



24 August 2017

## Extinct bird's bone reveals new facts about how the dodo lived

UCT study discovers how the dodo laid their eggs and when they renewed their feathers

University of Cape Town palaeobiologists, in collaboration with scientists from the National History Museum (NHM) in London, UK, have for the first time uncovered information on when the dodo laid their eggs and when they renewed their feathers. The discovery comes from new research published today, 24 August, in *Nature's Scientific Reports* on the bone microstructure of the dodo.

It is simply astounding to think that such basic biological information has until now not been known for the dodo, an extinct flightless bird that was endemic to the island of Mauritius.

The dodo is an iconic symbol of a species that has gone extinct because of human activity. It is quite bizarre that although humans and the dodo coexisted for over 300 years, very little is known about this bird. It is often depicted in the media as a fat and dumb looking bird, but the truth is virtually nothing is known about it.

UCT palaeobiologists Dr Delphine Angst and Professor Anusuya Chinsamy-Turan collaborated with the NHM scientists in the project.

Dr Angst, a UCT postdoctoral fellow says: "It has been extremely rewarding to have been able to spend time in Professor Chinsamy-Turan's laboratory to learn about how the microscopic structure of bone allows interpretations about the biology of extinct animals. Using this information, we were able to show that the dodo bred around August and that the chicks grew quickly to reach a robust size before the austral summer and cyclone season in Mauritius.

"It is fascinating to see that our findings matches the historical descriptions of the dodo made by 17th century sailors who were among the few people to have seen this bird alive."

Professor Chinsamy-Turan says: "We were absolutely delighted to have had the opportunity to work on the dodo. Our results have been exceptional in that besides knowing when they reproduced, we can also say when they mated."

She adds that it is indeed sad that today the only information known about the life and times of the dodo is what can be deduced from its "fossil" bones.

Dr Julian Hume of the NHM says: "All that remains of the dodo today is a handful of images, a few accounts, a unique head with soft tissue in Oxford, and fossil bones. Of these artefacts, it is only the study of the bone structure that is providing us with more precious information about the dodo's life history".

Professor Chinsamy-Turan, who earlier this year launched a UCT Massive Open Online Course (MOOC) through Futurelearn entitled: "*Extinctions-Past and Present*" says: "Like the dodo there have been many other species that have become extinct because of human induced activities. It is my earnest hope that we will be better at conserving and protecting the incredible biodiversity that we have before they go the way of the dodo".

**ENDS**

### **Background Information**

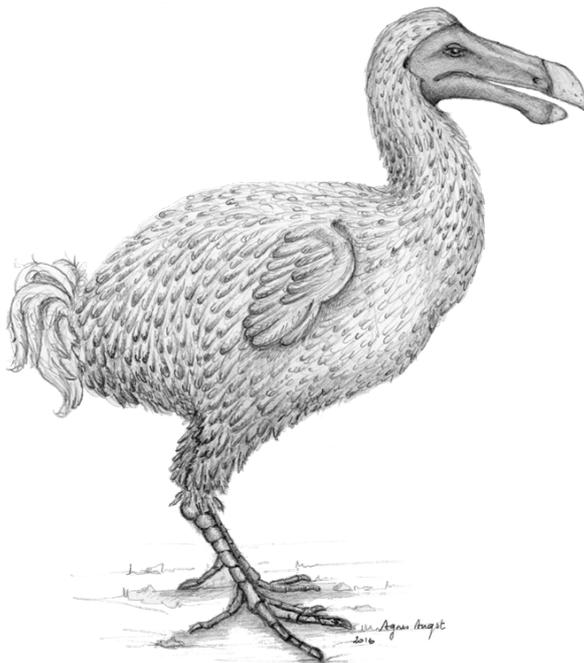
**Article:** *Nature's Scientific Reports*: Bone histology sheds new light on the ecology of the dodo (*Raphus cucullatus*, Aves, Columbiformes)

**Authors:** D. Angst, A. Chinsamy, L. Steel & J. P. Hume

**Link to "*Extinctions-Past and Present*"**

<https://www.futurelearn.com/courses/extinctions-past-present> Next run is on 4 September 2017, but you can sign up now already.

### **Pictures**



**Caption:** Reconstruction of the Dodo made by Agnès Angst



**Caption:** The three colored illustrations from Julian Hume



**Caption:** Dr Delphine Angst (brown shirt) and Professor Anusuya Chinsamy-Turan (red shirt), who are the first two authors of the paper

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