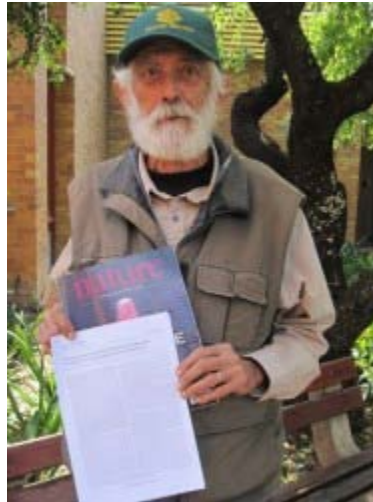


Faculty of Veterinary Science: Research article about Dinosaurs published in the prestigious journal, Nature

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Dr Huchzermeyer with his copy of the prestigious journal, Nature in which the article was published

The Department of Paraclinical Sciences of the Faculty of Veterinary Science is not only expanding its horizons, it is also digging deeper into the past. Dr Fritz Huchzermeyer, an extraordinary lecturer in the Department, was a co-author of an article that was recently published in the prestigious journal, Nature.

The work was done in collaboration with paleontologists in China. This publication reported the preservation of ovarian follicles in Mesozoic birds from China and the early evolution of avian reproductive behaviour. Crocodylians and birds are closely related to dinosaurs and are, therefore, ideal models to explain the reproductive behaviour of these extinct animals.

Dr Huchzermeyer has been working on all sorts of unusual patients over the years. He started his veterinary career by focusing on chickens and ostriches. He is the author of two well-known ostrich books. From ostriches he expanded his field of expertise to crocodiles. Again he contributed significantly to crocodile health by producing the only textbook available focusing on crocodylian medicine. This book is still used, all over the world, by veterinarians and other scientists. He is a man of many talents and is now doing the final editing to his latest book on the evolution of human nutrition.

During the last few years he started to collaborate more with paleontologists. His understanding and in-depth knowledge of crocodylian anatomy, obviously, helped to explain some of the paleontological findings. The fossils discovered in China with reproductive organs were the first of its kind, revealing new clues regarding bird-like dinosaur reproduction. The identification of the mature ovarian follicles allowed a rare opportunity to confidently identify the gender of these animals. The consistent preservation of the follicles on the left side of the body suggested that the right functional ovaries were lost during the dinosaur-avian transition period.

Another interesting conclusion was about the timing of sexual maturation. In crocodylians, reproduction has an early onset, before the animal reaches skeletal maturity. Most modern birds grow rapidly, typically reaching skeletal maturity within 1 year, although not typically becoming sexually mature until later (2-8 years; only 6 months in the domestic chicken). However, the paravian dinosaurs revealed a more crocodylian-like pattern of reaching sexual maturity before skeletal maturity.

A large number of scientific projects at the Faculty of Veterinary Science, focusing on the Nile crocodile, was initiated by Dr Huchzermeyer's energetic enthusiasm for these living dinosaurs.