

Anatomical Differences of the Donkey, Mule, and Horse

An Analysis Relevant to Veterinary Medicine

Horst Wissdorf, Hassen Jerbi,
Miriam Meier-Schellersheim



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Miriam Meier-Schellersheim (Übersetzer)

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Miriam Meier-Schellersheim

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Top left: Miriam Meier-Schellersheim, N.Y., USA

Top right: Marinda, Virginia, USA

Bottom: Hassen Jerbi, Tunisia

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Preface

In anatomy classes at the University of Veterinary Medicine Hannover, instruction has long been geared towards preparing students for the clinical aspects of the veterinary practice, encouraging them to view the learning of anatomical facts not only as part of the curriculum, but as a necessary foundation for their future career.

Unfortunately, the anatomy of the donkey often falls short, as the numerous clinical discrepancies between donkey and horse have not yet been thoroughly studied nor documented, and adequate literature on the subject is few and far between. Also lacking are images of adequately prepared specimens, but for all imaging techniques, too, applies:

Anatomia fundamentum medicinae est.

As the number of donkeys being treated in veterinary practices everywhere grows, so does the need to gain a greater anatomical understanding of them.

My friend and colleague, Prof. Horst Erich König of the University of Veterinary Medicine Vienna, connected me with anatomy professor Hasen Jerbi of the Veterinary School of Sidi Thabet in Tunisia, who prepares excellent donkey specimens for his lessons and generously offered 33 pictures of these for this work. Thus it was only Prof. König's help that made this book possible in the first place. To him I extend my utmost thanks.

The making of this book was generously supported by numerous authors, all of whom contributed photos or images from their own books or publications. I especially wish to thank Ms. Thekla Friedrich (Katzenelnbogen) and Ms. Marisa Hafner (Switzerland) for their contributions. Mr. R. Reifenrath (Jugenheim) impressed me with his enthusiasm and above average commitment in supplying and touching up images of his Provence donkeys.

Prof. B. Ohnesorge, of the University of Veterinary Medicine Hannover Foundation's equine clinic, provided endoscopic imaging depicting the larynx of a donkey and markedly displaying the differences between the donkey and horse pharynx.

From the USA came contributions by veterinary medicine student Ms. M. Meier-Schellersheim (New York), who provided mule photographs, and adeptly edited, corrected, and translated this book. I would like to thank Ms. Ellen Hornstein for providing advice to Ms. Miriam Meier-Schellersheim in the translation of the text.

A much needed picture of a stallion was arranged by Prof. H. Sieme, reproductive medicine specialist at the Reproductive Medicine Unit of the Clinics of the University of Veterinary Medicine Hannover Foundation, allowing the comparison of horse and donkey scrotal positioning.

Mr. Linti, of the Heidelberg Zoo, proffered a headshot of a Poitou donkey; Ms. Reichler, also of the Heidelberg Zoo, procured an image of a Poitou donkey's preputium; Ms. Otto, of the Zoo Hannover, supplied a picture of the scrotum of a Somali wild ass, and Ms. Mooser (Switzerland) gave the picture of the Asino dell' Amiata. From the book *Praxisorientierte Anatomie und Propädeutik des Pferdes* come images of the fundus of the eye of the donkey and horse, taken by colleagues Simoens (Ghent University) and Gerhards (LMU Munich), respectively.

Photographs of the animals of colleague H. Ende (Isernhagen) and those of Ms. I. Stephan (Lindwedel) were collected specifically for this book by veterinary medicine student Mr. D. Böhm (Hannover). Mr. Böhm also showed admirable patience and skill in revising and touching up various images, as well as contributing to the cover design.

I want to thank all these individuals for their support. Without them this book would never have been realized.

Thankfully, Prof. Isenbügel (Zurich) granted me the use of an article on donkey and mule gaits.

My thanks go out to illustrator Ms. von Stemm of the Anatomical Institute of the University of Veterinary Medicine Hannover Foundation, as well as to colleague Kim Uebermuth (Wildeshausen, Germany), for their detailed illustrations.

Great help was given to me by my colleague Paul Simoens (Ghent) in the completion of this book. To him I owe my special thanks.

I would like to thank Ms. Dr. Engelke, of the Anatomical Institute of the University of Veterinary Medicine Hannover Foundation, for her revisions of figure 3-22, which were greatly improved in meaning and clarity.

Very special thanks go out to Ms. R. Ramtke, manager and editor at the utzverlag publishing company. No matter what the question, she always managed to find a quick, competent, and satisfying solution for everything. The teamwork was exemplary.

Ehlershausen, July 2020

H. Wissdorf

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