

Biology and Conservation of Martens, Sables and Fishers – A new synthesis

Edited by K. B. Aubry, W. J. Zielinski, M. G. Raphael, G. Proulx and S. W. Buskirk. 2012. Comstock Publishing Associates, Box 6525, 750 Cascadilla Street, Ithaca, NY, USA, 14851-6525. 580 pages, 75.00 USD, Cloth.

This book is a synthesis of the invited, oral presentations from the Fifth International *Martes* Symposium held in September 2009. It reflects a very broad range of the current knowledge, often acquired with techniques not available prior to the first book of this nature in 1994. There are five sections to this book, but such a broad overlap between the sections exists that I don't think they were the best choices; this does not detract from the individual papers at all, but the organization is just a bit odd. These are scientifically written papers, and as such, are directed at peers and serious naturalists.

There are a few technical points which bothered me. In the vast majority of scientific writings, the whole numbers one through ten are spelled out, not written as numbers. For long-time readers of science, seeing "5" instead of "five" gives rise to a reading hiccup. It's also really quite irritating to find a graph axis labelled 0.6, 0.8, 1, 1.2, etc. Authors creating the graphs simply accepted sloppy defaults, where they should have insisted on consistent decimal places (e.g. 1.0, not 1) throughout. However, the papers are otherwise quite well written and make the arguments effectively.

The first paper, *Synthesis of Martes Evolutionary History* sets the stage for the animals discussed in this tome. Although the relationships *within* the genus are well described, a cladogram and brief discussion of the context of the genus *among* other mustelids would have been appropriate. The reader is exposed here to the possibility that the Wolverine and the Tayra may, with more analysis, be included in *Martes*, but where are the otters, badgers and weasels relative to the martens and their kin?

There are two papers centring on parasites; curiously, the one entitled *Complex Host-Parasite systems in Martes: Implications for Conservation Biology*... does not appear in the section on conservation. Nonetheless, both papers are well-written and quite interesting (no, this reviewer is not a parasitologist!). The second paper by Gabriel, Wengart and Brown includes a massive table of presumably all the known parasites associated with the genus...a total of almost 250 host-parasite relationships. This table alone would be gold

to someone starting out in *Martes* parasitology.

The chapters on habitat use bring to light the unexpected result that these animals are not, as presumed, dependent on old growth forests, neither in Europe nor North America. Given the lack of old growth, this is good news for reintroduction programs. However, the general consensus is that when available, complex forest structure, often found in old growth is preferred.

The section on research techniques includes chapters covering the gamut from scat-detecting dogs through radiotelemetry and modelling. In most cases, historical techniques (i.e. prior to 1994) are compared with current ones. Advantages and disadvantages of each technique are often discussed, allowing the reader to critically assess them.

The final section contains five chapters dealing with the conservation of *Martes* populations. The opening chapter, although well written, contains disappointing maps...pixellated and, in the case of the North American maps, uses projections which emphasize the United States, a country largely devoid of these animals, and a compressed Canada, where most of the detail is really necessary. Two graphs within this chapter have seven curves each, giving rise to an unnecessary amount of clutter. This could have been done better.

There are two strengths associated with reviews or amalgams of papers like this one (which include reviews). The first is that the reader gets the opinions of a diversity of authors, in this case, 62 of them. The second is the wealth of literature cited...a boon to anyone doing this type of research, whether a novice or career *Martesologist*. This volume cites over 1600 works... could a single paper have been missed?

Literature Cited

Buskirk, S. W., A. S. Harestad, M. G. Raphael and R. A. Powell (editors). 1994. *Martens, Sables and Fishers: Biology and Conservation*. Cornell University Press, Ithaca, NY.

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