|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Mon | Tues | Wed | Thurs | Fri |
| 9.00-9.30 | Lemurs (indoors) | Lemurs (indoors) |  |  |  |
| 9.30-10.00 | Lemurs (biodome) | Lemurs (biodome) | Lemurs (biodome) |
| 10.00-10.30 |  |  |
| 10.30-11.00 | Sakis (biodome) | Sakis (biodome) | Sakis (biodome) | Sakis (biodome) | Sakis (biodome) |
| 11.00-11.30 |
| 11.30-12.00 |  |  |  |  |  |
| 12.00-1.00 | Lunch | | | | |
| 1.00-1.30 | Fruit feeding | | | | |
| 1.30-2.00 |  |  |  |  |  |
| 2.00-2.30 |  |  |  |  |  |
| 2.30-3.00 | Lemurs (indoors) | Lemurs (indoors) | Lemurs (biodome) | Lemurs (biodome) | Lemurs (biodome) |
| 3.00-3.30 |
| 3.30-4.00 | Sakis (biodome) | Sakis (biodome) | Sakis (biodome) | Sakis (biodome) | Sakis (biodome) |
| 4.00-4.30 |
| 4.30-5.00 |  |  |  |  |  |

To be done before starting

* Be able to identify all individuals esp lemurs (create reference etc)
* Write up exact method
* Discuss amount of food to be put out for the contrafreeloading exp
* Write up list of expected fine scale behaviours

Experiment 1 (contrafreeloading):

Aim

* To determine if contrafreeloading occurs and if so, how it affects food processing time in primates

Hypothesis

* Primates will spend time and effort attempting to extract food in enrichment devices even when the same food is available.

Materials

* Plate (‘free’ food), enrichment feeder with same food and empty enrichment feeder
* Feed
* Tbc use of video recording

Measurements

* Feed quantity consumed – weight of each food choice measured before and after feeding (include discard on the floor)
* Total time spent feeding and processing time – for the plate and the enrichment
* Behaviour (i.e., investigation, manipulation), fine scale behaviours of device – zoo monitor
* If another individual is at the plate are the rest more likely to consume from the plate or from the device

Protocol

* Time: Twice a week 9.00-10.00am and 3.00-4.00pm
* Location: saki den (back of house)
* Continuous video recording and recording of temporal measurements

Timeline

* First 2 weeks collect data on only ring-tail lemurs – to explore feasibility of sakis afterwards
* 3 weeks – basic device
* 3 weeks – device with increased complexity
* Data analysis to be done afterwards

Experiment 2 (bio-dome):

Aim:

* To explore how the enrichment device affects food processing time and feeding behaviour

Hypothesis:

* Use of device increases food processing time and encourages naturalistic feeding behaviour
* OR: The studied primates will prefer to feed from enrichment devices even in the presence of increased food processing time.

Materials

* Enrichment device
* Feed
* Tbc use of video recording

Measurements

* Feed quantity consumed – how many feeding bouts
  + Total time spent feeding and processing time
* Behaviour (i.e., investigation, manipulation), fine scale behaviours of device – zoo monitor
* If another individual is at the plate are the rest more likely to consume from the plate or from the device – is there a need for more
* Measure activity level after interaction with device (?)

Protocol

* Time: 3 days a week lemurs (9.30-10.30am and 3.00-4.00pm) and sakis (10.30-11.30am and 4.00pm-5.00pm)
* Additional saki data collection on contrafreeloading days
* Location: fragile forest bio-dome – usual feeding locations
* Device-focused instantaneous sampling of behaviour every 1 minute with some behaviours recorded as an all-occurrence basis (aggression) and recording of time spent using device and number of feeding bouts

Timeline

* 3 weeks – basic device
* 3 weeks – device with increased complexity
* Data analysis to be done afterwards