Encyclopedia of Human–Animal Relationships: A Global Exploration of Our Connections with Animals. Ed. by Marc Bekoff. Westport, Conn.: Greenwood, 2008. 4 vols. alkaline \$499.95 (ISBN 978-0-313-33487-0).

This encyclopedia covers all aspects of human—animal relationships, bringing together many viewpoints on the subject. More than 350 detailed articles provide historical and current information on everything from bonding to environment; from keeping pets to hoarding animals; from animals in literature, movies, and cartoons to elephants and cows in India and dolphins in Japan. A number of essays may be unpleasant to read, such as topics on the use of dogs as food in other countries or reports of animal cruelty, but all help to present a comprehensive picture of human—animal relationships worldwide. All kinds of animals are discussed, from bats, honeybees, and cockroaches to rarite birds, chimpanzees, other primates, as well as the usual pet and service animals.

International in scope and unique in coverage, the typically long pieces present a broad view of animal treatment in many cultures and countries, both historical and current. Broad topics cover a wide variety of related subjects, such as "Conservation and the Environment," "Ethics and Animal Protection," and "Zoos and Aquariums," with each topic containing a number of related essays. Subjects include history, religion, culture, philosophy, literature, and art, as well as all aspects of science. Some of the essays provide very personal slants, offering observations and opinions of personnel who work in animal rescue and related fields all over the world.

Extremely broad topics require the use of the comprehensive index, located in volume 4, to find all the articles appropriate to a particular animal or research. But the index lacks volume numbers and does not identify the page spans of the 4 volumes to assist the user. A list of topics and subtopics appears in the front of each volume, but this list, while helpful, has no page or volume numbers as a guide, which is a serious deficiency. An additional list, by kind of animal, points the user to all articles mentioning that animal but again, no page numbers appear in this list. In addition to the comprehensive index, volume 4 also contains a "Chronology of Animal Protection," an extensive bibliography, and the complete list of contributors, noting their qualifications and the names of the article(s) they authored.

Each volume provides a number of black and white illustrations and a centrally located eight-page spread of color photographs. Though the color pictures are captioned and labeled with the title of a related article, many of the pictures seem only vaguely connected and some are located in a different volume from their article. These color photographs lack indexing, either in the comprehensive index or with a reference from the article.

All articles include a bibliography for further reading, containing both Web sites and citations to scientific as well as nontechnical material. A number of the shorter articles are really personal essays, sometimes set off as sidebars. Writing

quality of these varies. Some are obviously anecdotal, others are backed up with cited references and studies.

Bekoff is Professor Emeritus of Biology at the University of Colorado at Boulder, and cofounder, with Jane Goodall, of the Ethologists for the Ethical Treatment of Animals. Author of more than two hundred articles in this field as well as numerous books and several other related encyclopedias, he has impeccable credentials to edit this work.

This source is recommended for high school and college libraries as this material is rarely found elsewhere.—Marion S. Muskiewicz, Science Librarian, University of Massachusetts, Lowell

Encyclopedia of Nineteenth-Century Photography. Ed. by John Hannavy. New York: Routledge, 2007. 2 vols. alkaline \$540 (ISBN 978-0-415-97235-2).

As editor and noted photographic historian John Hannavy explains in his introduction, the pioneers of photography were sanguine about the medium's future. Nevertheless, they could never have anticipated the myriad technical processes and applications that would emerge in the decades following its invention. This impressive work surveys the extraordinary growth and development of photography during its first century, and corrects many mistakes and misinterpretations that have arisen since.

Each volume opens with a roster of advisors to the project, a list of more than 250 contributors (whose affiliations, unlike those of the advisors, are not identified), an "Alphabetical List of Entries," and a "Thematic List of Entries." The text consists of 1,197 signed entries, of which 610 are "major," ranging from 1,000 to 5,000 words. The remaining entries contain 200 to 1,000 words. Major entries conclude with a bibliography, and many are accompanied by illustrations. "See also" references direct the reader to related material, and a detailed analytical index closes each volume. Not counting front and back matter, the set runs to 1,523 pages.

Not surprisingly, most entries are devoted to "Photographers, Inventors, Patrons, and Critics." Among the nearly four dozen "National and Regional Surveys" there is an entry for Ceylon (Sri Lanka), but none for India, that "jewel in the crown" of the British Empire and the stomping ground of so many intrepid photographers. But the index directs the reader to a number of references within other entries. "Themes" includes such intriguing entries as "Expedition Photography" and "Spirit, Ghost, and Psychic Photography." The writing is generally clear, although entries falling under "Processes" and "Technical and Equipment" are necessarily more demanding.

Specialized reference works run the risk of overwhelming nonspecialists, and the *Encyclopedia of Nineteenth-Century Photography* takes pains to orient such users, beginning with its useful "Thematic List of Entries." The medium's historical development is described in eight articles running to more than forty pages, and the subject "Photographic history" in the index identifies key themes and processes by decade.