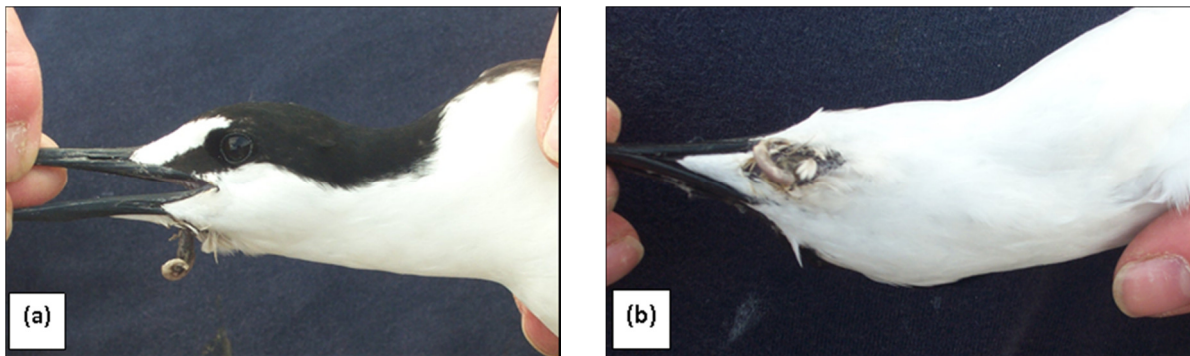


## Investigation of prevalence, distribution, pathology and causes of a 'rare' condition in birds

For those of us who spend much of our time working with and observing free-living birds, we are used to seeing some birds with obvious abnormalities such as missing toes, feet and even legs, and swellings around the bill caused by diseases such as Avian Pox. However, a condition which we think is far rarer was first described in the 'Vulnerable' Stitchbird (*Notiomystis cincta*) in New Zealand by Castro and Taylor (2001). They described a condition called an "oral fistula" in which the skin and muscle of the lower mandible were missing in some birds; the tongue was protruding through the opening and it was often outside the mouth cavity permanently. Since this first report, the condition has been described in Eurasian Griffon Vultures (*Gyps fulvus*) (Camiña and Guerrero 2013) and in two seabird species on Ascension Island in the South Atlantic – the Sooty Tern (*Onychoprion fuscatus*) (Reynolds *et al.* 2009; Fig. 1) and the Masked Booby (*Sula dactylatra*) (Hughes *et al.* 2013).



**Figure 1.** (a) Lateral and (b) ventral views of a sub-lingual oral fistula in an adult Sooty Tern on Ascension Island in the South Atlantic. The tongue permanently protrudes through a hole in the floor of the mouth. (Photos: R. Dickey. Source: Reynolds *et al.* 2009).

I am now asking for help from people who routinely interact with free-living birds at close quarters when handling, observing and photographing them. I am especially appealing to ringers/banders, wildlife photographers and birdwatchers to respond but I am happy to hear from anyone with relevant information. I suspect that there are many more birds living with this condition than we have already detected and the aims of this study are to determine its:

- prevalence within and across species to assess whether some are more predisposed to it than others
- spatial distribution to assess whether birds favouring some habitats are more predisposed to it than others
- pathology to assess whether its onset and progression differ across species
- cause(s).

If you have seen this condition in birds that you have handled, ringed/banded, observed and/or photographed, I am very keen to hear from you. Please complete the following simple form and send it back to me via e-mail at: [J.Reynolds.2@bham.ac.uk](mailto:J.Reynolds.2@bham.ac.uk). I would be very keen to receive photographs of such birds from you too. You will, of course, retain copyright on them and they will not be used to illustrate any written output from the study without me first obtaining consent from you. Each image will also be accompanied by a photo credit.

## References

Camiña, A. & Guerrero, L.M. (2013). An Eurasian Griffon *Gyps fulvus* disadvantaged for feeding. *Vulture News* **64**: 66–68.

Castro, I. & Taylor, J. (2001). Survival and reproductive success of Stitchbird (hihi, *Notiomystis cincta*) suffering from a bill abnormality (oral fistula). *Notornis* **48**: 241–244.

Hughes, B.J., Martin, G.R., Wearn, C.P. & Reynolds, S.J. (2013). Sublingual fistula in a Masked Booby (*Sula dactylatra*) and possible role of ectoparasites in its etiology. *Journal of Wildlife Diseases* **49**: 455–457.

Reynolds, S.J., Martin, G.R., Wearn, C.P. & Hughes, B.J. (2009). Sub-lingual oral fistulas in Sooty Terns (*Onychoprion fuscata*). *Journal of Ornithology* **150**: 691–696.

**Dr S. James Reynolds,**

**University of Birmingham, Birmingham, UK**

**Thursday 12<sup>th</sup> May 2016**