

# CHESTER ZOO ENDOCRINE LABORATORY- FAECAL COLLECTION PROTOCOL

### **Proper Identification**

- The most important requirement for any sample collection protocol is that that you know which animal the sample came from.
- The best approach is to separate animals at night to properly identify faecal samples.
- Otherwise you must observe the animal defecating and collect the sample as soon as possible.
- It is also possible to mark the faecal samples by feeding a marker (i.e. food colouring)

#### **Frequency of Collection**

- The second most important requirement is you are able to collect samples with a frequency that will provide useful and meaningful data.
- The frequency of sample collection is species dependant and is also dependent on the question you would like to answer.
- Please contact us and we can help you determine what frequency you should be collecting samples

#### Contamination

Things to be careful of:

- The faeces are not contaminated with urine
   (Urine has hormones too and this interferes with measurements of faecal hormone concentrations)
- The faeces are not contaminated with another individuals sample (faeces or urine)
- Try to collect samples as soon as possible. (hormone concentrations in samples left exposed to environment for extended periods will increase the risk of incorrect values)

## **Collection**

- Once you have properly identified the sample, collect sample into zip-lock baggies
- Do not collect the entire faecal sample. Instead collect several (3-4) 'sub' samples from the same faecal sample (as 'pockets' of hormone concentrations can be found in the faecal sample).
- Sample size equal to a handful/fist size is adequate.
- Try to minimize the amount of debris (hair/bones/hay) you collect, obviously the more faecal material present the better
- Label the bag using a waterproof permanent maker (i.e. Sharpie® pen) with:

Animal's Name
Species
Date (day/month/year)

### **Storage**

• Store sample **ASAP** in freezer at -20°C (Hormones concentrations will degrade if samples are left out too long)