones. Paperback – ISBN: 978-1-58465-656-2. \$24.95

Announced by the Center for North American Herpetology (CNAH) in 2008, this authoritative and well-illustrated book is an important acquisition for all of us who work to advance the conservation of Timber Rattlesnakes (*Crotalus horridus*) throughout the wide range of the species. Readers may well wonder why I feel that a book grounded in the biology of this impressive species in two northeastern states is so relevant elsewhere. Simply put, conservation — especially of venomous snakes — is a delicate balance of science, sociology, and politics. Furman has carefully researched and thoroughly documented the interplay of these three elements as they relate to the sundry (and increasing) anthropogenic threats faced by Timber Rattlesnake populations in two eastern states that only in relatively recent times have recognized the species as Endangered and have moved to try to reverse declines (or even extirpations) resulting from earlier flawed management practices.

A talented writer, Furman explores the troubling decline of the northeastern populations caused by bounty hunting from the 1890s to the early 1970s. His friendships with contemporary researchers such as Randy Stechert, William Brown, and others, whose individual and combined research and conservation work with *Crotalus horridus* have been crucial to reversing historical trends of persecution of the species, adds much to

the book. Vignettes of the legal battles waged on behalf of these snakes, along with Furman's observations on the personalities involved and their varied approaches to preventing further human damage to dens and birthing areas offer effective models of appropriate conservation measures.

An unusual aspect of the book is the time Furman invested in interviewing the most noted Crotalus horridus bounty hunters of the area. Despite the great toll these people took on the snakes, few were motivated by animosity toward them. Rather, they were people eking out a living in a largely agricultural area during difficult economic times, and they saw the poorly conceived state bounties on rattlesnakes as another way to earn income. One or two of the hunters went so far as to study wild and captive Crotalus horridus behavior, ecology (although not using that term), and physiology, the better to locate snakes and ply their trade. Even the interviews involving preparation of



A male dark-phase Crotalus horridus from Warren County, New York.

rattlesnake oil as an anti-inflammatory, a topic that initially brought a smirk to my face, proved valuable in understanding another aspect of why the hunters pursued their quarry. So, delving into the pharmacological literature in December 2009, I found that certain snake oils are higher in eicosapentaenoic acid (Omega-3) than many fish oils (Kunin 1989, Graber 2007)!

Overall, the book is solidly anchored in biology, sociology, and history of science. Although parts of Furman's oral history interviews with old-time bounty hunters often are unpleasant for herpetologists to read, they are important for understanding the sociological realities that historically have hampered conservation of any venomous snake species. If herpetologists are to successfully work to change public attitudes about rattlesnakes, such understanding is crucial (Pisani and Fitch 1993).

Literature Cited

Graber, C. 2007. Snake oil salesmen were on to something. *Scientific American*, 1 November 2007 (available online at: www.scientificamerican.com/article.cfm?id=snake-oil-salesmen-knew-something).

Kunin, R.A. 1989. Snake Oil. Western Journal of Medicine 151:208.

Pisani, G.R and H.S. Fitch. 1993. A survey of Oklahoma's rattlesnake roundups. Kansas Herpetological Society Newsletter (92):7–15.

> George R. Pisani Kansas Biological Survey Lawrence, KS 66047

