

## Appendix S1



Universiteit Utrecht

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### **Parrot Survey: follow up 2020**

This survey is aimed at pet parrot owners who have previously completed the longer version of our Parrot Survey. The purpose of this follow up survey is to collect up-to-date information on feather condition, diseases that affect feather condition, and your parrot's feather-related behaviour. This research is being undertaken by Professor Innes Cuthill (School of Biological Sciences, University of Bristol), Professor Mike Mendl (Bristol Veterinary School, University of Bristol), Professor Georgia Mason (Department of Animal Biosciences, University of Guelph), Dr Yvonne van Zeeland (Faculty of Veterinary Medicine, Utrecht University) and researcher Emma Mellor (Bristol Veterinary School, University of Bristol).

This survey has 13 questions and should take approximately 10 minutes to complete. Please note that your participation in this survey is completely voluntary. You may decline to answer any question(s) that you choose, and may withdraw your agreement to participate and your responses at any time during the study. While you will not be strictly anonymous, you will not be asked to provide your name or any other identifying information. Your submitted responses will be stored confidentially and securely on servers at Utrecht University and the University of Bristol. Your identity will not be published or otherwise released. Any images provided will be completely anonymised and securely stored on the same servers, so they

cannot be linked or traced back to a particular owner. Images will only be used for this particular study, and only used for scoring the feather condition of your parrot.

In order to participate, you must be at least 18 years old. If you are using a public computer to respond to the survey, you can help to ensure confidentiality by taking the following precautions to clear all private data from the computer:

1. Clear the browsing history
2. Clear the cache
3. Clear the cookies
4. Clear the authenticated session
5. LOG OFF

**To send photographs, ask questions, or to request further information please email**

**Emma Mellor: [em15953@bristol.ac.uk](mailto:em15953@bristol.ac.uk)**

## About you and your parrot:

Information collected in this section allows us to match up your responses to this current survey with your original Parrot Survey response

**1. What is your email address?**

**2. What is your parrot's name?**

**3. Which species is your parrot? Either common and/or scientific names are acceptable:**

**4. What sex is your parrot (please select one option)?**

Female

Male

Uncertain

## About your parrot's current plumage and medical problems:

5. Does your parrot currently have damaged plumage (i.e., damaged and/or missing feathers) (please select one)?

Yes

No

6. Which body parts are affected (i.e., feathers missing and/or damaged)? Check all that apply:

Head

Wings: dorsal (top) surface

Throat/neck

Wings: ventral (underneath) surface

Chest

Tail

Back

Legs

7. Which type(s) of feathers are damaged? Check all that apply:

Down feathers

Tail feathers (rectrices)

Covert feathers

Newly developing feathers (blood feathers)

Primary and/or secondary flight feathers  
(remiges, wings)

Mature feathers

8. Is there skin damage present (please select one)?

Yes

No

**9. Does your parrot pluck, bite, or chew its own feathers (please select one)?**

- Yes
- No
- No, the parrot is plucked by another bird
- Unknown

**10. How severe is the feather damage caused by your parrot's behaviour (please select one)?**

- Severe (bird [almost] completely devoid of feathers)
- Moderate (patchy distribution, may leave down alone)
- Mild (focal areas, most feathers intact)
- No damage

**11. Has your parrot been diagnosed with any of the following medical problems?**

**Check all that apply:**

- |   |  |
|---|--|
| <input type="checkbox"/> None known                             | <input type="checkbox"/> Arthritis/joint problems  |
| <input type="checkbox"/> Lipomas/Xanthomas                      | <input type="checkbox"/> Reproductive problems (e.g. reduced reproductive activity, egg binding) |
| <input type="checkbox"/> Atherosclerosis                        | <input type="checkbox"/> Hypothyroidism  |
| <input type="checkbox"/> Liver lipodosis (fatty liver syndrome) | <input type="checkbox"/> External parasites (e.g. ticks, mites)                                  |
| <input type="checkbox"/> Diabetes mellitus                      | <input type="checkbox"/> Internal parasites (e.g. intestinal worms)                              |

Pododermatitis (bumblefoot)

Other *please describe*: [Click or tap here to enter text.](#)

**12. Do you think your parrot's feather condition has changed since you originally completed the Parrot Survey (please select one)?**

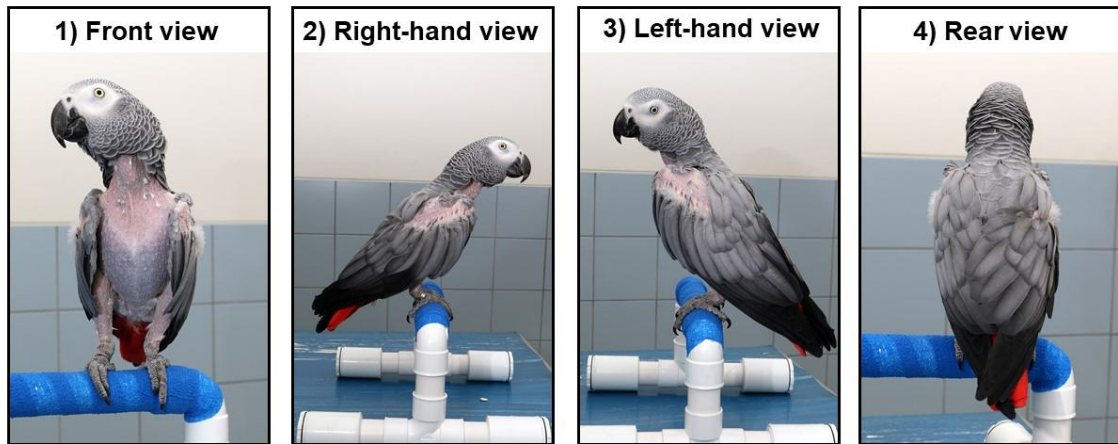
- Yes, it has improved
- Yes, it has got worse
- No, it has remained unchanged
- Unsure

**13. We would very much like to be able to assess your bird's feather condition. For this purpose, we would appreciate it if you would email us a standardised set of good quality photographs of your parrot, please?**

- Yes, and I will send them via email to: [em15953@bristol.ac.uk](mailto:em15953@bristol.ac.uk)
- No, I would prefer not to provide photographs

**Instructions:** Please supply the following photographs of your parrot: 1) front view, 2) right-hand side view, 3) left-hand side view, and 4) rear view of your parrot as shown in the example (please note we have shown a bird with damaged plumage for illustrative purposes). Photographs may be taken using a smart phone or digital camera, with your bird comfortably perched and taking into account the following guidelines: a) feature only the bird of interest, and no others; b) preferably taken from either within the enclosure or when the parrot is (safely) out of the cage as the wire mesh or metal bars can obscure the view; c) photographs should be taken in a well-lit environment (ideally in natural light); and d) photographs should be taken from no more than 0.5 meters from your bird. Please add any additional photos you think may be of interest for us to assess your bird's feather condition.

# Example photographs



Images kindly provided by Utrecht University's Division of Zoological Medicine

Please email images to: [em15953@bristol.ac.uk](mailto:em15953@bristol.ac.uk)

**Note:** all images provided will be completely anonymised and securely stored on servers at Utrecht University and the University of Bristol, so that they cannot be linked or traced back to a particular owner. Images will only be used in this particular study, and only used for scoring the feather condition of your parrot.

**Thank you for participating in our research!**