

The Beaver: Its Life and Impact. Second Edition

By Dietland Müller-Schwarze. 2011. Cornell University Press, Sage House, 512 East State Street, Ithaca, New York, NY, USA, 14850. 228 pages, 39.95 USD, Cloth.

Beavers are the second largest rodents in the world. Two extant species comprise the beaver genus *Castor*. The Eurasian Beaver (*Castor fiber*) was once widespread in Eurasia until uncontrolled hunting (for its fur and castoreum) nearly wiped out the species (concerted reintroduction programs throughout much of its former range have re-established many populations). The North American Beaver (*Castor canadensis*) is one of North America's most iconic mammals, having played a significant role in the human colonization of the continent.

Author Dietland Müller-Schwarze correctly refers to the beaver by its many descriptors – ecosystem/wetlands engineer, keystone species, and invasive species. Perhaps no other Holarctic mammal (with the exception of man) can influence its environment as profoundly as beavers. Admired for their determination and ingenuity, beavers are also sometimes shunned by those that find their natural behaviour in altering landscapes to be destructive and a nuisance. Given their ecological and economic importance, mammalogists know much about the life history of beavers. Yet, despite knowing much about their biology, few compiled works exist. This up-to-date and inclusive book, in its second edition, is an attempt by Müller-Schwarze to fill that void.

The book is effectively organized into five parts, each one covering a different aspect of beaver life history

and human interactions: I. The Organism; II. Behavior; III. Populations; IV. Ecology; and V. Beaver and People: Conservation, Use, and Management. Each part is comprised of several chapters which present comprehensive information on a specific aspect of beaver biology, ranging from specific topics that include morphology (form and function), physiology (e.g., diving and thermoregulation) and behaviour (e.g., communication) to broader subject matters that encompass population biology, ecology (e.g., diseases; predators), and wildlife management.

Much of the information presented is data rich; many past, classical scientific studies on beavers (e.g., intra- and interspecific interactions; summer versus winter metabolic rates) are cited in the text. Though the prose is largely scientific, the writing style is clear and concise which facilitates quick understanding for those relatively familiar with biological terms and jargon. Colour and black-and-white photographs interspersed throughout the text illustrate the various aspects of beaver life history, highlighting anatomical features (skull, castor sacs), beaver infrastructure (dams, lodges, trails, and canals), and the species' importance and impact on human culture (e.g., fur trade).

Altogether, Müller-Schwarze has done a commendable job, compiling almost all the pertinent studies on beavers into an easily accessible resource. This is a

book which should find a place on the library shelf of every bibliophile who has an interest in wildlife and landscape management. Readers who are particularly interested in learning more about the biology and historical significance of one of the world's most charis-

matic rodents will be pleased with this excellent contribution.

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