Dear Prof. Evans

My name is Gerhard Steenkamp and I am a veterinarian working at the Veterinary Faculty of the University of Pretoria, Onderstepoort. My chosen field of interest is Dentistry and Maxillofacial Surgery for animals. My wife, a member of SADA, passes her SADJ to me every month and understandably I was very excited to see your monthly focus on ‘The Wild Teeth of Africa’. The dental formulas you are publishing however do not show any references and hence the reader is not able to see where these were obtained from.

Personally I do not agree with the dental formulas you have published for the rhinoceros (September 2014) and the crocodile (October 2014).

Rhinos do not have incisors or canines. They are herbivorous and will have no need for them. Maybe if they did have canines it could have helped them fight the poachers?

Crocodiles like cetaceans have unspecialised teeth and therefore they are called homodont. There would be no reason for crocodiles to have teeth of a distinct variety (incisors, canines, premolars or molars). The readers of your journal will be very familiar how we classify bunodont teeth of humans into these different categories based on development and function. This will be superfluous in crocodilians as their teeth are merely adapted to grab hold of prey. Another interesting fact to your readers is that a crocodile continuously produce teeth throughout its life. For them to lose teeth would be life threatening. Would it not be wonderful if we could harness some of those genetics to give edentulous people functional teeth?

These two examples illustrate the very importance of comparative odontology when dealing with more than one species. As veterinarians we need to be aware of this as it does not only give us insight into what our potential patients need (eat) but also what the teeth are used for when faced with treating them. This helps us decide if we can/should save a tooth (or not) and by which means. Furthermore it also helps us understand the management of a patient post extractions and how their diet may have to be adapted.

Thank you for highlighting wildlife dentistry, not only is this my very vocation but indeed my passion.

With kind regards
Dr. Gerhard Steenkamp
Senior lecturer: Companion Animal Clinical Studies
Faculty of Veterinary Science
University of Pretoria

References

ERRATUM: COVER PICTURE DATA INCORRECT

Dr Steenkamp does The South African Dental Journal a considerable favour by correcting errors which slipped past the Editor. As regards the Rhinoceros, the Cover Picture for September, I had the correct teeth listed in the text… BUT not in the formula itself. The crocodile on the October cover fared a little better as the text section was indeed correct as far as it went…and the formula may apparently be given as it appeared on the cover… but the teeth are given labels (Incisor, canine, molar etc) simply because of their positions in the jaws. So I should have placed inverted commas around each of the items in the formula. Ian Corfe of the Institute of BioTechnology, University of Helsinki, even comments that there are indeed slight differences in the shape of the teeth so they could perhaps be designated differently.

Every apology to all readers for committed errors… and sincere appreciation to Dr Steenkamp for gentle correction and for providing additional data. I hope he will continue to peruse the JOURNAL.

W G Evans, Managing Editor.

PS. I referred to Austin Roberts: The Mammals of South Arica, The Larousse Encyclopaedia of Animal Life and to Wikipaedia. The mistakes are in both cases are mine.