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Book Reviews. . .

Ultrasonic Imaging and Animal Reproduction: Color-Doppler Ultrasonography

O. J. Ginther

Equiservices Publishing, Cross Plains, Wisconsin. 2007. Order online: www.equipub.com; \$96 (includes shipping in the US); 258 pages, 319 images, 90 diagrams and photographs, full color.

This book, fourth in a series by the author on the use of ultrasonic imaging to study reproduction in farm animals, could be subtitled the *Ultrasound Technician's Companion*. Anyone wishing to learn how to apply color-Doppler ultrasonography to the study of reproduction should keep this book close and consult it often. This is a creative work by a master of his discipline who brings to bear extensive expertise, hundreds of color images, and a unique pedagogical style to produce a book that will allow the would-be color-Doppler practitioner to develop the depth of understanding needed to apply the procedure to the study of reproductive physiology.

Color-Doppler ultrasonography is a technique that involves a multitude of dimensions: three-dimensional space, time, and digital output. In the first four chapters of the book, Ginther does an excellent job of providing the reader with the information needed to think in these dimensions. Information presented includes a description of the vascular architecture of the equine and bovine reproductive tracts, principles of hemodynamics, the physical principles underlying the use of the Doppler effect to study fluid mechanics, and much practical information and theory on how instrumentation for collecting color-Doppler information can be used correctly and optimally.

The remaining five chapters of the book highlight use of color-Doppler ultrasonography to study the reproductive tract of the female (four chapters) and male (one chapter). Emphasis is on horses and cattle with some examples from the human when comparative interest is compelling.

The book has some idiosyncratic features that reflect the individualistic nature of the author. The system for

referencing other sections of this volume and earlier volumes in the *Ultrasonic Imaging and Animal Reproduction* series is unique, as is the use of red fonts to highlight the words “horses” and “cattle” for the species specialists (or is it chauvinists?). Much of the book is organized around the description of individual figures, with the book laid out so that the entire description can be read while looking at the figure. The figures themselves are literally precious. Most are original to the book and must have been expensive to prepare. All are in color, many are artistically beautiful, and the overall teaching value of the figures is high. Many of these figures will find their way into classrooms and seminar presentations.

This book is not simply a technical treatise on ultrasonography, but is also a study of the principles of reproductive biology presented against the backdrop of ultrasound imagery. Results are mixed. There is much to learn, as the book is full of original information and images that have not been published previously. Thus, there are insights to be gained by reading the book that cannot be gained by perusal of refereed journals. However, the unique nature of the presentation style, where the book is organized around the description of individual images, sometimes makes grasping of general physiological principles a task.

It should be pointed out that the cost of purchase is very low for a book with such high-quality production values. Indeed, the book is being sold at less than cost because of contributions from the non-profit Eutheria Foundation directed by the author.

O. J. Ginther has done more for the advancement of the use of ultrasonography to study large animal reproduction than any other scientist and this most recent volume in his series *Ultrasonic Imaging and Animal Reproduction* will give the next generation of scientists the insight and tools to continue use of this extraordinary technique to illuminate reproductive biology.

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Handbook of Milk of Non-Bovine Mammals

Edited by Y. W. Park and G. F. W. Haenlein

Blackwell Publishing, Ames, IA. 2006. \$199.99. ISBN 9780813820514.

The editors of this book on milk from non-bovine mammals are well known and they have done a good job with this comprehensive book. Haenlein is the long-time chief editor of *Small Ruminant Research* and he has worked on dairying and milk for almost 50 years. Park is renowned for his research contributions to goat milk and goat milk production over the past 25 years.